



**Central Statistics Office**  
An Phríomh-Oifig Staidrimh

# Measuring Ireland's Progress

## 2006

Published by the Stationery Office, Dublin, Ireland.

To be purchased from the:

Central Statistics Office, Information Section, Skehard Road, Cork,

Government Publications Sales Office, Sun Alliance House,  
Molesworth Street, Dublin 2,

or through any bookseller.

Prn A7/0774

Price €5.00

April 2007

© Government of Ireland 2007

Material compiled and presented by the  
Central Statistics Office.

Reproduction is authorised, except for commercial  
purposes, provided the source is acknowledged.

ISSN 1649-6728

ISBN 0-7557-7182-6

# Contents

Page

<b>Preface</b>	<b>5</b>
<b>Chapter 1 Introduction</b>	
1.1 Introduction	8
1.2 Background to indicator report	8
1.3 Overview of selected indicators	8
1.4 Structure of report and brief technical notes	9
<b>Chapter 2 Indicators</b>	
2.1 Commentary	14
2.2 Indicators	17
Economy	17
Innovation and technology	30
Employment and unemployment	34
Social cohesion	40
Education	47
Health	53
Population	55
Housing	61
Crime	63
Environment	65
<b>Appendices</b>	
Appendix 1 Definitions	76
Appendix 2 Data sources	97
<b>Tables</b>	
Table A Selected key indicators of national progress	10



## Preface

The progress indicators used in this report are intended to provide a synoptic analysis of the economic, social and environmental situation in Ireland. Indicators are most useful when they are relatively easy to read and understand; are relevant to policy; are reliable and have timely availability; and are sufficiently consistent to permit benchmarking over time and across countries. In this report, the results for Ireland are set as much as possible in the context of the corresponding position for the other 26 EU Member States as of January 1<sup>st</sup> 2007 as well as for six additional countries (Iceland, Norway, Switzerland, Croatia, Turkey and the Former Yugoslav Republic of Macedonia) whenever data were available for them.

From the feedback received, it would appear that the policy debate has been greatly facilitated by the first three editions of this report. Bringing together in one report a diverse set of key indicators for all EU countries was appreciated by our users. A similar approach has also been followed in another publication series *Women and Men in Ireland*.

Internationally, there has been an increasing level of interest in national progress indicators and a high-level OECD conference, *Measuring the Progress of Societies*, in Istanbul in June 2007 (see <http://www.oecd.org/oecdworldforum>) will undoubtedly deepen this interest. A number of other EU countries have recently published similar reports (e.g. Spain and Germany) and the OECD recently published their 2007 Factbook.

We would welcome feedback on this report as input into the 2007 report.



**Donal Garvey**  
**Director General**



**Chapter**

**1**

---

**Introduction**

## 1.1 Introduction

This chapter briefly reviews the background leading to the preparation of national progress indicators reports and the role of the social partners and the National Statistics Board (NSB) in requesting this work. The chapter also presents an overall summary of the selected indicators.

## 1.2 Background to indicator report

The social partnership agreement 2003-2005<sup>1</sup> requested the CSO to support a move towards more evidence-based policy-making by developing a set of national progress indicators. In its report, *Developing Irish Social and Equality Statistics to meet Policy Needs*, the NSB asked the CSO to prepare a preliminary national progress indicators report<sup>2</sup>. It was intended that this initial report would facilitate discussions between the main users and producers of key economic and social statistics with a view to reaching consensus on the most appropriate set of indicators to determine whether target national economic and social outcomes are being achieved.

The NSB reiterated the need for a key national progress indicators report in its *Strategy for Statistics 2003-2008*<sup>3</sup>. The Board requested that the selected indicators should be consistent with international statistical concepts and facilitate international benchmarking.

In response to this request, a preliminary set of national progress indicators was published in December 2003. Volume 1 of the report presented the selected indicators in both a national and international context. Volume 2 gave an overview of existing national and international reports and provided a context for the initial selection of indicators. An updated set of national progress indicators was published in March 2005 and in June 2006.

This report is the fourth in the series.

## 1.3 Overview of selected indicators

The list of national progress indicators is presented in summary format in Table A. A total of 110 indicators covering 49 domain themes have been selected. Over 57 per cent of these relate principally to social domains (3 to 9), reflecting the emphasis on societal outcomes as the ultimate aim of policy measures. The other indicators cover the economy, innovation and the environment.

Most indicators are presented in both a national and an international context. The national context is generally in a time series format while the international context compares Ireland principally with other EU countries.

Based on feedback received and developments in data availability, a small number of changes were made to the initial set of indicators published in 2003. In the 2004 report, a new indicator on social protection expenditure was added to the social cohesion section. The section on poverty rates was revised to include data from the new EU Survey on Income and Living Conditions (EU SILC). Two indicators on housing ownership at EU level and household composition were removed from the list of indicators due to issues around data availability, quality and clarity of meaning. In the 2005 report, two indicators on Eurozone interest rates for bank overdraft facilities for non-financial corporations (previously indicator 1.19) and EU homicide rates per 100,000 population (previously indicator 9.5) were removed for similar reasons.

In this, the 2006 report, two indicators describing disposable income and gross value added in the NUTS3 regions have been added to the economy section (domain 1) and two indicators on social expenditure in purchasing power parities and expenditure by type have been added to the social cohesion section (domain 4). The data source for the crime section (domain 9) is the new CSO release 'Headline crime statistics'. It is anticipated that new indicators will be included in this domain from the 2007 report.

---

<sup>1</sup> Department of the Taoiseach (2003): *Sustaining Progress, Social Partnership Agreement 2003-2005*.

<sup>2</sup> Recommendation 10.

<sup>3</sup> NSB (2003), *Strategy for Statistics, 2003-2008*, Stationery Office, Dublin.



## 1.4 Structure of report and brief technical notes

Chapter 2 presents the selected indicators. In cases where tables are not sorted by year, the sort data column is highlighted with a darker background. The appendices describe the indicator definitions and data sources in greater detail.

In many tables, both GDP and GNI data have been given for Ireland because Ireland is almost unique in the EU in the wide divergence between GDP and GNI. As far as possible international tables include an aggregate figure for the 27 EU Member States (post 1<sup>st</sup> January 2007) or 25 EU Member States (post 1<sup>st</sup> May 2004). In some cases, where this figure was not available, an aggregate figure for the 15 countries who were EU members prior to May 2004 is used. These figures are labelled EU 27, EU 25 or EU 15 as appropriate.

The national and international data sources are given for each indicator. Most of the national data are compiled by the CSO. In some cases, the survey name more widely used at EU level is quoted, for example, the QNHS is referred to as the EU Labour Force Survey (LFS).

The figures in the tables and graphs reflect the data availability position as at the end of February 2007.

**Table A Selected key indicators of national progress**

Domain and sub-domain	Indicator	
<b>Economy</b>		
<b>Gross Domestic Product</b>	1.1	Ireland: GDP and GNI, 1996-2005
	1.2	EU: GDP and GNI at current market prices, 2005
	1.3	EU: GDP per capita in Purchasing Power Standards, 2003-2005
<b>Government debt</b>	1.4	Ireland, EU and Eurozone: General government consolidated gross debt, 1996-2005
	1.5	EU: General government consolidated gross debt, 2003-2005
<b>Public balance</b>	1.6	Ireland and Eurozone: Public balance, 1996-2005
	1.7	EU: Public balance, 2003-2005
	1.8	Ireland: Central and Local Government current expenditure, 1996-2005
<b>Gross fixed capital formation</b>	1.9	Ireland and EU: Gross fixed capital formation, 1996-2005
	1.10	EU: Gross fixed capital formation, 2003-2005
<b>International transactions</b>	1.11	EU: Current account balance, 2003-2005
	1.12	EU: Direct investment flows, 2004-2005
<b>International trade</b>	1.13	EU: Exports of goods and services, 2003-2005
	1.14	EU: Imports of goods and services, 2003-2005
<b>Exchange rates</b>	1.15	International: Bilateral euro exchange rates, 1999-2006
	1.16	Ireland: Trade weighted competitiveness indicator, 1999-2006
<b>Interest rates</b>	1.17	Eurozone: Convergence of interest rates for loans to non-financial corporations up to one year, 1997-2006
	1.18	Eurozone: Interest rates for short-term loans (new business) to non-financial corporations, 2005-2006
<b>Harmonised Index of Consumer Prices</b>	1.19	Ireland and EU: Harmonised Index of Consumer Prices, 1997-2006
	1.20	EU: Harmonised Index of Consumer Prices, 2004-2006
<b>Price levels</b>	1.21	Ireland and EU: Comparative price levels of final consumption by private households including indirect taxes, 1996-2005
	1.22	EU: Comparative price levels of final consumption by private households including indirect taxes, 2003-2005
<b>Regional income</b>	1.23	Ireland: Gross Value Added per capita by region, 2002-2004
	1.24	Ireland: Disposable income per capita by region, 2002-2004
<b>Innovation and technology</b>		
<b>Science and technology graduates</b>	2.1	Ireland: Science and technology graduates, per 1,000 population aged 20-29, 1995-2004
	2.2	EU: Mathematics, science and technology PhDs awarded per 1,000 population aged 25-34, 2002-2004
<b>Research and development expenditure</b>	2.3	Ireland and EU: Gross domestic expenditure on R&D, 1996-2005
	2.4	EU: Gross domestic expenditure on R&D, 1995-2005
<b>Patent applications</b>	2.5	Ireland and EU: European Patent Office applications, 1994-2003
	2.6	EU: European Patent Office applications, 2003
<b>Household internet access</b>	2.7	Ireland: Private households with internet access, 1998-2006
	2.8	EU: Private households with internet access, 2004-2006
<b>Employment and unemployment</b>		
<b>Employment rate</b>	3.1	Ireland: Employment rates, 1997-2006
	3.2	EU: Employment rates by sex, 2005
<b>Labour productivity</b>	3.3	Ireland: GDP in PPS per hour worked and per person employed, 1996-2005
	3.4	EU: GDP in PPS per person employed, 2005
<b>Unemployment rate</b>	3.5	Ireland and EU: Unemployment rates, 1997-2006
	3.6	EU: Unemployment rates by sex, 2006
	3.7	Ireland and EU: Long-term unemployment rates, 1997-2006
	3.8	EU: Long-term unemployment rates by sex, 2005
<b>Jobless households</b>	3.9	Ireland: Population aged 18-59 living in jobless households, 1997-2006
	3.10	EU: Population aged 18-59 living in jobless households, 2004-2006
<b>Older workers</b>	3.11	EU: Employment rate of workers aged 55-64 by sex, 2005
	3.12	EU: Average exit age from the labour force by sex, 2005
<b>Social cohesion</b>		
<b>Social protection expenditure</b>	4.1	Ireland and EU: Social protection expenditure, 1995-2004
	4.2	EU: Expenditure on social protection, education and health, 2003

Domain and sub-domain	Indicator	
	4.3	EU: Social protection expenditure in Purchasing Power Parities per capita, 2002-2004
	4.4	EU: Social protection expenditure by type, 2004
<b>Risk of poverty</b>	4.5	EU: At risk of poverty rates, 2005
	4.6	Ireland: At risk of poverty rates by age and sex, 2004-2005
	4.7	Ireland: Persons in consistent poverty by age and sex, 2004-2005
	4.8	Ireland: Persons in consistent poverty by principal economic status, 2005
<b>Gender pay gap</b>	4.9	Ireland and EU: Gender pay gap, 1996-2005
	4.10	EU: Gender pay gap, 2003-2005
<b>Voter turnout</b>	4.11	Ireland: Numbers voting in Dáil elections, 1973-2002
	4.12	EU: Votes recorded at national parliamentary elections, 1981-2006
<b>Official development assistance</b>	4.13	Ireland: Net official development assistance, 1996-2005
	4.14	EU: Net official development assistance, 2003-2005
<b>Education</b>		
<b>Education expenditure</b>	5.1	Ireland: Real non-capital public expenditure on education, 1996-2005
	5.2	Ireland: Student numbers by level, 1996-2006
	5.3	EU: Public expenditure on education, 2001-2003
<b>Pupil-teacher ratio</b>	5.4	EU: Ratio of students to teachers, 2003/2004
	5.5	EU: Average class size at ISCED levels 1 and 2, 2003/2004
<b>Third level education</b>	5.6	Ireland: Persons aged 25-34 with 3rd level education, 1999-2006
	5.7	EU: Persons aged 25-34 with 3rd level education by sex, 2006
<b>Literacy</b>	5.8	Ireland: Student performance on the combined reading, mathematical and scientific literacy scales by sex, 2003
	5.9	EU: Student performance on the combined reading, mathematical and scientific literacy scales, 2003
<b>Early school leavers</b>	5.10	Ireland: Early school leavers by labour force status and sex, 2006
	5.11	Ireland: Proportion of the population aged 20-64 with at least upper secondary education, 2006
	5.12	EU: Early school leavers, 2006
<b>Health</b>		
<b>Health care expenditure</b>	6.1	Ireland: Non-capital public expenditure on health care, 1995-2004
	6.2	EU: Total expenditure on health as percentage of GDP, 2002-2004
<b>Life expectancy</b>	6.3	Ireland: Life expectancy at birth and at age 65 by sex, 1925-2003
	6.4	EU: Life expectancy at birth by sex, 2005
<b>Population</b>		
<b>Population distribution</b>	7.1	Ireland: Population distribution by age group, 1997-2006
	7.2	Ireland: Household composition, 1997-2006
	7.3	EU: Population change, 1996-2006
<b>Migration</b>	7.4	Ireland: Migration and natural increase, 1997-2006
	7.5	Ireland: Immigration by country of origin, 1997-2006
	7.6	Ireland and EU: Rate of natural increase of population, 1996-2005
<b>Age of population</b>	7.7	Ireland: Age dependency ratio, 1997-2006
	7.8	EU: Young and old as proportion of population aged 15-64, 2005
<b>Fertility</b>	7.9	Ireland and EU: Total fertility rate, 1996-2005
	7.10	EU: Total fertility rate, 1995-2005
<b>Lone parent families</b>	7.11	Ireland: Lone parent families with children aged under 20 by sex of parent, 1997-2006
<b>Living alone</b>	7.12	Ireland: Persons aged 65 and over living alone by sex, 1997-2006
<b>Housing</b>		
<b>Dwelling completions</b>	8.1	Ireland: Dwelling unit completions, 1970-2006
	8.2	Ireland: Dwelling unit completions, 1997-2006
	8.3	Ireland: Nature of occupancy of private households, 1961-2006
<b>Mortgages</b>	8.4	Ireland: Housing loans approved and paid, 1996-2005
	8.5	Eurozone: Interest rates for household mortgages (new business), 2004-2006
<b>Crime</b>		
<b>Headline offences</b>	9.1	Ireland: Headline offences detection rates by Garda Division, 2003-2006
	9.2	Ireland: Headline offences recorded by Garda Division, 2006
	9.3	Ireland: Headline offences recorded per 1,000 population, 2003-2006

Domain and sub-domain	Indicator	
<b>Murders</b>	9.4	Ireland: Murders recorded, 2003-2006
<b>Environment</b>		
<b>Greenhouse gases</b>	10.1	Ireland: Total net greenhouse gas emissions, 1996-2005
	10.2	EU: Net greenhouse gas emissions, 2004, and Kyoto 2008-2012 target
<b>Energy intensity of economy</b>	10.3	Ireland: Gross inland consumption of energy divided by GDP, 1995-2004
	10.4	EU: Gross inland consumption of energy divided by GDP, 2004
<b>River water quality</b>	10.5	Ireland: River water quality, 1987-2005
<b>Urban air quality</b>	10.6	Ireland: Smoke concentrations in urban areas, 1992-2005
<b>Acid rain precursors</b>	10.7	Ireland: Acid rain precursor emissions, 1995-2004
<b>Waste management</b>	10.8	Ireland: Total waste collected and percentage landfilled by type, 2003-2005
	10.9	EU: Municipal waste collected and landfilled, 2005
<b>Transport</b>	10.10	Ireland: Private cars under current licence, 1996-2005
	10.11	EU: Passenger cars per 1,000 population aged 15 and over, 2003-2005
	10.12	Ireland and EU: Share of road in total inland freight transport, 1996-2005
	10.13	EU: Share of road in total inland freight transport, 2003-2005
	10.14	Ireland and EU: Index of inland freight transport volume, 1996-2005
	10.15	EU: Index of inland freight transport volume, 2003-2005

**Chapter**

**2**

---

**Indicators**

## 2.1 Commentary

This section gives an overview of Ireland's situation in respect of the economic, social and environment statistical indicators in comparison with other EU countries. More detailed commentary on the individual indicators can be found in Section 2.2.

Key findings include:

- ◆ In 2005, Ireland had the second highest GDP per capita, expressed in terms of purchasing power standards within the EU at 38.9% above the EU average. However, based on GNI, Ireland was in fifth place at 18.6% above the EU 25 average.
- ◆ Investment in Ireland in Gross Fixed Capital Formation (GFCF) increased by almost 43% over the period 1996-2005. In each year since 1997, Ireland has invested a higher proportion of GDP in GFCF than the EU 25 average.
- ◆ Ireland's international trade competitiveness has deteriorated since 2000, mainly due to higher inflation and an appreciating euro. Over the period 1999-2006, the euro increased in value against the dollar by 17%.
- ◆ The employment rate in Ireland rose from 56.1% in 1997 to 68.1% in 2006. The rate for women increased by over 14 percentage points over that period, while the rate for men rose by around 10 percentage points. Productivity in Ireland, measured as GDP per person employed, was the second highest in the EU 27 in 2005.
- ◆ The unemployment rate in Ireland increased from a low point of 3.6% in 2001 to 4.3% in 2006. Ireland had the third lowest unemployment rate in the EU in 2006 at just over half of the EU 27 average of 7.9%. The long-term unemployment rate in Ireland was 1.4% in 2005, which was lower than the EU 27 average of 4%.
- ◆ The employment rate of persons aged 55-64 at 51.7% was higher than the EU 27 average of 42.3% in 2005. However only 37.4% of women in Ireland in this age group were in employment compared to 65.7% of men.
- ◆ Over 6% of men and 7.5% of women in Ireland were in consistent poverty in 2005. Unemployed people were most likely to be in consistent poverty.
- ◆ The proportion of Irish people at risk of poverty, after pensions and social transfer payments were taken into account, was 20% in 2005. This was one of the highest rates in the EU 27. The effect of pensions and social transfers on reducing the at-risk-of-poverty rate was low in Ireland compared with other EU 27 countries. In 2004, social protection expenditure in Ireland was 17% of GDP. This was just over half of the rate in Sweden.
- ◆ Ireland's net official development assistance amounted to 0.42% of GNI in 2005. This was below both the UN 2007 target of 0.7% of GNI and the interim Irish Government 2002 target of 0.45% of GNI.
- ◆ Non-capital public expenditure on education per student rose by 45.2% between 1996 and 2005, after allowing for inflation. Most of the increased expenditure was directed towards primary and secondary education.
- ◆ An average of €2,223 (at constant 2003 prices) per person was spent on non-capital public expenditure on health care in Ireland in 2004. This represented an increase of over 80% on the 1995 level.
- ◆ The pupil-teacher ratio at primary level in Ireland in the school year 2003/2004 was one of the highest in the EU 27 at 18.3. Twelve of the other twenty-six EU member states had a pupil-teacher ratio of less than 15 at primary level.
- ◆ Early school leavers represented 12.3% of the 18-24 age group in Ireland in 2006. The unemployment rate for early school leavers in this age group was 19% in 2006 compared with an unemployment rate of 8.2% for all persons aged 18-24.

- ◆ The population in Ireland increased by 15.7% to almost 4.24 million persons in the period 1997-2006. This was the second highest rate of increase in the EU 27 behind Cyprus. The fertility rate in Ireland was the second highest in the EU after France in 2005, at a rate of 1.88 compared to an EU 25 average of 1.52.
- ◆ Life expectancy at birth was 81.8 years for Irish women and 77.1 years for Irish men in 2005. Life expectancy for men in Ireland was 1.3 years above the EU 25 average of 75.8 years, while that for women was 0.1 years below the EU 25 average of 81.9 years.
- ◆ Ireland's greenhouse gas emissions were at 125.4% of 1990 levels in 2005. This was 12.4% higher than the Kyoto 2008-2012 target for Ireland of 113% of 1990 levels.
- ◆ The percentage of waste landfilled in Ireland decreased from 71.6% in 2003 to 65.4% in 2005. Glass and ferrous, aluminium and other metals were the materials most likely to be recycled with 64.4% of glass waste and 53.8% of metal waste recycled in 2005.





## 2.2 Indicators

### 1.1 Ireland: GDP and GNI, 1996–2005

	€b	€b	%	€000
Year	GDP	GNI	GNI as % of GDP	GNI at constant (2004) prices per capita
1996	58.8	53.4	90.8	21.3
1997	68.1	60.8	89.3	23.1
1998	78.7	69.8	88.7	24.5
1999	90.6	78.0	86.1	26.2
2000	104.6	90.0	86.0	28.3
2001	116.8	98.5	84.3	28.9
2002	129.9	107.7	82.9	29.4
2003	138.9	118.5	85.3	30.4
2004	147.6	125.8	85.2	31.1
2005 <sup>4</sup>	161.2	137.7	85.5	32.1

Source: CSO National Accounts

- ◆ In 2005, the GNI figure for Ireland was 85.5% of the GDP figure. This figure has essentially been unchanged since 2003 (see Table 1.1).
- ◆ In 2005, the Irish GNI per capita figure was over 50% higher than the 1996 figure when measured in constant 2004 prices (see Table 1.1).
- ◆ The situation in Ireland is exceptional among EU countries, with Luxembourg the only other country where the difference between GDP and GNI is more than 10% of GDP (see Table 1.2). The gap reflects the importance of foreign direct investment to the Irish economy.
- ◆ After Luxembourg, with a GDP/GNI ratio of 81.7, the next eight lowest EU countries apart from Ireland had ratios in the range 94.2 to 97.7. These were all new EU Member States (see Table 1.2).

### 1.2 EU: GDP and GNI at current market prices, 2005

	€b	€b	%
Country	GDP	GNI	GNI as % of GDP
United Kingdom	1,790.7	1,833.0	102.4
Netherlands	505.6	510.2	100.9
Belgium	298.5	301.1	100.9
Denmark	208.3	210.0	100.8
France	1,710.0	1,718.8	100.5
Finland	157.2	157.8	100.4
Germany	2,241.0	2,248.2	100.3
<b>EU 25</b>	<b>10,848.8</b>	<b>10,835.1</b>	<b>99.9</b>
Sweden	287.7	286.9	99.7
Italy	1,417.2	1,412.6	99.7
Slovenia	27.6	27.4	99.1
Austria	245.1	242.6	99.0
Spain	905.5	893.2	98.6
Latvia	12.8	12.7	98.6
Lithuania	20.6	20.3	98.4
Portugal	147.8	145.3	98.3
Greece	181.1	177.7	98.2
Cyprus <sup>5</sup>	13.6	13.3	97.7
Slovakia	38.1	37.1	97.4
Romania <sup>5</sup>	79.3	77.0	97.1
Poland	243.8	235.3	96.5
Malta	4.6	4.4	96.5
Czech Republic	99.7	95.3	95.6
Estonia	11.1	10.5	95.2
Hungary	88.8	83.7	94.2
<b>Ireland</b>	<b>161.2</b>	<b>137.7</b>	<b>85.5</b>
Luxembourg	29.4	24.0	81.7
Bulgaria	21.4	:	:
Switzerland	294.3	323.5	110.0
Norway	237.7	239.0	100.6
Turkey <sup>5</sup>	290.5	290.0	99.8
Iceland	12.9	12.5	96.5
Croatia	30.9	:	:
Macedonia, TFYR	4.6	:	:

Source: Eurostat, CSO National Accounts

<sup>4</sup> Preliminary data.

<sup>5</sup> Forecasted data for Cyprus, Romania and Turkey.

### 1.3 EU: GDP per capita in Purchasing Power Standards, 2003–2005

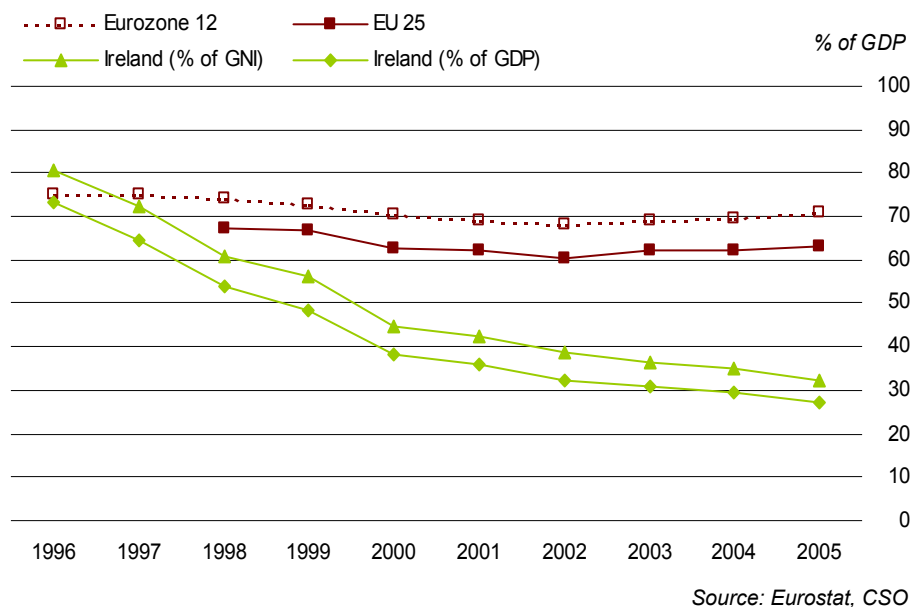
Country	EU 25=100		
	2003	2004	2005
Luxembourg	236.7	240.8	251.1
<b>Ireland (GDP)</b>	<b>134.4</b>	<b>135.7</b>	<b>138.9</b>
Netherlands	123.8	124.7	125.6
Austria	123.4	123.4	123.1
Denmark	119.3	119.4	121.9
<b>Ireland (GNI)</b>	<b>114.6</b>	<b>115.6</b>	<b>118.6</b>
Belgium	119.0	119.4	118.1
United Kingdom	116.1	118.0	117.5
Sweden	115.4	115.4	114.8
Finland	108.7	111.1	110.5
Germany	112.5	111.1	110.0
France	107.7	107.7	108.2
Italy	106.0	103.0	100.4
<b>EU 25</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Spain	96.7	96.6	98.0
<b>EU 27</b>	<b>95.8</b>	<b>95.9</b>	<b>96.0</b>
Cyprus	85.3	87.7	88.9
Greece	80.2	81.4	84.1
Slovenia	77.4	79.9	81.9
Czech Republic	70.7	72.1	73.7
Portugal	73.0	71.8	71.1
Malta	74.3	71.3	70.4
Hungary	60.8	61.3	62.5
Estonia	51.2	53.4	59.8
Slovakia	52.8	54.4	57.1
Lithuania	47.1	49.0	52.1
Poland	46.9	48.7	49.7
Latvia	41.2	43.6	48.0
Romania	29.9	32.6	34.1
Bulgaria	31.0	31.8	32.9
Norway	148.7	155.5	168.8
Iceland	119.5	123.6	129.4
Switzerland <sup>6</sup>	129.8	129.1	129.0
Croatia <sup>6</sup>	45.6	46.5	48.0
Turkey	26.2	26.8	27.6
Macedonia, TFYR <sup>6</sup>	24.5	24.9	25.9

Source: Eurostat, National Accounts

- ◆ In 2005, Ireland had the second highest GDP per capita, expressed in terms of purchasing power standards within the EU 27. However, based on GNI, Ireland fell back to fifth place at 18.6% above the EU 25 average. Nevertheless, this marked an improvement of two places compared with 2004 (see Table 1.3).
- ◆ The twelve new EU Member States were all below the EU 27 average in 2005. However, most have shown an improvement over the 2003-2005 period (see Table 1.3).

<sup>6</sup> Forecast for 2005. See Appendix 1 for details of PPS.

#### 1.4 Ireland, EU and Eurozone<sup>7</sup>: General government consolidated gross debt, 1996–2005



- ◆ General government consolidated gross debt as a percentage of GDP fell sharply in Ireland from 73.3% to 27.4% over the 1996-2005 period. In contrast, the Eurozone 12 figure has remained virtually constant at around 70% (see Graph 1.4).
- ◆ Ireland had a low debt/GDP ratio compared to other EU countries at less than 44% of the EU 25 average in 2005 (see Table 1.5).
- ◆ With the exception of Cyprus and Malta, the new EU Member States generally had lower than average debt to GDP ratios in 2005 (see Table 1.5).

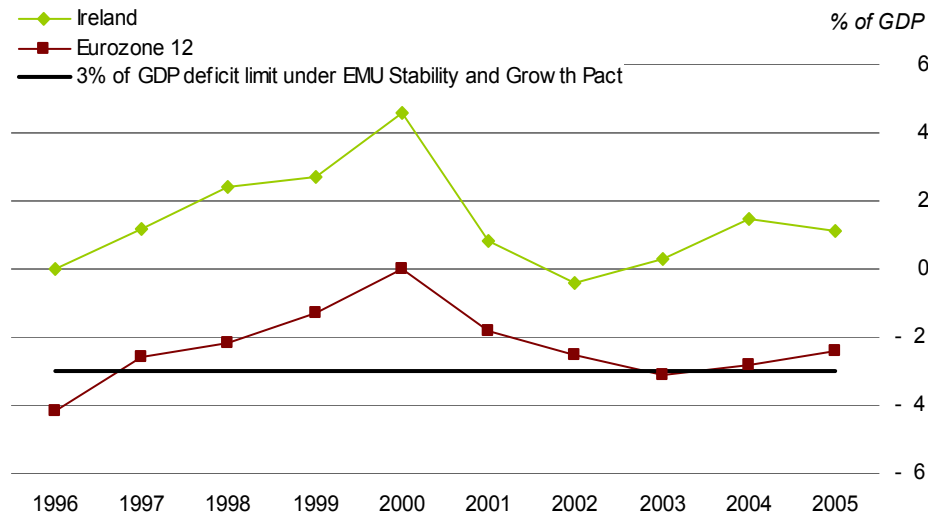
#### 1.5 EU: General government consolidated gross debt, 2003–2005

Country	% of GDP		
	2003	2004	2005
Estonia	5.7	5.2	4.5
Luxembourg	6.3	6.6	6.0
Latvia	14.4	14.5	12.1
Romania	20.7	18.0	15.2
Lithuania	21.2	19.4	18.7
<b>Ireland (% of GDP)</b>	<b>31.1</b>	<b>29.7</b>	<b>27.4</b>
Slovenia	28.5	28.7	28.0
Bulgaria	46.1	38.6	29.9
Czech Republic	30.1	30.7	30.4
<b>Ireland (% of GNI)</b>	<b>36.5</b>	<b>34.9</b>	<b>32.1</b>
Slovakia	42.7	41.6	34.5
Denmark	44.4	42.6	35.9
Finland	44.3	44.3	41.3
Poland	43.9	41.9	42.0
United Kingdom	38.9	40.4	42.4
Spain	48.7	46.2	43.1
Sweden	51.8	50.5	50.4
Netherlands	52.0	52.6	52.7
Hungary	55.8	56.3	57.7
<b>EU 25</b>	<b>62.0</b>	<b>62.4</b>	<b>63.2</b>
Austria	64.6	63.8	63.4
Portugal	57.0	58.6	64.0
France	62.4	64.4	66.6
Germany	63.9	65.7	67.9
Cyprus	69.1	70.3	69.2
<b>Eurozone 12</b>	<b>69.3</b>	<b>69.8</b>	<b>70.8</b>
Malta	70.2	74.9	74.2
Belgium	98.6	94.3	93.2
Italy	104.3	103.9	106.6
Greece	107.8	108.5	107.5
Croatia	40.9	43.7	44.2
Turkey	85.1	76.9	69.6

Source: Eurostat, CSO National Accounts

<sup>7</sup> Eurozone 11 and Greece up to 31 December 2000, Eurozone 12 from 1 January 2001. Slovenia joined the Eurozone on 1<sup>st</sup> January 2007.

### 1.6 Ireland and Eurozone: Public balance, 1996–2005



Source: Eurostat, CSO National Accounts

- ◆ The public balance in Ireland was significantly in surplus during the late 1990s. Over the period 2000-2002, it decreased from a surplus of 4.6% of GDP to a small deficit of 0.4% of GDP. In 2003, Ireland showed a small surplus of 0.3% of GDP, which increased to 1.5% in 2004, before falling slightly to a surplus of 1.1% in 2005 (see Graph 1.6 and Table 1.7).
- ◆ In 2005, four Eurozone member states exceeded the 3% of GDP deficit limit under the EMU Stability and Growth Pact (Portugal, Greece, Italy and Germany). Five EU member states outside the Eurozone also had deficits greater than this limit. Denmark at 4.9% had the highest public balance surplus in 2005, while Hungary, at -6.5%, had the highest deficit (see Table 1.7).

### 1.7 EU: Public balance, 2003–2005

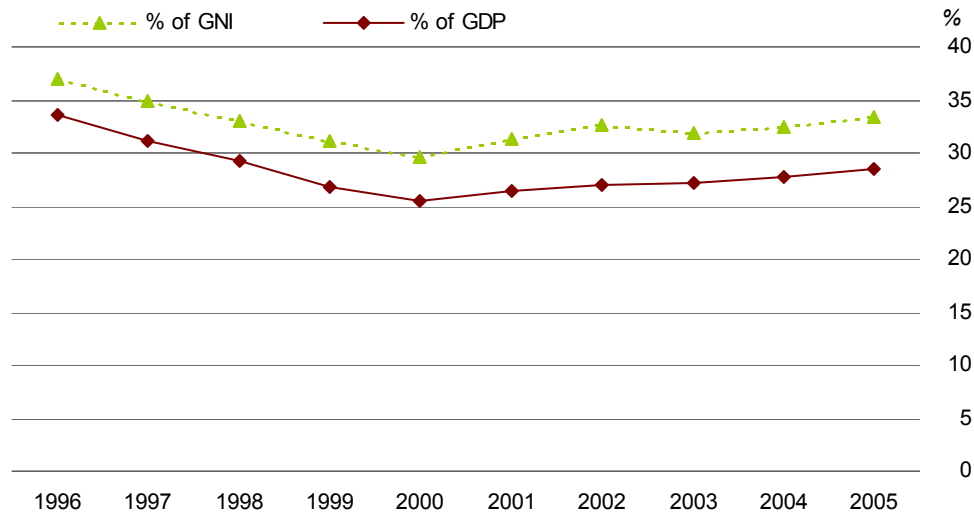
Country	% of GDP		
	2003	2004	2005
Denmark	1.1	2.7	4.9
Bulgaria	0.3	1.9	3.1
Sweden	0.1	1.8	3.0
Finland	2.5	2.3	2.7
Estonia	2.0	2.3	2.3
<b>Ireland (% of GNI)</b>	<b>0.4</b>	<b>1.8</b>	<b>1.3</b>
<b>Ireland (% of GDP)</b>	<b>0.3</b>	<b>1.5</b>	<b>1.1</b>
Spain	0.0	-0.2	1.1
Latvia	-1.2	-0.9	0.1
Netherlands	-3.1	-1.8	-0.3
Romania	-1.7	-1.3	-0.4
Lithuania	-1.3	-1.5	-0.5
Luxembourg	0.3	-1.1	-1.0
Slovenia	-2.8	-2.3	-1.4
Austria	-1.6	-1.2	-1.5
<b>EU 25</b>	<b>-3.0</b>	<b>-2.7</b>	<b>-2.3</b>
Belgium	0.0	0.0	-2.3
Cyprus	-6.3	-4.1	-2.3
<b>Eurozone 12</b>	<b>-3.1</b>	<b>-2.8</b>	<b>-2.4</b>
Poland	-4.7	-3.9	-2.5
France	-4.2	-3.7	-2.9
Slovakia	-3.7	-3.0	-3.1
Germany	-4.0	-3.7	-3.2
Malta	-10.0	-5.0	-3.2
United Kingdom	-3.3	-3.2	-3.3
Czech Republic	-6.6	-2.9	-3.6
Italy	-3.5	-3.4	-4.1
Greece	-6.1	-7.8	-5.2
Portugal	-2.9	-3.2	-6.0
Hungary	-6.3	-5.3	-6.5
Turkey	-11.3	-5.7	-1.2
Croatia	-4.5	-5.0	-3.9

Source: Eurostat, CSO National Accounts

**1.8 Ireland: Central and Local Government current expenditure, 1996–2005**

Year	%	
	% of GDP	% of GNI
1996	33.6	37.0
1997	31.2	35.0
1998	29.2	32.9
1999	26.8	31.1
2000	25.5	29.6
2001	26.4	31.3
2002	26.9	32.6
2003	27.1	31.8
2004	27.7	32.5
2005 <sup>8</sup>	28.5	33.4

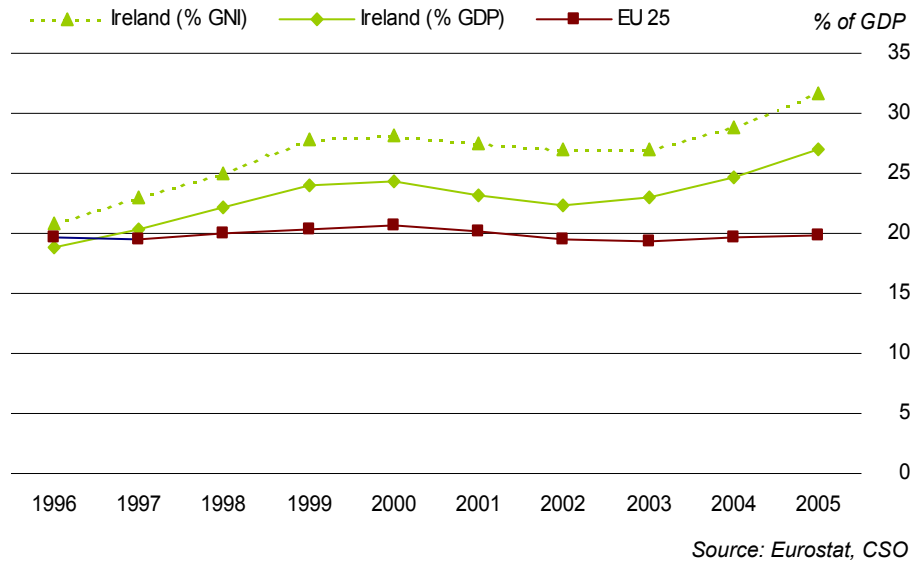
Source: CSO National Accounts



- ◆ Current expenditure by central and local government decreased from 33.6% of GDP in 1996 to 25.5% in 2000 reflecting Ireland's strong economic growth over the period. Since then it has tended to increase and reached 28.5% of GDP in 2005 (see Tables 1.1 and 1.8).

<sup>8</sup> Estimate.

### 1.9 Ireland and EU: Gross fixed capital formation, 1996–2005



- ◆ Since 1997, Ireland has had a higher rate of investment in gross fixed capital formation than the EU 25 average. In 2005, gross fixed capital formation was 27% of GDP for Ireland compared to an EU 25 average of 19.9% of GDP (see Graph 1.9 and Table 1.10).
- ◆ The Irish rate has increased by four percentage points between 2003 and 2005 with the result that Ireland now has the fourth highest rate in the EU 27 (see Table 1.10).

### 1.10 EU: Gross fixed capital formation, 2003–2005

Country	% of GDP		
	2003	2004	2005
<b>Ireland (% of GNI)</b>	<b>27.0</b>	<b>28.8</b>	<b>31.6</b>
Estonia	29.3	31.5	31.1
Latvia	24.4	27.5	29.8
Spain	27.2	28.1	29.3
<b>Ireland (% of GDP)</b>	<b>23.0</b>	<b>24.6</b>	<b>27.0</b>
Slovakia	25.0	24.1	26.8
Czech Republic	26.7	26.2	24.9
Slovenia	23.3	24.5	24.4
Bulgaria	19.4	20.8	23.8
Greece	25.3	25.2	23.7
Romania	21.4	21.6	23.1
Hungary	21.9	22.4	22.7
Lithuania	21.2	22.3	22.4
Portugal	22.5	22.2	21.4
Italy	20.4	20.6	20.6
Austria	21.3	20.9	20.5
Denmark	19.3	19.4	20.4
Malta	19.4	19.1	20.1
<b>EU 25</b>	<b>19.4</b>	<b>19.6</b>	<b>19.9</b>
Belgium	18.8	19.4	19.8
France	18.8	19.2	19.7
Luxembourg	21.5	20.6	19.7
Netherlands	19.5	19.1	19.3
Cyprus	17.6	18.8	18.9
Finland	18.1	18.2	18.9
Poland	18.3	18.1	18.2
Germany	17.8	17.4	17.3
Sweden	16.0	16.3	17.2
United Kingdom	16.1	16.5	16.8
Croatia <sup>9</sup>	28.6	29.4	29.3
Iceland	19.8	23.3	28.4
Switzerland	20.7	21.0	21.4
Turkey	15.5	17.8	19.6
Norway	17.5	18.0	18.7

Source: Eurostat, CSO National Accounts

<sup>9</sup> Forecast for 2005.

### 1.11 EU: Current account balance, 2003–2005

current account balance as % of GDP			
Country	2003	2004	2005
Luxembourg	7.5	11.8	11.8
Netherlands	5.5	8.5	7.7
Sweden	7.3	6.8	6.2
Finland	6.4	7.8	4.9
Germany	1.9	3.7	4.1
Denmark	3.4	2.4	3.6
Belgium	4.1	3.5	2.5
Austria	-0.2	0.5	1.3
<b>EU 25</b>	<b>0.0</b>	<b>-0.1</b>	<b>-0.6</b>
Italy	-1.3	-0.9	-1.6
France	0.4	-0.3	-1.6
Poland	-2.1	-4.2	-1.7
Slovenia	-0.8	-2.7	-2.0
Czech Republic	-6.2	-6.1	-2.1
United Kingdom	-1.3	-1.7	-2.4
<b>Ireland</b>	<b>0.0</b>	<b>-0.6</b>	<b>-2.6</b>
Cyprus	-2.3	-5.0	-5.6
Hungary	-8.0	-8.4	-6.8
Lithuania	-6.8	-7.7	-7.2
Spain	-3.5	-5.3	-7.4
Greece	-7.1	-6.2	-7.7
Slovakia	-0.9	-3.4	-8.5
Romania	-5.5	-8.4	-8.7
Portugal	-5.9	-7.2	-9.2
Estonia	-11.6	-12.5	-10.5
Malta	-4.7	-8.0	-10.5
Bulgaria	-8.5	-5.8	-11.8
Latvia	-8.2	-13.0	-12.7
Norway	13.0	13.8	16.7
Croatia	:	-4.9	-6.4
Turkey	-3.3	-5.2	-6.4
Iceland	-4.9	-10.1	-16.5

Source: Eurostat, CSO Balance of Payments

- ◆ Ireland had a current account deficit in our balance of international payments in 2005 of 2.6% of GDP compared with 0.6% in 2004 and a balanced account in 2003 (see Table 1.11).
- ◆ Eight EU 27 member states had current account surpluses in 2005 (see Table 1.11).

### 1.12 EU: Direct investment flows, 2004–2005

% of GDP				
Country	Inward		Outward	
	2004	2005	2004	2005
Luxembourg	230.1	306.0	-243.2	-327.2
Estonia	8.3	21.2	-2.3	-4.5
Bulgaria	10.6	9.8	0.8	-1.2
Malta	7.4	9.4	0.0	0.5
Czech Republic	4.6	8.8	-0.9	-0.7
United Kingdom	3.6	8.8	-4.6	-4.1
Belgium	12.1	8.7	-9.5	-8.7
Cyprus	6.9	7.2	-4.4	-2.9
Netherlands	0.3	6.6	-4.4	-22.7
Romania	8.5	6.6	-0.1	0.0
Hungary	4.4	6.3	-1.1	-1.6
Denmark	-3.8	5.1	4.2	-5.8
Latvia	4.6	4.6	-0.8	-0.8
Slovakia	2.7	4.4	0.4	-0.3
Lithuania	3.4	4.0	-1.2	-1.3
Sweden	3.3	3.6	-6.0	-6.6
Poland	5.1	3.2	-0.3	-1.0
France	1.5	3.0	-2.8	-5.4
Austria	1.3	3.0	-2.8	-3.3
Spain	2.4	2.0	-5.8	-3.4
Finland	1.6	2.0	0.6	-2.2
Portugal	1.3	1.7	-4.5	-0.6
Slovenia	2.5	1.6	-1.7	-1.8
Germany	-0.6	1.2	-0.1	-1.6
<b>Eurozone 12</b>	<b>1.2</b>	<b>1.1</b>	<b>-2.0</b>	<b>-3.7</b>
Italy	1.0	1.1	-1.1	-2.4
Greece	0.7	-0.1	-0.3	-0.4
<b>Ireland</b>	<b>-5.8</b>	<b>-15.5</b>	<b>-9.9</b>	<b>-6.8</b>
Iceland	5.7	15.9	-19.7	-44.3
Croatia	3.5	4.5	-1.0	-0.6
Turkey	1.0	2.8	-0.3	-0.3
Norway	0.2	1.4	-0.8	-5.2

Source: Eurostat, CSO Balance of Payments

- ◆ Direct investment in Ireland by foreign companies was negative (i.e. disinvestment) in 2005, and represented 15.5% of GDP. This was mainly due to loans being made by companies, that are largely IFSC Treasury companies, to related companies abroad. On account of the scale of these activities in our economy, this statistic tends to be quite volatile. Outward investment by companies resident in Ireland into their foreign subsidiaries and associates was 6.8% of GDP which was lower than in 2004 (see Table 1.12 and Appendix 1).

### 1.13 EU: Exports of goods and services, 2003–2005

Country	exports as % of GDP		
	2003	2004	2005
Luxembourg	125.8	140.5	150.5
Belgium	80.4	82.8	85.8
<b>Ireland</b>	<b>83.1</b>	<b>83.3</b>	<b>80.5</b>
Estonia	70.8	75.6	79.7
Slovakia	76.2	75.0	76.9
Malta	78.8	78.6	71.9
Czech Republic	61.7	71.0	71.8
Netherlands	60.9	64.4	68.1
Hungary	61.6	65.1	68.1
Slovenia	55.8	59.9	64.5
Bulgaria	53.5	57.5	60.1
Lithuania	51.3	52.1	58.2
Austria	51.8	55.0	56.7
Sweden	43.8	46.5	48.9
Denmark	45.1	45.7	48.7
Latvia	41.7	43.6	47.6
Cyprus	47.2	47.0	47.5
Finland	38.9	40.3	42.2
Germany	35.5	38.1	40.4
Poland	33.3	37.6	37.2
Romania	34.8	35.9	33.2
Portugal	28.6	29.2	29.0
United Kingdom	25.7	25.4	26.6
Italy	24.5	25.3	26.3
France	25.5	25.7	26.1
Spain	26.3	26.0	25.6
Greece	20.9	23.4	23.1
Croatia	:	50.2	49.3
Norway	43.8	45.2	45.1
Iceland	34.7	34.6	31.7
Turkey	28.8	29.9	28.6

Source: Eurostat, CSO Balance of Payments

- ◆ Exports of merchandise goods and services from Ireland were 80.5% of GDP in 2005, which was lower than the 83.3% recorded in 2004 (see Table 1.13).

### 1.14 EU: Imports of goods and services, 2003–2005

Country	imports as % of GDP		
	2003	2004	2005
Italy	23.9	24.6	26.3
France	24.5	25.6	27.1
Greece	28.1	29.3	29.6
United Kingdom	28.4	28.4	30.3
Spain	28.4	29.8	30.7
Germany	31.6	33.1	35.4
Finland	30.2	32.0	36.4
Poland	35.7	39.5	37.5
Portugal	35.1	36.7	37.6
Sweden	36.9	38.1	41.2
Romania	42.2	45.0	43.5
Denmark	38.7	40.5	43.6
Cyprus	47.7	49.8	50.1
Austria	50.7	53.1	54.1
Netherlands	54.2	56.8	59.6
Latvia	54.4	59.5	63.0
Slovenia	55.8	61.1	65.1
Lithuania	57.0	59.1	65.5
<b>Ireland</b>	<b>67.6</b>	<b>68.9</b>	<b>68.4</b>
Hungary	65.5	67.7	68.9
Czech Republic	63.9	71.5	69.8
Bulgaria	63.0	69.0	77.4
Slovakia	77.4	77.8	81.3
Malta	82.3	84.6	81.9
Belgium	76.3	79.1	83.0
Estonia	78.5	83.7	85.9
Luxembourg	101.3	113.3	119.1
Norway	30.3	30.9	27.9
Turkey	30.2	33.5	33.8
Iceland	37.7	40.2	44.5
Croatia	:	57.1	56.5

Source: Eurostat, CSO Balance of Payments

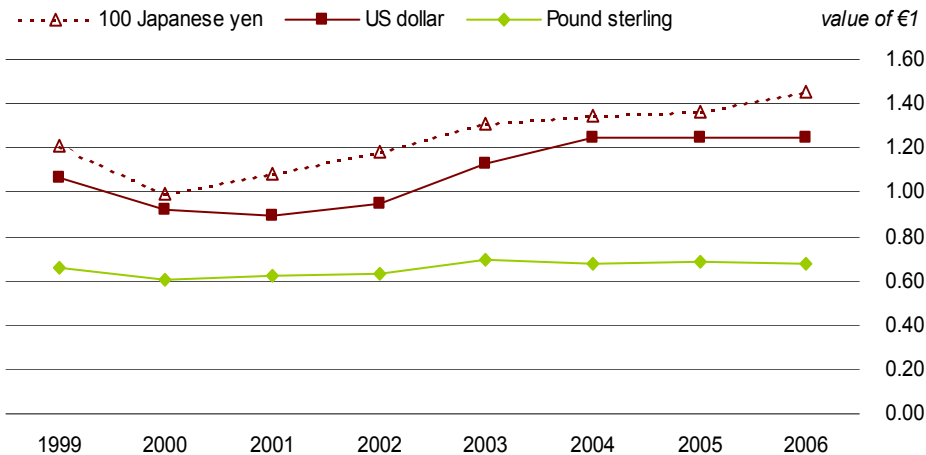
- ◆ Imports of goods and services into Ireland as a percentage of GDP were relatively unchanged over the period 2003-2005, being 68.4% of GDP in 2005 (see Table 1.14).



### 1.15 International: Bilateral euro<sup>10</sup> exchange rates, 1999–2006

Year	value of €1		
	US dollar	Pound sterling	Japanese yen
1999	1.066	0.659	121.3
2000	0.924	0.609	99.5
2001	0.896	0.622	108.7
2002	0.946	0.629	118.1
2003	1.131	0.692	131.0
2004	1.244	0.679	134.4
2005	1.244	0.684	136.8
2006	1.251	0.679	145.4

Source: European Central Bank



<sup>10</sup> On 1 January 1999, the euro became the national currency of the 11 participating EU countries. Greece joined the euro currency on 1<sup>st</sup> January 2001. Slovenia joined the euro currency on 1<sup>st</sup> January 2007.

### 1.16 Ireland: Trade weighted competitiveness indicator<sup>11</sup>, 1999–2006

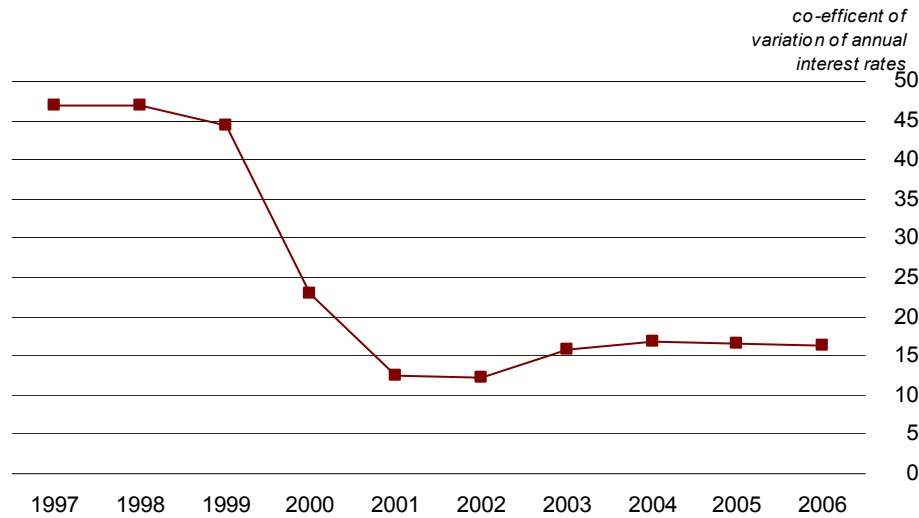
Year	1999Q1=100		
	Nominal TWCI	Real TWCI (Deflated by consumer prices)	Real TWCI (Deflated by producer prices)
1999	97.2	98.0	98.0
2000	90.7	94.8	94.8
2001	91.4	97.5	97.4
2002	93.4	102.8	102.0
2003	100.4	113.2	109.0
2004	102.1	115.7	108.1
2005	102.4	116.2	106.2
2006	103.0	117.3	105.0

Source: Central Bank, Financial Services Authority of Ireland

- ◆ The euro initially decreased in value against the US dollar by 15% between its introduction in 1999 and 2001 but then appreciated by almost 40% over the following three years to stand at 17% above the 1999 value in 2004. Since 2004, the value of the euro against the US dollar has been more stable. A broadly similar pattern was observed in respect of the movements of the euro against the Japanese yen (see Table 1.15 and graph).
- ◆ The relationship between the euro and the pound sterling has been more stable over the period (see Table 1.15 and graph).
- ◆ Ireland's trade weighted competitiveness improved from 97.2 in 1999 to 90.7 in 2000 before slipping in the period 2001-2006, mainly due to higher inflation and an appreciating euro (see Tables 1.15, 1.16 and Graph 1.19).

<sup>11</sup> For 2006, the consumer price TWCI is based on an 11 month average, but the deflated producer price TWCI is based on a 10 month average.

### 1.17 Eurozone: Convergence of interest rates for loans to non-financial corporations up to one year<sup>12</sup>, 1997–2006



Source: Eurostat, European Central Bank

- ◆ Interest rates for loans of up to one year, converged dramatically among the Eurozone countries between 1999 and 2001, but have remained fairly stable during 2001-2006 (see Graph 1.17).

<sup>12</sup> All figures are Eurostat estimates.

### 1.18 Eurozone: Interest rates for short-term loans (new business) to non-financial corporations, 2005–2006

Country	2005		2006	
	Loans of value up to €1m	Loans of value greater than €1m	Loans of value up to €1m	Loans of value greater than €1m
Austria	3.66	3.13	4.57	4.24
Netherlands	3.60	3.63	4.77	4.35
Spain	3.69	3.12	4.83	4.43
France	3.53	2.70	4.85	4.41
Finland	3.74	3.19	4.88	4.41
Belgium	4.02	2.95	5.02	4.39
Italy	4.07	3.25	5.03	4.47
<b>Eurozone</b>	<b>3.99</b>	<b>3.25</b>	<b>5.08</b>	<b>4.50</b>
Luxembourg	:	:	5.15	4.45
Germany	4.57	3.46	5.67	4.58
<b>Ireland</b>	<b>4.52</b>	<b>4.22</b>	<b>5.68</b>	<b>5.50</b>
Greece	5.41	3.93	6.30	5.16
Portugal	5.73	3.93	6.52	5.03

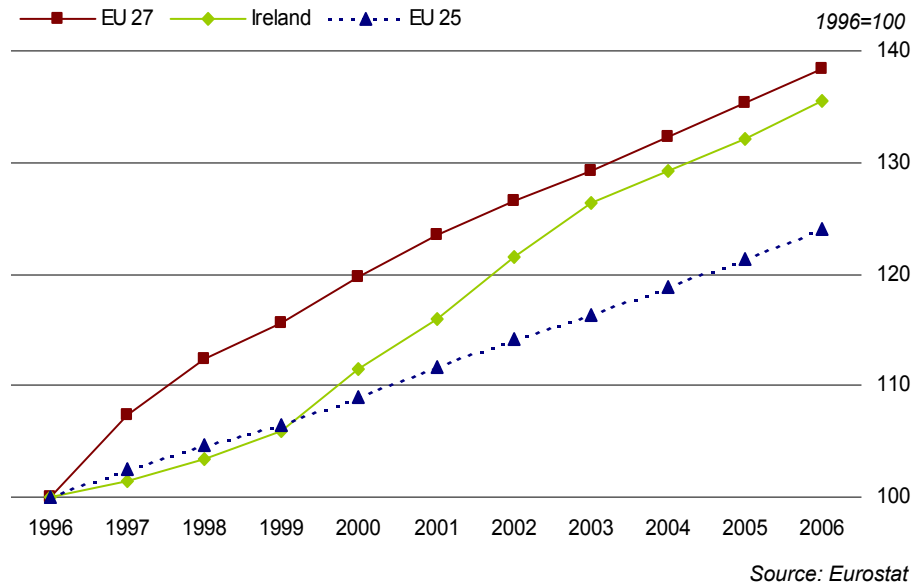
Source: Eurostat, European Central Bank

- ◆ In Ireland, variable interest rates and rates fixed for up to one year on new loans to non-financial corporations were at 5.68% for loan amounts of up to one million euro at the end of 2006, which was an increase on the 4.52% rate in 2005 (see Table 1.18).
- ◆ Interest rates on loans of amounts greater than one million euro increased from 4.22% to 5.5% in the same period. Ireland had the highest interest rate among Eurozone countries for loans of this type, compared to a Eurozone average rate of 4.50% (see Table 1.18).

<sup>13</sup> Rates shown are as at end of period.

<sup>14</sup> Rates shown in this table cover both floating (variable) rates and rates fixed for up to one year.

### 1.19 Ireland and EU: Harmonised Index of Consumer Prices, 1997–2006<sup>15</sup>



- ♦ Inflation in Ireland, as measured by the HICP, has been consistently higher than the EU 25 average since 1999. Cumulative inflation over the period 1996-2006, at 135.6% was higher than the EU 25 figure of 124.1% but lower than the EU 27 figure of 138.4%. This was due to very high inflation rates in Bulgaria and Romania over the period (see Graph 1.19 and Table 1.20).

### 1.20 EU: Harmonised Index of Consumer Prices, 2004–2006

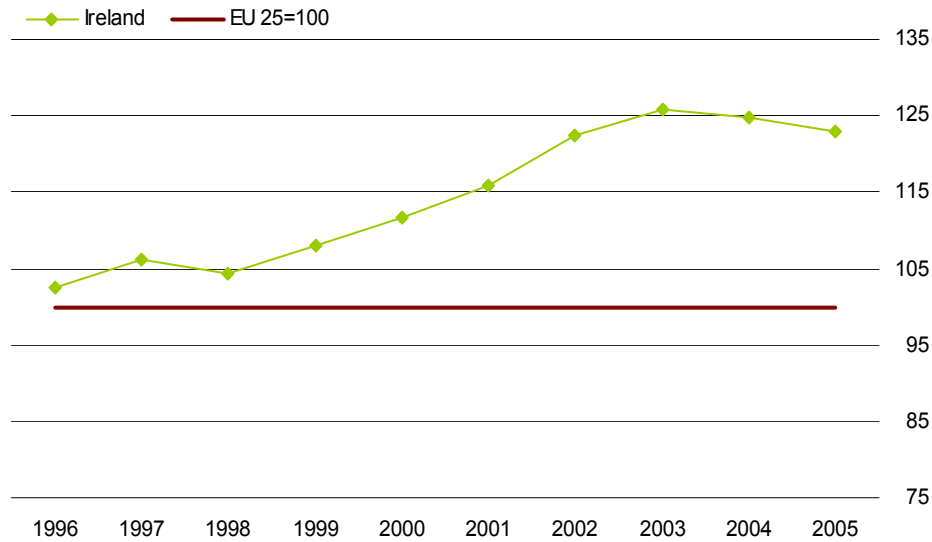
Country	1996=100		
	2004	2005	2006
Germany	110.7	112.8	114.8
Finland	113.7	114.5	116.0
Sweden	113.3	114.3	116.0
United Kingdom <sup>16</sup>	111.2	113.5	116.1
Austria	112.3	114.7	116.6
France	113.3	115.4	117.6
Belgium	114.4	117.3	120.0
Denmark	116.7	118.7	120.9
<b>EU 25<sup>16</sup></b>	<b>118.8</b>	<b>121.4</b>	<b>124.1</b>
Italy	119.7	122.3	125.0
Netherlands	122.5	124.3	126.4
Luxembourg	118.7	123.2	126.8
Lithuania	121.6	124.8	129.5
Cyprus	124.5	127.1	129.9
Malta	125.1	128.3	131.6
Portugal	125.3	128.0	131.9
Spain	124.1	128.3	132.9
<b>Ireland</b>	<b>129.2</b>	<b>132.1</b>	<b>135.6</b>
<b>EU 27<sup>16</sup></b>	<b>132.3</b>	<b>135.3</b>	<b>138.4</b>
Czech Republic	136.3	138.4	141.3
Greece	133.0	137.6	142.2
Latvia	135.0	144.3	153.8
Estonia	145.6	151.6	158.4
Poland	169.9	173.6	175.8
Slovenia	172.8	177.0	181.5
Slovakia	181.1	186.2	194.1
Hungary	209.9	217.3	226.0
Bulgaria	916.8	972.1	1,044.2
Romania	1,830.0	1,996.0	2,127.8
Norway	116.9	118.6	121.5
Iceland	128.1	129.9	135.9
Turkey	2,653.7	2,869.4	3,135.5

Source: Eurostat HICP

<sup>15</sup> 2006 EU 27 data provisional. 1996 Ireland data estimated. 1996-1998 EU 27 data estimated.

<sup>16</sup> Provisional estimated value.

### 1.21 Ireland and EU: Comparative price levels of final consumption by private households including indirect taxes, 1996–2005



Source: Eurostat, CSO

- ◆ In the first half of the 1990s, price levels in Ireland were below the EU 25 average. Since 1995, Ireland has become considerably more expensive and by 2003 our price level was 25.7% above the EU 25 average. However, since 2003 our price levels have fallen slightly in comparison with the EU 25 (see Graph 1.21 and Table 1.22).
- ◆ Ireland and Finland were the most expensive countries in the Eurozone, with price levels in both countries around 20% higher than the average for the zone (see Table 1.22).
- ◆ In 2005, Ireland had the second highest price levels among EU 27 countries after Denmark. The cost of living in Norway and Switzerland was on a similar scale to that of Denmark, but Iceland was considerably more expensive (see Graph 1.21 and Table 1.22).

### 1.22 EU: Comparative price levels of final consumption by private households including indirect taxes, 2003–2005

Country	EU 25=100		
	2003	2004	2005
Bulgaria	40.5	41.2	42.7
Romania	43.6	44.0	52.8
Lithuania	51.9	52.7	53.6
Latvia	54.9	55.1	55.5
Slovakia	50.4	54.5	56.1
Czech Republic	54.0	54.5	57.8
Poland	54.2	52.8	59.7
Hungary	58.0	61.1	62.4
Estonia	61.7	62.3	63.6
Malta	71.2	71.8	72.5
Slovenia	75.9	74.9	74.5
Portugal	85.7	86.1	86.0
Greece	85.4	86.7	87.0
Cyprus	90.4	89.8	90.2
Spain	88.2	90.2	91.9
<b>EU 25</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Austria	102.6	102.2	102.1
<b>Eurozone 12</b>	<b>103.0</b>	<b>103.0</b>	<b>102.9</b>
Germany	104.8	103.9	103.1
United Kingdom	104.1	104.4	103.7
Luxembourg	102.9	104.3	104.5
Netherlands	107.1	105.2	104.5
Belgium	105.6	104.8	104.7
Italy	103.4	104.5	104.8
France	109.3	109.7	109.0
Sweden	122.5	121.0	117.3
Finland	125.6	122.9	121.8
<b>Ireland</b>	<b>125.7</b>	<b>124.7</b>	<b>123.0</b>
Denmark	140.2	138.6	138.3
Macedonia, TFYR	43.8	43.8	43.5
Croatia	64.3	65.3	66.6
Turkey	57.7	58.5	67.3
Switzerland	142.7	138.9	136.2
Norway	141.3	133.9	139.3
Iceland	137.1	137.0	151.5

Source: Eurostat HICP

### 1.23 Ireland: Gross Value Added<sup>17</sup> per capita by region, 2002–2004

*Ireland=100*

Region	2002	2003	2004
<b>Border, Midland and Western</b>	68.5	70.6	72.7
Border	70.9	73.6	74.3
Midland	62.4	65.6	66.3
Western	69.3	70.1	74.8
<b>Southern and Eastern</b>	111.2	110.7	109.9
Dublin	127.6	131.5	133.3
Mid East	81.1	74.4	73.8
<i>Dublin plus Mid-East<sup>18</sup></i>	<i>115.1</i>	<i>115.9</i>	<i>116.8</i>
Mid West	82.9	88.9	93.2
South East	89.6	85.0	81.6
South West	133.3	128.2	122.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: CSO

- ◆ Dublin had the highest Gross Value Added<sup>19</sup> per capita in 2004 at 33.3% above the national average (see Table 1.23).
- ◆ Dublin also had the highest disposable income per capita in 2004 at 11.8% above the national average (see Table 1.24).

### 1.24 Ireland: Disposable income per capita by region, 2002–2004

*Ireland=100*

Region	2002	2003	2004
<b>Border, Midland and Western</b>	91.3	92.3	93.2
Border	89.8	90.9	92.3
Midland	91.5	92.3	92.0
Western	93.1	94.0	95.1
<b>Southern and Eastern</b>	103.1	102.8	102.5
Dublin	113.5	113.0	111.8
Mid East	100.8	99.4	98.1
Mid West	98.4	97.9	100.3
South East	91.3	91.3	91.2
South West	96.2	96.8	97.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

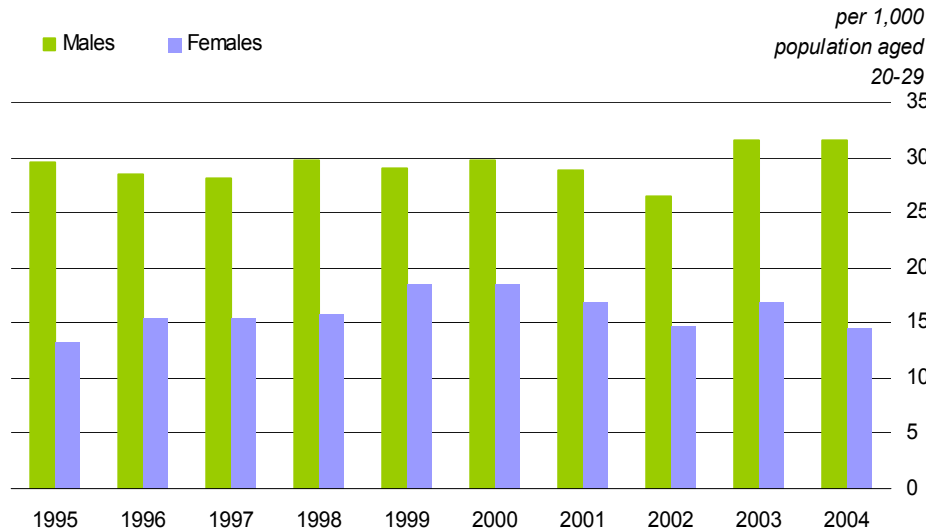
Source: CSO

<sup>17</sup> At basic prices.

<sup>18</sup> Dublin and Mid-East regions are combined together as they are affected significantly by workers living in one region and commuting to work in another.

<sup>19</sup> See Appendix 1.

## 2.1 Ireland: Science and technology graduates, per 1,000 population aged 20–29, 1995–2004



Source: Eurostat, Department of Education and Science

- Over the period 1995 to 2004, the proportion of male science and technology graduates per 1,000 males aged 20-29 has been significantly higher than the number of female science and technology graduates. While the number of female graduates increased in the late 1990's, since 2000 there has been a general decline in the number of female graduates (see Graph 2.1).
- The proportion of male science and technology graduates decreased from 29.8 per 1,000 males aged 20-29 in 2000 to 26.4 per 1,000 in 2002 but increased to 31.6 in 2004. The proportion of female graduates per 1,000 females aged 20-29 followed a similar pattern between 2000 and 2002, decreasing from 18.5 to 14.6. However, after an increase to 16.8 in 2003, the proportion decreased to 14.6 in 2004, substantially below the 2000 level (see Graph 2.1).
- The proportion of mathematics, science and technology PhDs awarded in Ireland, at 0.6 per 1,000 population aged 25-34 was the same as the EU 27 average in 2003 and 2004. Sweden had the highest rate, at 1.8, in 2004 (see Table 2.2).

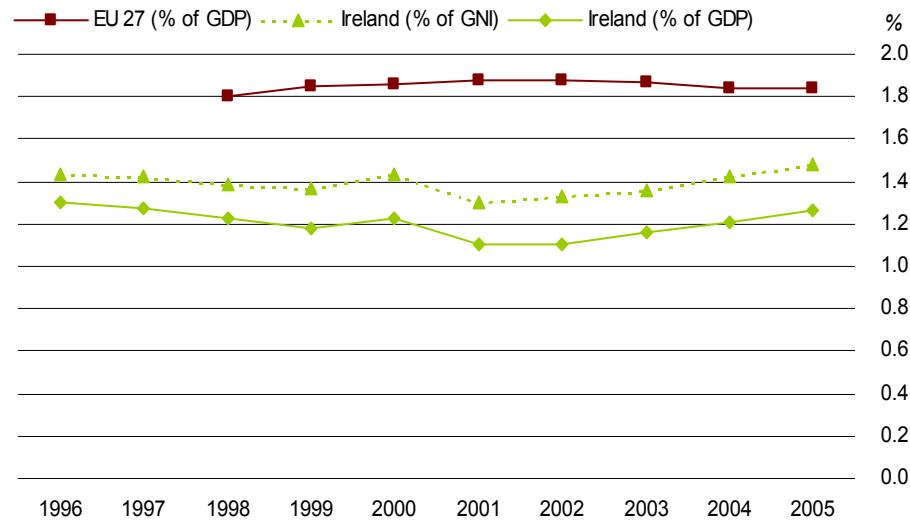
## 2.2 EU: Mathematics, science and technology PhDs awarded per 1,000 population aged 25–34, 2002–2004

Country	per 1,000 population aged 25-34		
	2002	2003	2004
Sweden	1.4	1.5	1.8
Portugal	0.6	0.7	1.0
United Kingdom	0.9	0.9	0.9
Germany	0.8	0.8	0.8
Austria	0.7	0.7	0.7
<b>EU 27<sup>20</sup></b>	<b>0.5</b>	<b>0.6</b>	<b>0.6</b>
<b>Ireland</b>	<b>0.5</b>	<b>0.6</b>	<b>0.6</b>
Slovenia	0.6	0.6	0.6
Belgium	0.5	0.5	0.5
Czech Republic	0.4	0.5	0.5
Greece	:	:	0.5
Estonia	0.2	0.3	0.4
Spain	0.4	0.4	0.4
Italy	0.2	0.4	0.4
Netherlands	0.4	0.4	0.4
Slovakia	0.4	0.6	0.4
Lithuania	0.2	0.2	0.3
Poland	0.3	0.3	0.3
Romania	:	1.0	0.2
Bulgaria	0.1	0.1	0.1
Cyprus	:	0.0	0.1
Latvia	0.1	0.1	0.1
Hungary	0.2	0.2	0.1
Finland	1.1	1.0	:
France	:	0.6	:
Switzerland	1.1	1.0	1.1
Croatia	:	0.2	0.5
Macedonia, TFYR	0.1	0.1	0.1
Turkey	:	0.1	0.1
Iceland	0.0	0.0	0.1
Norway	0.0	0.5	0.0

Source: Eurostat, Department of Education and Science

<sup>20</sup> Eurostat estimate.

### 2.3 Ireland and EU: Gross domestic expenditure on R&D<sup>21,22</sup>, 1996–2005



Source: Eurostat, Forfás

- ◆ Ireland spent less on research and development<sup>23</sup> as a percentage of GDP/GNI than the EU 27 average in the period 1996-2005 (see Graph 2.3 and Table 2.4).
- ◆ Sweden and Finland invested more in R&D relative to GDP in 2005 than any other EU 27 country (see Table 2.4).

### 2.4 EU: Gross domestic expenditure on R&D, 1995–2005

Country	% of GDP		
	1995	2000	2005
Sweden	3.32 <sup>24</sup>	:	3.86
Finland	2.26	3.34	3.48
Germany	2.19 <sup>25</sup>	2.45	2.51 <sup>25</sup>
Denmark	1.82	2.24	2.44 <sup>26</sup>
Austria	1.54 <sup>25</sup>	1.91 <sup>25</sup>	2.36 <sup>25,27</sup>
France	2.29	2.15 <sup>24</sup>	2.13 <sup>27</sup>
<b>EU 27</b>	:	<b>1.86<sup>27</sup></b>	<b>1.84<sup>26</sup></b>
Belgium	1.67	1.97	1.82 <sup>27</sup>
Netherlands	1.97	1.82	1.78 <sup>27, 28</sup>
United Kingdom	1.95	1.86	1.73 <sup>28</sup>
Luxembourg	:	1.65	1.56 <sup>27</sup>
<b>Ireland (% of GNI)</b>	<b>1.40</b>	<b>1.43</b>	<b>1.48<sup>25,27</sup></b>
Czech Republic	0.95 <sup>24</sup>	1.21	1.42
<b>Ireland (% of GDP)</b>	<b>1.26</b>	<b>1.23</b>	<b>1.26<sup>25,27</sup></b>
Slovenia	1.57	1.43	1.22
Spain	0.79	0.91	1.12 <sup>25,27</sup>
Italy	0.97	1.05	1.10 <sup>28</sup>
Hungary	0.73	0.78	0.94
Estonia	:	0.61	0.94 <sup>27</sup>
Portugal	0.54	0.76 <sup>25</sup>	0.81 <sup>27</sup>
Lithuania	0.44	0.59	0.76
Greece	0.49 <sup>24</sup>	:	0.61 <sup>27</sup>
Malta	:	:	0.61 <sup>27</sup>
Poland	0.63 <sup>24</sup>	0.64	0.57
Latvia	0.47	0.44	0.57
Slovakia	0.92	0.65	0.51
Bulgaria	0.62	0.52	0.50
Cyprus	:	0.24	0.40 <sup>27</sup>
Romania	:	0.37	0.39 <sup>28</sup>
Switzerland	:	2.57	2.93 <sup>28</sup>
Iceland	1.53	2.69 <sup>25</sup>	2.83 <sup>28</sup>
Norway	1.70 <sup>24</sup>	:	1.51 <sup>27</sup>
Turkey	0.38	0.64	:

Source: Eurostat

<sup>24</sup> Break in series.

<sup>25</sup> Estimated value.

<sup>26</sup> Eurostat estimate.

<sup>27</sup> Provisional value.

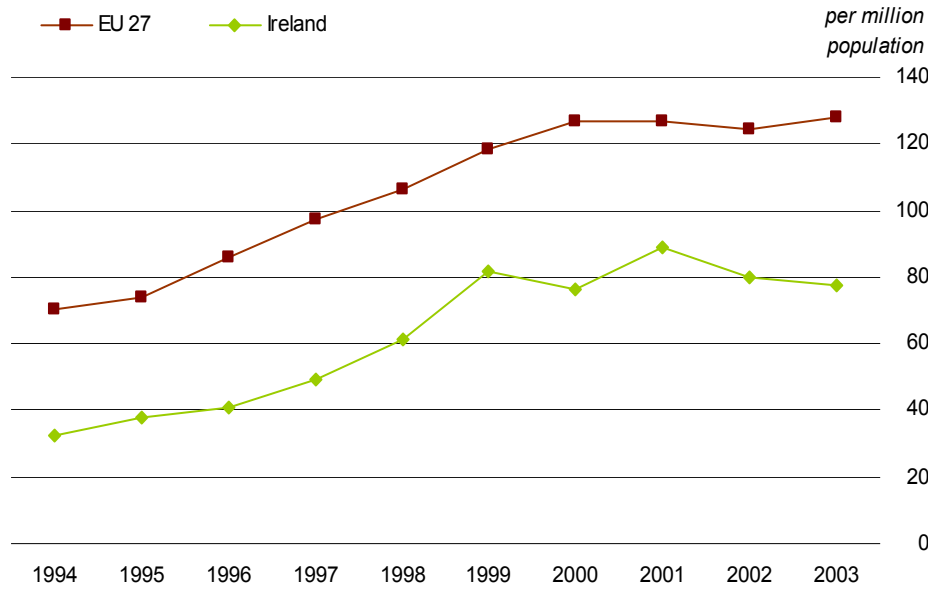
<sup>28</sup> 2004 data.

<sup>21</sup> All EU 27 figures are Eurostat estimates.

<sup>22</sup> Irish 2005 figures are provisional.

<sup>23</sup> Investment in research and development made outside of Ireland by foreign companies with subsidiaries based in Ireland is not included in the figures for Ireland.

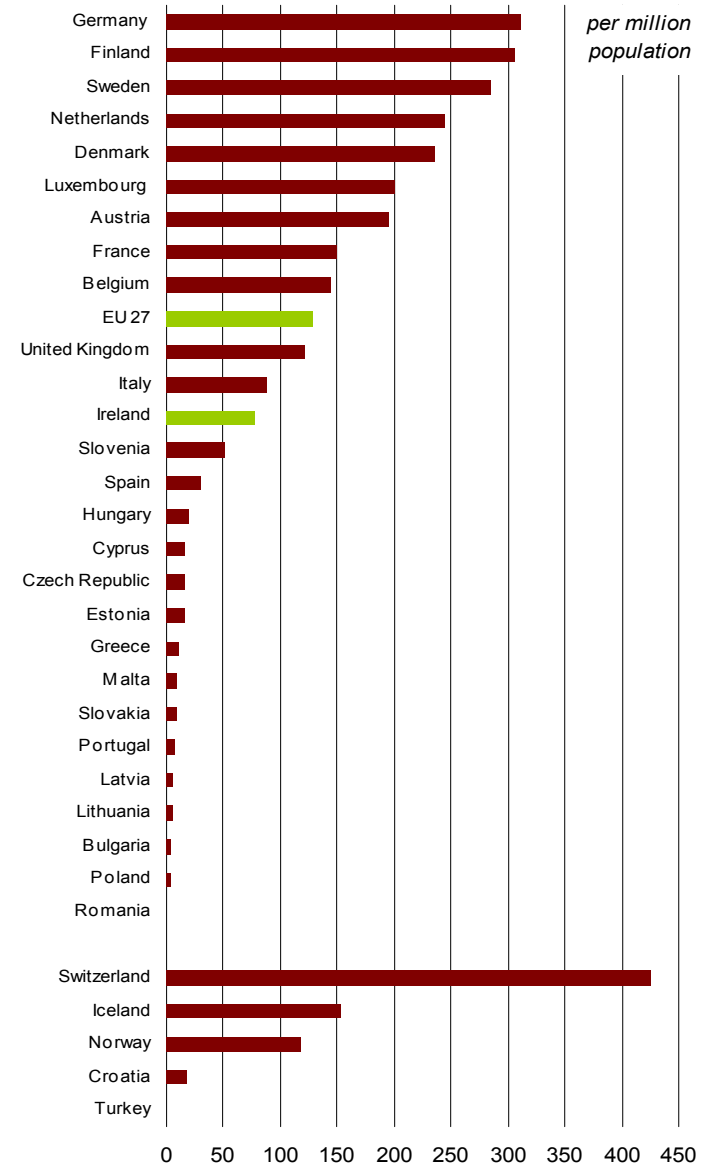
2.5 Ireland and EU: European Patent Office applications, 1994–2003



Source: Eurostat, EPO

- ◆ There was a significant increase in the number of applications made to the European Patent Office from Ireland during the 1994-1999 period, since then the number of applications has remained quite steady at around 80 applications per million population. Trends in the EU 27 were broadly similar to Ireland, with an increase in applications between 1994 and 2000 but remaining steady since then at around 125 applications per million population (see Graph 2.5).
- ◆ Germany and Finland, with over 300 applications per million population, had the highest rates in the EU 27 in 2003 (see Graph 2.6).

2.6 EU: European Patent Office applications, 2003



Source: Eurostat, EPO



## 2.7 Ireland: Private households with internet access, 1998–2006

Households	Households connected to the internet (000s)	% of all households
1998	61.2	5.0
2000	266.0	20.5
2003	463.2	33.5
2004	537.0	38.2
2005	655.0	45.1
2006	722.2	48.7

Source: CSO Information Society and Telecommunications

- ◆ Almost 49% of all private households in Ireland were connected to the internet in 2006 compared with only 5% in 1998 (see Table 2.7).
- ◆ The Netherlands, at 80%, had the highest reported rate of household internet access in the EU 27 in 2006. Ireland, at 50%, ranked only twelfth of the twenty-six EU countries reporting levels of internet access in private households in 2006. The EU 25 average was 51% of households. Iceland had the highest rate of all countries reporting with 83% of households having internet access (see Table 2.8).

## 2.8 EU: Private households with internet access, 2004–2006

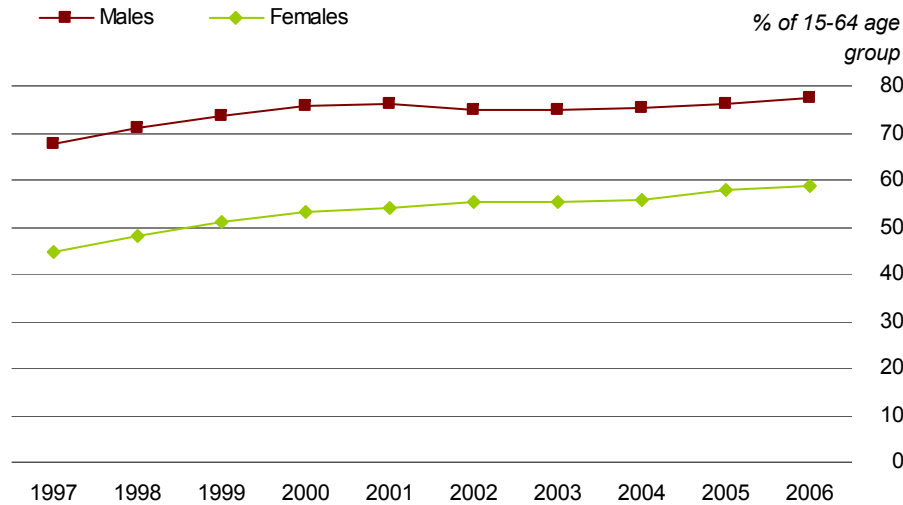
Country	% of households		
	2004	2005	2006
Netherlands	:	78	80
Denmark	69	75	79
Sweden	:	73	77
Luxembourg	59	65	70
Germany	60	62	67
Finland	51	54	65
United Kingdom	56	60	63
Belgium	:	50	54
Slovenia	47	48	54
Malta	:	:	53
Austria	45	47	52
<b>EU 25</b>	<b>42</b>	<b>48</b>	<b>51</b>
<b>Ireland</b>	<b>40</b>	<b>47</b>	<b>50</b>
Estonia	31	39	46
Latvia	15	31	42
France	34	:	41
Italy	34	39	40
Spain	34	36	39
Cyprus	53	32	37
Poland	26	30	36
Lithuania	12	16	35
Portugal	26	31	35
Hungary	14	22	32
Czech Republic	19	19	29
Slovakia	23	23	27
Greece	17	22	23
Bulgaria	10	:	17
Romania	6	:	:
Iceland	81	84	83
Norway	60	64	69
Macedonia, TFYR	11	:	14
Turkey	7	8	:

Source: Eurostat, CSO QNHS

### 3.1 Ireland: Employment rates, 1997–2006

Year	% of population aged 15-64		
	Persons	Males	Females
1997	56.1	67.6	44.6
1998	59.7	71.1	48.1
1999	62.5	73.6	51.2
2000	64.5	75.7	53.2
2001	65.2	76.2	54.0
2002	65.1	75.0	55.2
2003	65.1	74.7	55.3
2004	65.5	75.2	55.8
2005	67.1	76.2	58.0
2006	68.1	77.3	58.8

Source: CSO QNHS<sup>29</sup>



- ◆ The employment rate for women in Ireland rose by over 14 percentage points over the period 1997-2006, compared with an increase of less than 10 percentage points for men. The rate for men decreased from 76.2% in 2001 to 74.7% in 2003 but has increased since then to 77.3% in 2006 (see Table 3.1).

<sup>29</sup> LFS (April 1997) and QNHS (March-May, 1998-2006).

### 3.2 EU: Employment rates by sex, 2005

Country	% of population aged 15-64			
	Persons	Males	Females	Sex difference
Denmark	75.9	79.8	71.9	7.9
Netherlands	73.2	79.9	66.4	13.5
Sweden	72.5	74.4	70.4	4.0
United Kingdom	71.7	77.6	65.9	11.7
Austria	68.6	75.4	62.0	13.4
Cyprus	68.5	79.2	58.4	20.8
Finland	68.4	70.3	66.5	3.8
Portugal	67.5	73.4	61.7	11.7
<b>Ireland</b>	<b>67.1</b>	<b>76.2</b>	<b>58.0</b>	<b>18.2</b>
Slovenia	66.0	70.4	61.3	9.1
Germany	65.4	71.3	59.6	11.7
Czech Republic	64.8	73.3	56.3	17.0
Estonia	64.4	67.0	62.1	4.9
Luxembourg	63.6	73.3	53.7	19.6
<b>EU 27</b>	<b>63.4</b>	<b>70.8</b>	<b>56.0</b>	<b>14.8</b>
Spain	63.3	75.2	51.2	24.0
Latvia	63.3	67.6	59.3	8.3
France	63.1	68.8	57.6	11.2
Lithuania	62.6	66.1	59.4	6.7
Belgium	61.1	68.3	53.8	14.5
Greece	60.1	74.2	46.1	28.1
Slovakia	57.7	64.6	50.9	13.7
Italy	57.6	69.9	45.3	24.6
Romania	57.6	63.7	51.5	12.2
Hungary	56.9	63.1	51.0	12.1
Bulgaria	55.8	60.0	51.7	8.3
Malta	53.9	73.8	33.7	40.1
Poland	52.8	58.9	46.8	12.1
Iceland	83.8	86.9	80.5	6.4
Switzerland	77.2	83.9	70.4	13.5
Norway	74.8	77.8	71.7	6.1
Croatia	55.0	61.7	48.6	13.1
Turkey	46.0	68.2	23.8	44.4

Source: Eurostat LFS, CSO QNHS

- ◆ Ireland's employment rate, at 67.1% was above the average EU 27 rate of 63.4% in 2005. All EU states had higher male than female employment rates with the highest differences in Malta, Greece, and Italy and the lowest differences in Finland and Sweden (see Table 3.2).

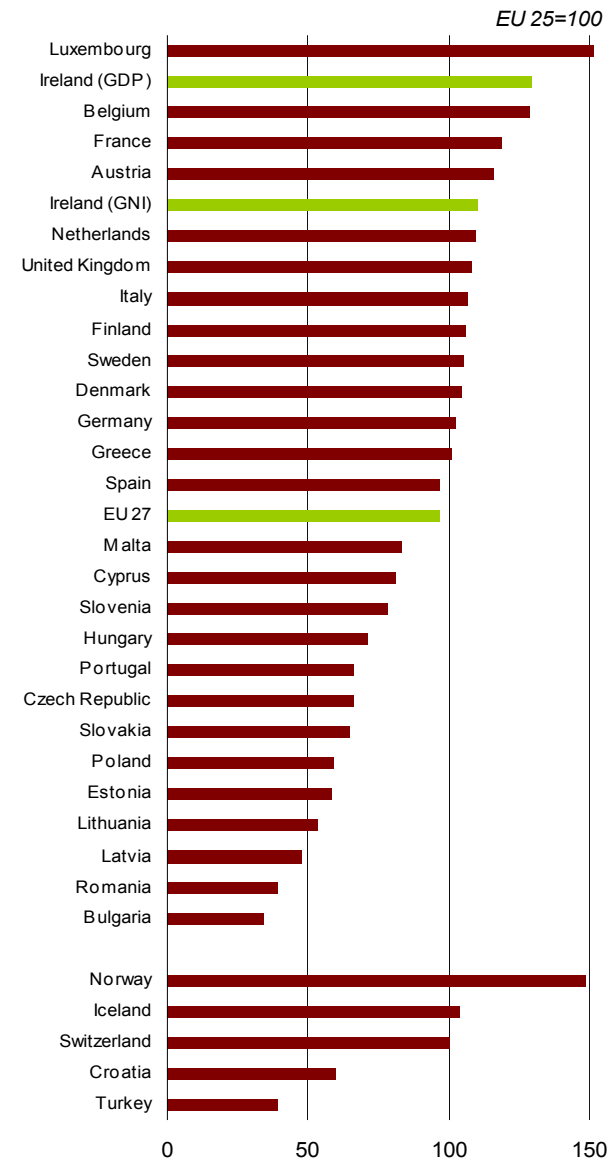
### 3.3 Ireland: GDP in PPS per hour worked<sup>30</sup> and per person employed, 1996–2005

Year	EU 15=100	EU 25=100
	per hour worked GDP	per person employed GDP
1996	98.6	116.2
1997	105.9	122.1
1998	108.7	120.1
1999	110.6	120.3
2000	112.1	122.3
2001	114.1	123.7
2002	117.6	127.3
2003	120.0	128.8
2004	120.3	128.6
2005	120.9	129.2

Source: Eurostat

- ◆ The productivity of the Irish workforce as measured by GDP in PPS per person employed was 29.2% higher than the EU 25 average in 2005, with Ireland having the second highest productivity rate among EU 27 states (see Table 3.3 and Graph 3.4).
- ◆ In terms of GDP, productivity per hour worked in Ireland has been higher than the EU 15 average since 1997 (see Table 3.3).

### 3.4 EU: GDP in PPS per person employed<sup>31</sup>, 2005



Source: Eurostat, CSO National Accounts

<sup>31</sup> Forecasted values for Bulgaria, Romania, Portugal, Croatia and Turkey. Estimates for Greece and Poland.

<sup>30</sup> Estimated values. See Appendix 1 for details of PPS.

### 3.5 Ireland and EU: Unemployment rates, 1997–2006



Source: Eurostat, CSO

- ◆ The unemployment rate in Ireland has been consistently lower than the rate for the EU 27 since 2000. Unemployment rates in Ireland declined from 10.3% in 1997 to a low point of 3.6% in 2001. Over the past five years the rate has remained fairly stable at just over 4%. The Irish rate in 2006 was just over half of the EU 27 average and was the third lowest of all EU 27 countries (see Graph 3.5 and Table 3.6).
- ◆ Five EU 27 countries, including Ireland, had higher male than female unemployment rates, as did Norway and Turkey (see Table 3.6).

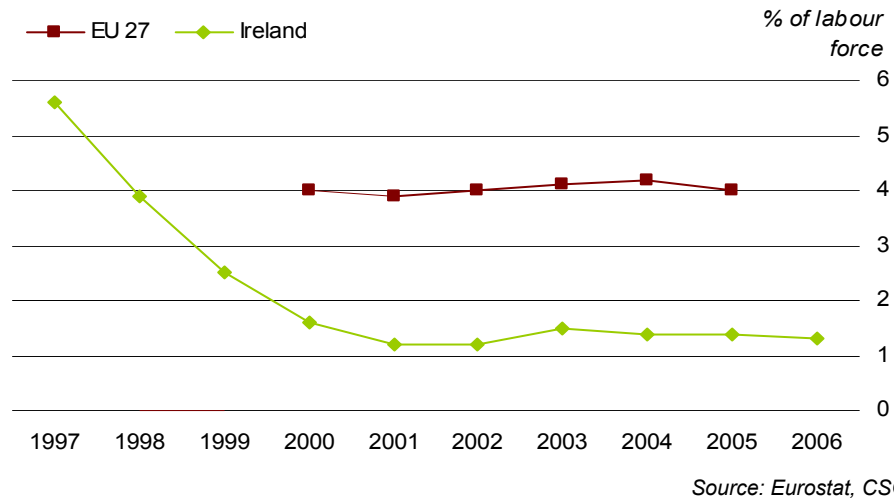
### 3.6 EU: Unemployment rates by sex, 2006

Country	% of labour force			
	Persons	Males	Females	Sex difference
Denmark	3.8	3.2	4.5	-1.3
Netherlands	3.9	3.5	4.4	-0.9
<b>Ireland</b>	<b>4.3</b>	<b>4.5</b>	<b>4.1</b>	<b>0.4</b>
Luxembourg	4.8	3.6	6.4	-2.8
Austria	4.8	4.4	5.2	-0.8
United Kingdom <sup>32</sup>	4.8	5.1	:	:
Cyprus	4.9	4.2	5.6	-1.4
Estonia	5.6	5.7	5.4	0.3
Lithuania	5.9	6.2	5.6	0.6
Slovenia	6.0	5.0	7.2	-2.2
Latvia	6.9	7.6	6.1	1.5
Sweden	7.1	6.9	7.3	-0.4
Czech Republic	7.2	5.8	9.0	-3.2
Romania <sup>32</sup>	7.2	7.8	6.4	1.4
Malta	7.4	6.5	9.2	-2.7
Portugal	7.4	6.3	8.6	-2.3
Hungary	7.5	7.2	7.9	-0.7
Italy <sup>33</sup>	7.7	6.2	10.1	-3.9
Finland	7.7	7.4	8.1	-0.7
<b>EU 27</b>	<b>7.9</b>	<b>7.1</b>	<b>8.8</b>	<b>-1.7</b>
Belgium	8.3	7.5	9.2	-1.7
Germany	8.4	7.7	9.2	-1.5
Spain	8.6	6.4	11.6	-5.2
Bulgaria	8.9	8.6	9.3	-0.7
France	9.0	8.2	10.0	-1.8
Greece <sup>32</sup>	9.8	6.1	15.3	-9.2
Slovakia	13.3	12.3	14.7	-2.4
Poland	14.0	13.1	15.1	-2.0
Norway <sup>32</sup>	4.6	4.8	4.4	0.4
Turkey <sup>32</sup>	10.3	10.4	10.2	0.2

Source: Eurostat LFS

<sup>32</sup> 2005 data.

### 3.7 Ireland and EU: Long-term unemployment rates, 1997–2006



- ◆ The long-term unemployment rate in Ireland fell in every year between 1997 and 2001, since then it has remained just above 1% (see Graph 3.7).
- ◆ The long-term unemployment rate for Ireland was 1.4% in 2005 compared to an EU 27 average of 4%. The rate for men in Ireland and the UK was around twice that for women in 2005. However, at EU 27 level, the rate for women was higher at 4.5% compared to 3.6% for men in 2005. Iceland had a lower long-term unemployment rate than any EU 27 country at 0.3% (see Table 3.8).

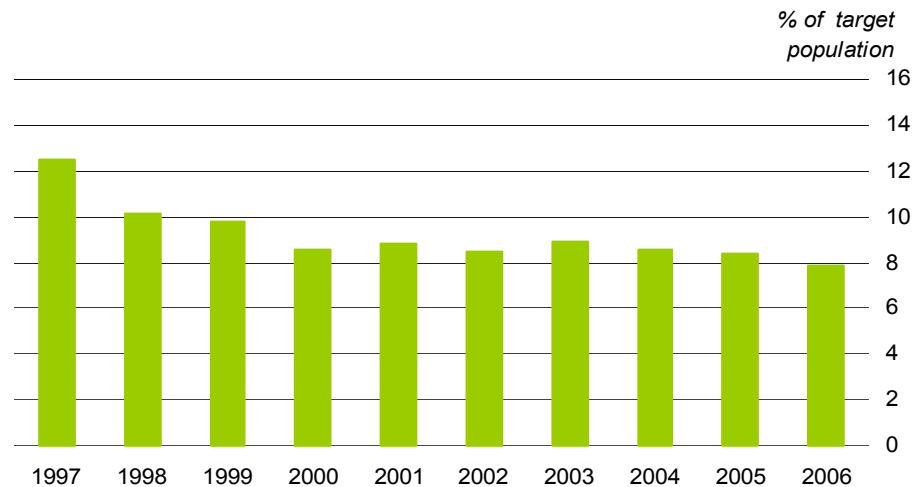
### 3.8 EU: Long-term unemployment rates by sex, 2005<sup>33</sup>

Country	Persons	% of labour force	
		Males	Females
United Kingdom	1.0	1.3	0.7
Denmark	1.1	1.1	1.2
Cyprus	1.2	0.8	1.7
Luxembourg	1.2	1.2	1.2
Sweden	1.2	1.4	1.0
Austria	1.3	1.2	1.4
<b>Ireland</b>	<b>1.4</b>	<b>1.8</b>	<b>0.7</b>
Netherlands	1.9	1.9	1.9
Spain	2.2	1.4	3.4
Finland	2.2	2.4	1.9
Slovenia	3.1	2.9	3.3
Hungary	3.2	3.3	3.2
Malta	3.4	3.4	3.2
Portugal	3.7	3.2	4.2
Italy	3.9	2.9	5.2
<b>EU 27</b>	<b>4.0</b>	<b>3.6</b>	<b>4.5</b>
France	4.0	3.5	4.5
Romania	4.0	4.6	3.4
Latvia	4.1	4.4	3.7
Czech Republic	4.2	3.4	5.3
Estonia	4.2	4.2	4.2
Lithuania	4.3	4.2	4.5
Belgium	4.4	3.8	5.0
Germany	5.0	4.7	5.4
Greece	5.1	2.6	8.9
Bulgaria	6.0	6.1	6.0
Poland	10.2	9.3	11.4
Slovakia	11.7	11.2	12.3
Iceland	0.3	0.3	0.3
Norway	0.9	0.9	0.8
Turkey	4.1	3.8	4.8
Croatia	7.4	6.5	8.4

Source: Eurostat LFS

<sup>33</sup> Break in data for Germany and Spain. Sweden data provisional.

### 3.9 Ireland: Population aged 18–59 living in jobless households<sup>34</sup>, 1997–2006



Source: Eurostat, CSO QNHS<sup>35</sup>

- ◆ The proportion of the population aged 18-59 living in jobless households in Ireland decreased by almost five percentage points in the period 1997-2006, falling from 12.5% in 1997 to 7.9% in 2006 (see Graph 3.9).
- ◆ Twelve EU 27 countries reported a lower proportion of 18-59 year olds living in jobless households than Ireland in 2006, with Cyprus having the lowest reported rate at 4.9% in 2006 (see Table 3.10 and footnote).

### 3.10 EU: Population aged 18–59 living in jobless households, 2004–2006

Country	% of target population		
	2004	2005	2006
Cyprus	5.0	5.2	4.9
Portugal	5.3	5.5	5.8
Estonia	9.5	8.5	6.0
Spain	7.3	6.7	6.3
Luxembourg	7.1	6.7	6.7
Malta	8.6	8.2	6.7
Latvia	7.8	8.1	6.8
Lithuania	8.1	6.6	7.0
Slovenia	7.5	6.7	7.2
Czech Republic	8.0	7.4	7.3
Netherlands	8.0	8.0	7.4
Denmark	8.5	7.7	7.7
<b>Ireland</b>	<b>8.6</b>	<b>8.4</b>	<b>7.9</b>
Greece	8.5	8.5	8.1
Austria	8.8	8.7	8.8
Italy	9.1	9.5	9.2
Slovakia	10.8	10.2	9.6
Romania	11.1	10.4	9.7
<b>EU 25</b>	<b>10.3</b>	<b>10.2</b>	<b>9.8</b>
Finland	11.0	10.5	10.5
Germany	11.1	11.1	10.6
United Kingdom	11.0	11.0	10.7
France	10.8	10.7	10.9
Bulgaria	13.7	13.0	11.6
Hungary	11.9	12.3	11.6
Poland	15.8	15.3	13.5
Belgium	13.7	13.5	14.3
Croatia	11.2	12.5	12.5

Source: Eurostat LFS

<sup>34</sup> The target population is persons aged 18-59 excluding persons living in households where everyone is aged 18-24 and either in education or inactive (see Appendix 1).

<sup>35</sup> LFS (April 1997) and QNHS (March-May, 1998-2006).

### 3.11 EU: Employment rate of workers aged 55–64 by sex, 2005<sup>36</sup>

Country	Persons	% of 55-64 age group	
		Males	Females
Sweden	69.4	72.0	66.7
Denmark	59.5	65.6	53.5
United Kingdom	56.9	66.0	48.1
Estonia	56.1	59.3	53.7
Finland	52.7	52.8	52.7
<b>Ireland</b>	<b>51.7</b>	<b>65.7</b>	<b>37.4</b>
Cyprus	50.6	70.8	31.5
Portugal	50.5	58.1	43.7
Latvia	49.5	55.2	45.3
Lithuania	49.2	59.1	41.7
Netherlands	46.1	56.9	35.2
Germany	45.4	53.5	37.5
Czech Republic	44.5	59.3	30.9
Spain	43.1	59.7	27.4
<b>EU 27</b>	<b>42.3</b>	<b>51.5</b>	<b>33.5</b>
Greece	41.6	58.8	25.8
Romania	39.4	46.7	33.1
France	37.9	40.7	35.2
Bulgaria	34.7	45.5	25.5
Hungary	33.0	40.6	26.7
Belgium	31.8	41.7	22.1
Austria	31.8	41.3	22.9
Luxembourg	31.7	38.3	24.9
Italy	31.4	42.7	20.8
Malta	30.8	50.8	12.4
Slovenia	30.7	43.1	18.5
Slovakia	30.3	47.8	15.6
Poland	27.2	35.9	19.7
Iceland	84.3	88.9	79.6
Norway	65.5	70.8	60.1
Switzerland	65.0	74.8	55.4
Croatia	32.6	43.0	23.8
Turkey	31.0	45.4	17.1

Source: Eurostat LFS

- ◆ In Ireland, 65.7% of men aged 55-64 were employed in 2005 compared with 37.4% of women. Finland had the smallest difference between the employment rates of men and women in this age group in 2005. There is wide variation across the EU 27 in the employment rate of persons aged 55-64. The variation shows similar patterns to the national average exit age data (see Tables 3.11 and 3.12).

<sup>36</sup> Break in series for Germany, Spain and Sweden.

### 3.12 EU: Average exit age from the labour force by sex, 2005<sup>37</sup>

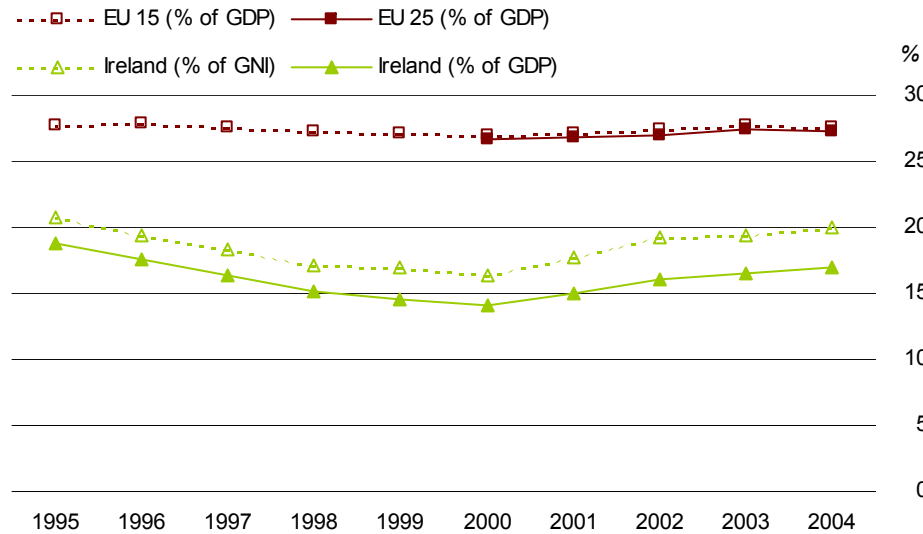
Country	Persons	years	
		Males	Females
<b>Ireland</b>	<b>64.1</b>	<b>63.6</b>	<b>64.6</b>
Sweden	63.7	64.3	63.0
Portugal	63.1	62.4	63.8
Romania	63.0	64.7	61.5
United Kingdom	62.6	63.4	61.9
Spain	62.4	62.0	62.8
Latvia	62.1	:	:
Estonia	61.7	:	:
Greece	61.7	62.5	61.0
Finland	61.7	61.8	61.7
Netherlands	61.5	61.6	61.4
<b>EU 25</b>	<b>60.9</b>	<b>61.4</b>	<b>60.4</b>
Denmark	60.9	61.2	60.7
Belgium	60.6	61.6	59.6
Czech Republic	60.6	62.3	59.1
Bulgaria	60.2	62.4	58.4
Lithuania	60.0	:	:
Hungary	59.8	61.2	58.7
Austria	59.8	60.3	59.4
Italy	59.7	60.7	58.8
Poland	59.5	62.0	57.4
Luxembourg	59.4	:	:
Slovakia	59.2	61.1	57.6
France	58.8	58.5	59.1
Malta	58.8	:	:
Slovenia	58.5	:	:
Iceland	66.3	65.0	65.5
Norway	63.1	63.1	63.1
Switzerland	62.5	63.1	62.0
Croatia	59.7	60.5	57.4

Source: Eurostat LFS

- ◆ The average exit age from the labour force was 64.1 years in Ireland in 2005, the highest age among reporting EU 27 member states. The average exit age in Ireland for women was 64.6 years compared with 63.6 years for men.
- ◆ In 2005, the average exit age from the labour force in the EU 25 was 60.9 years (see Table 3.12).

<sup>37</sup> EU 25 value estimated. Austria and Italy break in series. Sweden provisional value.

#### 4.1 Ireland and EU: Social protection expenditure<sup>38</sup>, 1995–2004



Source: Eurostat, CSO National Accounts

- ◆ Social protection expenditure as a proportion of GDP was lower in Ireland over the period 1995-2004 than in the EU 15 and EU 25 Member States. Expenditure in Ireland decreased from 18.8% of GDP in 1995 to 14.1% in 2000, but increased again to 17% in 2004 (see Graph 4.1).
- ◆ Ireland's expenditure on social protection<sup>39</sup> in 2003, at 16.5% of GDP was the fourth lowest reported of the EU 27 Member States. The EU 25 average was 27.4%. Sweden had the highest expenditure at 33.3% of GDP (see Tables 4.2 and 4.3).
- ◆ Ireland's expenditures on education and health were also below the EU 25 average in 2003. Ireland's combined expenditure on social protection, education<sup>39</sup> and health<sup>40</sup> amounted to 28.1% of GDP in 2003 compared to an EU 25 average of 41.2% of GDP (see Tables 4.2, 5.3 and 6.2).

<sup>38</sup> 2002 and 2003 data provisional for EU 15 and EU 25, 2004 EU 15 and EU 25 data estimated.

<sup>39</sup> It should be noted however that social protection expenditure data for Ireland does not cover private pension schemes organised on a group basis which are included in the social protection expenditure figures of other countries. In addition, Ireland has the second lowest proportion of persons aged 65 and over in the population in the EU which has an effect on social protection expenditure.

#### 4.2 EU: Expenditure on social protection, education and health, 2003

Country	% of GDP			
	Social protection	Education <sup>40</sup>	Health <sup>41</sup>	Total
Sweden	33.3	7.5	9.3	50.1
Denmark	30.7	8.3	8.9	47.9
France	30.9	5.9	10.4	47.2
Germany	30.2	4.7	10.9	45.8
Belgium	29.1	6.1	9.9	45.1
Austria	29.5	5.5	9.6	44.6
Netherlands	28.3	5.1	8.9	42.3
<b>EU 25</b>	<b>27.4</b>	<b>5.2</b>	<b>8.6</b>	<b>41.2</b>
Finland	26.5	6.4	7.4	40.3
Greece	26.0	3.9	10.2	40.1
United Kingdom	26.4	5.4	7.9	39.7
Portugal	24.2	5.6	9.8	39.6
Slovenia	24.6	6.0	8.8	39.4
Italy	25.8	4.7	8.2	38.7
Hungary	21.1	5.9	8.3	35.3
Luxembourg	22.2	3.8	7.7	33.7
Poland	20.9	5.6	6.5	33.0
<b>Ireland (% of GNI)</b>	<b>19.3</b>	<b>5.2</b>	<b>8.4</b>	<b>32.9</b>
Czech Republic	20.2	4.5	7.5	32.2
Cyprus	18.5	7.3	6.4	32.2
Spain	19.9	4.3	7.9	32.1
Malta	17.9	4.8	9.3	32.0
Slovakia	18.2	4.3	5.9	28.4
<b>Ireland (% of GDP)</b>	<b>16.5</b>	<b>4.4</b>	<b>7.2</b>	<b>28.1</b>
Lithuania	13.6	5.2	5.7	24.5
Latvia	13.4	5.3	5.0	23.7
Estonia	12.9	5.4	5.1	23.4
Romania	:	3.4	4.1	:
Switzerland	29.3	6.0	11.5	46.8
Norway	27.5	7.6	10.1	45.2
Iceland	23.3	7.8	10.5	41.6
Turkey	:	3.7	7.6	:
Macedonia, TFYR	:	3.4	6.8	:

Source: Eurostat, World Health Organisation, CSO National Accounts

<sup>40</sup> Total public expenditure on education as % of GDP, for all levels of education combined.

<sup>41</sup> Total health (public and private) expenditure as a % of GDP.



#### 4.3 EU: Social protection expenditure in Purchasing Power Parities<sup>42</sup> per capita , 2002-2004

Country	PPP per capita		
	2002	2003	2004
Luxembourg	10,187	11,272	12,180
Sweden	7,904	8,386	8,756
Denmark	7,771	8,078	8,470
Austria	7,533	7,712	8,062
Netherlands	7,446	7,677	8,056
Belgium	7,100	7,481	7,890
France	7,330	7,515	7,772
Germany	7,004	7,120	7,239
United Kingdom	6,594	6,700	6,994
Finland	6,340	6,510	6,897
Italy	6,004	6,045	6,257
<b>EU 25</b>	<b>5,823</b>	<b>5,965</b>	<b>6,188</b>
<b>Ireland</b>	<b>4,554</b>	<b>4,804</b>	<b>5,232</b>
Greece	4,357	4,588	4,830
Spain	4,056	4,223	4,438
Slovenia	4,059	4,062	4,379
Portugal	4,054	3,840	4,082
Cyprus	2,901	3,235	3,406
Czech Republic	2,943	3,006	3,131
Malta	2,792	2,867	3,001
Hungary	2,590	2,764	2,868
Poland	2,113	2,132	2,213
Slovakia	2,093	2,060	2,064
Estonia	1,282	1,412	1,625
Lithuania	1,271	1,336	1,448
Latvia	1,156	1,192	1,220
Norway	8,299	8,745	9,154
Switzerland	8,123	8,389	8,894
Iceland	5,650	6,127	6,621

Source: Eurostat

- ◆ Social protection expenditure on a per capita basis in Ireland increased from 4,554 PPP in 2002 to 5,232 PPP in 2004. This placed Ireland twelfth among EU 25 countries in 2004 (see Table 4.3).

#### 4.4 EU: Social protection expenditure by type, 2004

Country	% of GDP						Total
	Family/ Children	Unemployment	Sickness and disability	Old age and survivors	Housing & social exclusion n.e.c.		
Sweden	3.0	2.0	12.7	12.7	1.2	32.9	
France	2.5	2.3	10.5	12.8	1.3	31.2	
Denmark	3.9	2.8	10.3	11.1	1.7	30.7	
Germany	3.0	2.4	9.9	12.4	0.7	29.5	
Belgium	2.0	3.5	9.6	12.3	0.5	29.3	
Austria	3.0	1.7	9.4	13.6	0.5	29.1	
Netherlands	1.3	1.7	11.0	11.1	1.6	28.5	
<b>EU 25</b>	<b>2.1</b>	<b>1.7</b>	<b>9.5</b>	<b>12.0</b>	<b>0.9</b>	<b>27.3</b>	
Finland	3.0	2.5	10.0	9.6	0.8	26.7	
United Kingdom	1.7	0.7	10.2	11.5	1.7	26.3	
Italy	1.1	0.5	8.1	15.4	0.1	26.1	
Greece	1.7	1.5	7.9	12.8	1.2	26.0	
Portugal	1.2	1.3	9.5	11.0	0.2	24.9	
Slovenia	2.0	0.7	9.7	10.6	0.7	24.3	
Luxembourg	3.8	1.0	8.5	8.1	0.6	22.6	
Hungary	2.5	0.6	8.1	8.6	0.5	20.7	
<b>Ireland (% of GNI)</b>	<b>2.9</b>	<b>1.5</b>	<b>9.0</b>	<b>4.5</b>	<b>1.1</b>	<b>20.0</b>	
Spain	0.7	2.5	7.4	8.5	0.3	20.0	
Poland	0.9	0.7	6.1	11.8	0.2	20.0	
Czech Republic	1.6	0.7	8.2	7.8	0.6	19.6	
Malta	1.0	1.3	6.3	9.5	0.5	18.8	
Cyprus	2.0	0.9	5.0	8.5	1.2	17.8	
Slovakia	1.8	1.0	6.6	6.6	0.5	17.2	
<b>Ireland (% of GDP)</b>	<b>2.5</b>	<b>1.3</b>	<b>7.7</b>	<b>3.8</b>	<b>0.9</b>	<b>17.0</b>	
Estonia	1.7	0.2	5.4	5.8	0.2	13.4	
Lithuania	1.1	0.2	5.1	6.1	0.3	13.3	
Latvia	1.3	0.4	4.2	6.1	0.2	12.6	
Switzerland	1.3	1.3	10.6	13.3	0.9	29.5	
Norway	3.1	0.8	13.4	7.7	0.8	26.3	
Iceland	3.2	0.6	11.2	6.9	0.8	23.0	

Source: Eurostat

- ◆ Social protection expenditure on old age and survivors was 3.8% of GDP and 4.5% of GNI in Ireland in 2004, compared to 12.0% in the EU 25 (see Table 4.4).

<sup>42</sup> See Appendix 1 for details of PPPs.

#### 4.5 EU: At risk of poverty rates, 2005<sup>43,44</sup>

Country	% of population			
	Before pensions and social transfers	After pensions only	After pensions and social transfers	Risk reduction
Sweden	42	29	9	33
Czech Republic	39	21	10	29
Slovenia	37	16	10	27
Netherlands	37	22	11	26
Denmark	39	31	12	27
Austria	43	24	12	31
Finland	40	28	12	28
Germany	44	24	13	31
France	45	26	13	32
Luxembourg	40	23	13	27
Hungary	50	29	13	37
Slovakia	40	22	13	27
Belgium	42	28	15	27
Malta	36	21	15	21
Bulgaria	40	:	15	25
<b>EU 25</b>	<b>43</b>	<b>26</b>	<b>16</b>	<b>27</b>
Cyprus	29	22	16	13
Estonia	39	24	18	21
Romania	43	:	18	25
Italy	43	24	19	24
Latvia	40	26	19	21
United Kingdom	:	:	19	:
<b>Ireland</b>	<b>40</b>	<b>32</b>	<b>20</b>	<b>20</b>
Greece	39	23	20	19
Spain	39	24	20	19
Portugal	42	26	20	22
Lithuania	42	26	21	21
Poland	51	30	21	30
Iceland	28	20	10	18
Norway	38	29	11	27

Source: Eurostat, EU SILC

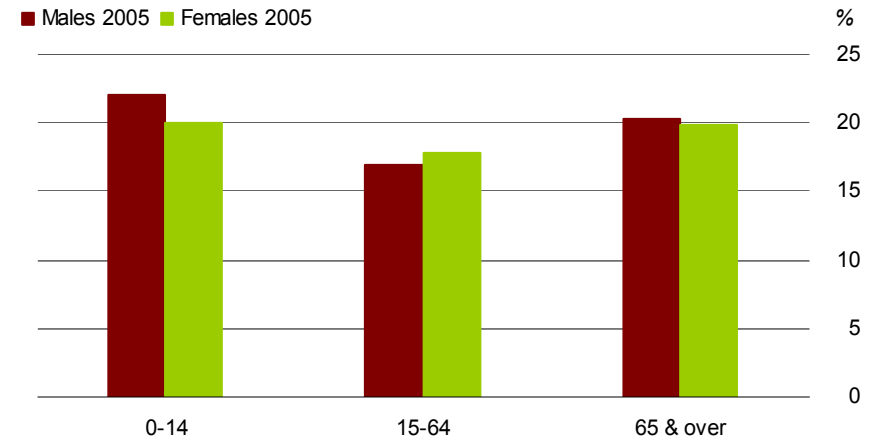
<sup>43</sup> Data in Table 4.5 are obtained from the EU Survey on Income and Living Conditions (EU SILC). Rates in Table 4.5 are calculated using a Eurostat definition of income and modified OECD equivalence scale (see Appendix 1).

<sup>44</sup> EU 25 data are Eurostat estimates. Break in series in 2005 for Czech Republic, Germany, Italy, Cyprus, Latvia, Lithuania, Hungary, Malta, Netherlands, Poland and Slovakia. Hungary data provisional. 2003 data for Slovenia, 2004 data for Bulgaria.

#### 4.6 Ireland: At risk of poverty rates<sup>45</sup> by age and sex, 2004-2005

Age	% of age group					
	2004			2005		
	Males	Females	Persons	Males	Females	Persons
0-14	19.5	23.1	21.2	22.1	20.1	21.2
15-64	16.4	18.8	17.6	17.0	17.8	17.4
65 & over	25.8	28.2	27.1	20.3	19.9	20.1
<b>Total</b>	<b>18.0</b>	<b>20.8</b>	<b>19.4</b>	<b>18.4</b>	<b>18.5</b>	<b>18.5</b>

Source: CSO, EU SILC



- ◆ In 2005, the percentage of the population at risk of poverty in Ireland, before pensions and social transfers, was 40%. The effect ("risk reduction") of pensions and social transfers was less in Ireland than in most other EU countries. As a result, the risk of poverty rate in Ireland after pensions and social transfers of 20% was among the highest in the EU 27 (see Table 4.5).
- ◆ In 2005, 18.4% of males and 18.5% of females were at risk of poverty in Ireland. Across all age groups, there was little difference between the at risk of poverty rate for men and women (see Table 4.6 and graph).
- ◆ The risk of poverty for those aged 65 and over in Ireland fell significantly from 27.1% in 2004 to 20.1% in 2005 (see Table 4.6).

<sup>45</sup> Equivalised total disposable income including all social transfers (60% threshold). Data in Table 4.6, Table 4.7 and Graph 4.8 are calculated using the national definition of income and national equivalence scale. See Appendix 1.

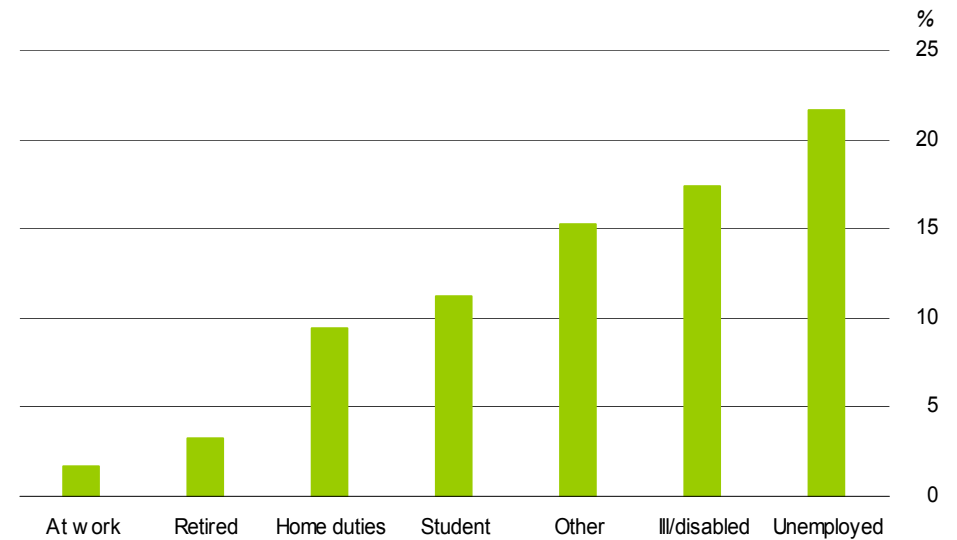
#### 4.7 Ireland: Persons in consistent poverty<sup>46,47</sup> by age and sex, 2004-2005

Age group	% of age group					
	2004			2005		
	Males	Females	Persons	Males	Females	Persons
0-14	8.2	11.0	9.5	10.0	10.5	10.2
15-64	5.9	7.1	6.5	5.8	7.3	6.5
65+	3.8	3.0	3.3	3.6	3.8	3.7
<b>Total</b>	<b>6.2</b>	<b>7.4</b>	<b>6.8</b>	<b>6.4</b>	<b>7.5</b>	<b>7.0</b>

Source: CSO, EU SILC

- ◆ In 2005, 7.0% of the population were living in consistent poverty. A higher percentage of women (7.5%) than men (6.4%) were living in consistent poverty (see Table 4.7).
- ◆ Just over 10% of children under the age of fifteen were in consistent poverty in 2005. This was slightly higher than the 9.5% recorded in 2004 (see Table 4.7).
- ◆ In 2005, 21.6% of unemployed persons were in consistent poverty, compared with 1.7% of people at work. Almost 17.4% of ill or disabled people in Ireland were experiencing consistent poverty (see Graph 4.8).

#### 4.8 Ireland: Persons in consistent poverty<sup>48</sup> by principal economic status, 2005



Source: CSO, EU SILC

<sup>46</sup> Equivalised total disposable income including all social transfers (60% threshold).

<sup>47</sup> Individuals are defined as being in consistent poverty if they are at risk of poverty and are suffering enforced deprivation as defined by a set of eight deprivation indicators (see Appendix 1).

<sup>48</sup> Percentage of persons in 'consistent poverty' at 60% level using basic life-style deprivation indicators.

#### 4.9 Ireland and EU: Gender pay gap<sup>49</sup>, 1996–2005



Source: Eurostat, EU SILC<sup>50</sup>

- ◆ In 1996, women's earnings were 79% of men's earnings in Ireland compared to 83% in the EU 27 as a whole. By 2005 this proportion had increased to 91% in Ireland compared to an EU 27 average of 85% (see Graph 4.9). It should be noted that persons working 15 hours or less are excluded from this indicator. These persons are more likely to be female and persons on lower incomes. The calculation of the gender pay gap is under revision at EU level.
- ◆ Ireland had the joint fourth lowest gender pay gap of those EU 27 countries providing data for 2005. Malta had the lowest gap, with women's earnings at 96% of men's earnings (see Table 4.10).

<sup>49</sup> All EU 27 figures are Eurostat estimates. 2004 and 2005 data for Ireland are provisional. Break in series for Ireland in 2003.

<sup>50</sup> See Appendix 1 for details of national data sources.

#### 4.10 EU: Gender pay gap, 2003–2005<sup>51</sup>

Country	2003	2004	2005
Malta	96	96	96
Belgium	:	94	93
Slovenia	:	92	92
<b>Ireland</b>	<b>86</b>	<b>89</b>	<b>91</b>
Greece	89	90	91
Italy	:	93	91
Portugal	91	95	91
Poland	89	90	90
Hungary	88	86	89
France	88	88	88
Spain	82	85	87
Romania	82	86	87
Luxembourg	85	86	86
<b>EU 27</b>	<b>85</b>	<b>85</b>	<b>85</b>
Lithuania	83	84	85
Bulgaria	82	84	84
Sweden	84	83	84
Latvia	84	85	83
Denmark	82	83	82
Netherlands	82	81	82
Austria	83	82	82
Czech Republic	81	81	81
United Kingdom	78	78	80
Germany	77	77	78
Slovakia	77	76	76
Estonia	76	76	75
Cyprus	75	75	75
Finland	80	81	:
Norway	84	84	84

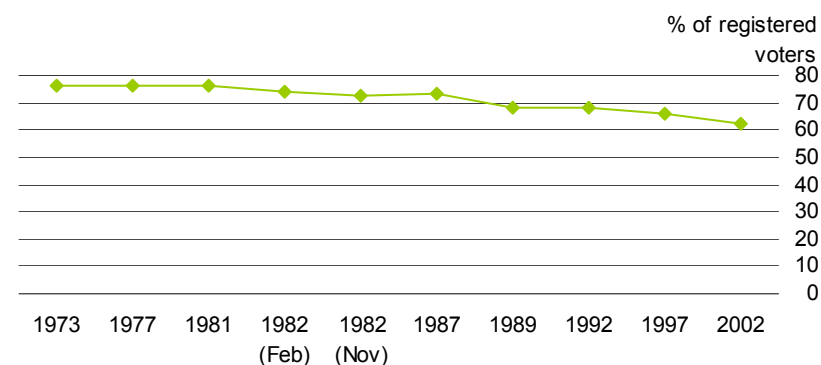
Source: Eurostat, EU SILC<sup>51</sup>

<sup>51</sup> Break in data series due to change in data source from ECHP to EU SILC (see Appendix 1). EU 27 data Eurostat estimate. 2005 data for Ireland, Greece, Spain, Austria, Slovenia and UK are provisional.

#### 4.11 Ireland: Numbers voting in Dáil elections, 1973–2002

Year of election	000's		% turnout
	Registered voters	Votes recorded	
1973	1,783.6	1,366.5	77
1977	2,118.6	1,616.8	76
1981	2,275.5	1,734.4	76
1982 (Feb)	2,275.5	1,679.5	74
1982 (Nov)	2,335.2	1,701.4	73
1987	2,445.5	1,793.5	73
1989	2,448.8	1,677.6	69
1992	2,557.0	1,751.4	68
1997	2,741.3	1,806.9	66
2002	3,002.2	1,878.6	63

Source: Department of the Environment, Heritage and Local Government



- ◆ Voter turnout at Dáil elections has gradually declined from over 75% in the 1970s to 63% in 2002. This decline was mirrored in Europe where most EU 27 countries showed a decrease in voter turnout over the period 1991-2006 (see Tables 4.11 and 4.12).
- ◆ Ireland had a lower rate of turnout in the election of 2002 compared to other national parliamentary elections across the EU in the period 2001-2006. The average turnout for EU 27 countries in that period was 69% (see Table 4.12). Voting is compulsory by law in Belgium, Cyprus, Greece, Italy, Luxembourg, the Netherlands and parts of Austria and Switzerland and for the French Senate but levels of enforcement vary (see Appendix 1).

#### 4.12 EU: Votes recorded at national parliamentary elections, 1981–2006

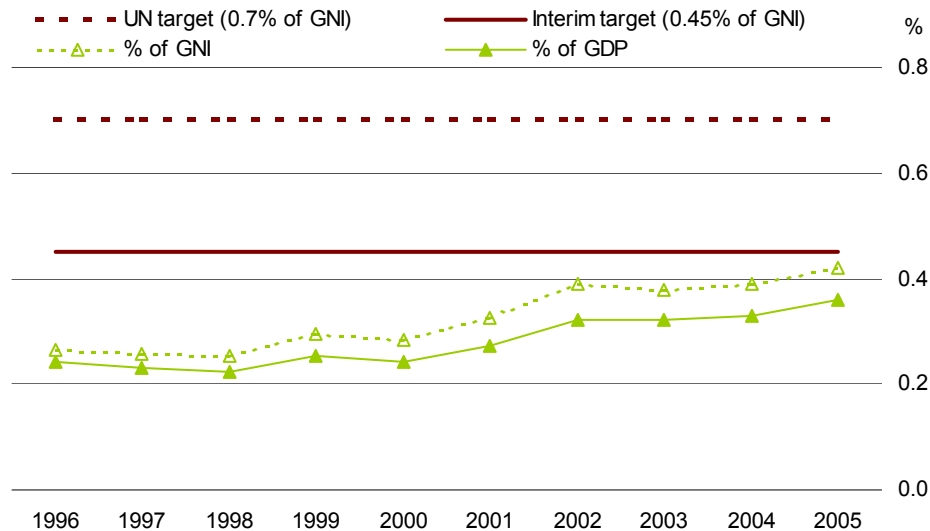
Country	% of registered voters		
	1981-1986	1991-1996	2001-2006
Malta	94.6	97.2	95.7
Luxembourg	88.8	88.3	91.7
Belgium	93.6	91.1	91.6
Cyprus	94.6	90.1	89.0
Denmark	88.4	84.3	84.5
Austria	90.5	86.0	84.3
Italy	89.0	82.9	83.6
Sweden	89.9	88.1	80.1
Netherlands	85.8	78.7	80.0
Germany	89.1	79.0	77.7
Greece	83.8	76.3	76.6
Spain	70.4	78.1	75.7
Latvia	:	71.9	71.2
<b>EU 27</b>	:	<b>75.4</b>	<b>69.0</b>
Finland	75.7	68.6	66.7
Czech Republic	:	76.3	64.5
Hungary	:	68.9	64.4
Portugal	75.4	66.3	64.3
<b>Ireland</b>	<b>72.9</b>	<b>68.5</b>	<b>62.6</b>
United Kingdom	72.8	77.8	61.4
Slovenia	:	73.7	60.6
France	78.5	68.9	60.3
Romania	:	76.0	58.5
Estonia	:	68.9	57.6
Bulgaria	:	75.2	55.8
Slovak Republic	:	75.4	54.7
Lithuania	:	52.9	46.1
Poland	:	52.1	40.6
Iceland	88.6	87.4	87.7
Norway	84.0	75.8	77.4
Turkey	92.3	85.2	76.9
Macedonia, TFYR	:	57.8	74.6
Croatia	:	68.8	61.7
Switzerland	48.9	42.2	45.4

Source: International Institute for Democracy and Electoral Assistance

#### 4.13 Ireland: Net official development assistance, 1996–2005

Year	€m	%
	Net ODA	% of GNI at current market prices
1996	142.3	0.27
1997	157.6	0.26
1998	177.3	0.25
1999	230.3	0.30
2000	254.8	0.28
2001	320.1	0.32
2002	422.1	0.39
2003	445.7	0.38
2004	488.9	0.39
2005	578.5	0.42

Source: Development Co-operation Ireland,  
Department of Foreign Affairs



#### 4.14 EU: Net official development assistance, 2003–2005

Country	% of GNI		
	2003	2004	2005
Sweden	0.79	0.78	0.94
Netherlands	0.80	0.73	0.82
Luxembourg	0.81	0.83	0.82
Denmark	0.84	0.85	0.81
Belgium	0.60	0.41	0.53
Austria	0.20	0.23	0.52
France	0.40	0.41	0.47
United Kingdom	0.34	0.36	0.47
Finland	0.35	0.37	0.46
<b>Ireland</b>	<b>0.39</b>	<b>0.39</b>	<b>0.42</b>
Germany	0.28	0.28	0.36
Italy	0.17	0.15	0.29
Spain	0.23	0.24	0.27
Portugal	0.22	0.63	0.21
Greece	0.21	0.16	0.17
Norway	0.92	0.87	0.94
Switzerland	0.39	0.41	0.44

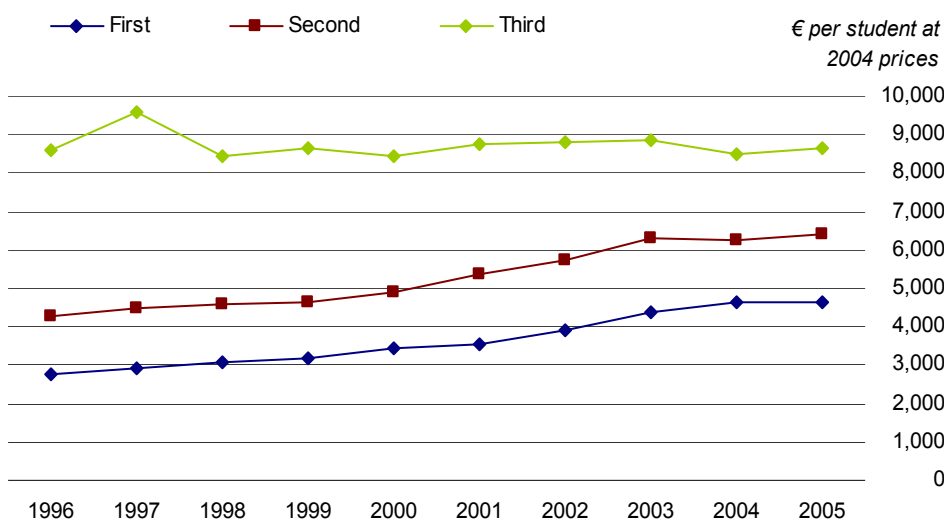
Source: OECD Development Co-operation Report

- ◆ The proportion of Irish GNI represented by net official development assistance increased from 0.27% in 1996 to 0.42% in 2005 (see Table 4.13).
- ◆ In 2005, the Irish contribution was still below both the 2002 interim Irish Government target of 0.45% of GNI and the UN 2007 target of 0.7% (see Table 4.13 and Graph).
- ◆ Four EU countries and Norway exceeded the UN target in 2005 (see Table 4.14).

## 5.1 Ireland: Real non-capital public expenditure on education, 1996–2005

Year	€ per student at 2004 prices			Real non-capital public expenditure €m at 2004 prices
	Level First	Second <sup>52</sup>	Third <sup>53</sup>	
1996	2,777	4,264	8,591	3,831
1997	2,898	4,478	9,579	4,108
1998	3,057	4,567	8,431	4,094
1999	3,165	4,644	8,638	4,189
2000	3,417	4,893	8,420	4,376
2001	3,538	5,357	8,753	4,618
2002	3,896	5,734	8,813	4,943
2003	4,362	6,308	8,876	5,399
2004	4,612	6,261	8,464	5,471
2005	4,635	6,422	8,655	5,563

Source: Department of Education and Science, CSO



<sup>52</sup> Second level includes further education (e.g. post-Leaving Certificate programmes).

<sup>53</sup> Full-time equivalents.

## 5.2 Ireland: Student numbers<sup>54</sup> by level, 1996–2006

Year	Level			Third (part-time)
	First	Second <sup>52</sup>	Third (full-time)	
1996/1997	469,628	371,184	100,204	22,795
1997/1998	460,845	368,160	104,439	25,439
1998/1999	452,533	362,051	108,509	27,764
1999/2000	444,310	353,860	115,696	31,469
2000/2001	439,560	345,384	119,991	32,265
2001/2002	441,065	340,078	124,589	34,965
2002/2003	443,720	339,231	129,283	34,680
2003/2004	446,029	337,851	133,887	34,000
2004/2005	449,298	335,162	133,691	34,509
2005/2006	457,889	332,407	136,719	:

Source: Department of Education and Science

- ◆ Real expenditure per student in Ireland increased by 67% and 51% for first and second level students respectively over the period 1996-2005. However the corresponding increase at third level was less than 1% (see Table 5.1 and Appendix 1).
- ◆ These contrasting trends are partly explained by the trend in student numbers. The numbers of students decreased by 2.5% at first level and by 10.4% at second level between 1996/1997 and 2005/2006. However, over the same period, the number of full-time third level students increased by 36.4% (see Table 5.2).

<sup>54</sup> Only students in institutions which are aided by the Department of Education and Science are included in this table.

### 5.3 EU: Public expenditure on education<sup>55</sup>, 2001–2003

Country	% of GDP			per pupil/student
	2001	2002	2003	in €PPS
Denmark	8.4	8.4	8.3	7,382
Sweden	7.2	7.6	7.5	6,892
Cyprus	5.9	6.6	7.3	6,712
Finland	6.0	6.2	6.4	5,876
Belgium	6.0	6.1	6.1	6,975
Slovenia	6.7	6.0	6.0	5,763
France	5.6	5.6	5.9	6,221
Hungary	5.0	5.4	5.9	3,902
Poland	5.4	5.4	5.6	:
Portugal	5.6	5.5	5.6	4,748
Austria	5.7	5.7	5.5	:
Estonia	5.3	5.5	5.4	2,371
United Kingdom	4.7	5.2	5.4	5,467
Latvia	5.6	5.7	5.3	2,143
Lithuania	5.9	5.9	5.2	:
<b>Ireland (% of GNI)</b>	<b>5.1</b>	<b>5.2</b>	<b>5.2</b>	<b>5,337</b>
<b>EU 27</b>	<b>5.0</b>	<b>5.1</b>	<b>5.2</b>	<b>5,325</b>
Netherlands	4.8	4.9	5.1	:
Malta	4.5	4.4	4.8	4,200
Italy	4.9	4.6	4.7	6,510
Germany	4.5	4.7	4.7	5,550
Czech Republic	4.1	4.3	4.5	3,323
<b>Ireland (% of GDP)</b>	<b>4.3</b>	<b>4.3</b>	<b>4.4</b>	<b>5,337</b>
Slovakia	4.0	4.3	4.3	2,388
Spain	4.2	4.3	4.3	5,869
Bulgaria	3.8	4.0	4.2	1,663
Greece	3.9	3.9	3.9	3,837
Luxembourg	3.7	3.8	3.8	11,817
Romania	3.3	3.5	3.4	1,131
Iceland	6.3	6.9	7.8	6,992
Norway	7.2	7.6	7.6	8,611
Switzerland	5.5	5.8	6.0	8,697
Croatia	:	4.3	4.5	2,577
Turkey	3.7	3.6	3.7	1,068
Macedonia, TFYR	:	3.4	3.4	:

Source: Eurostat

- Public expenditure on education in Ireland as a percentage of both GNI and GDP was quite static during the 2001-2003 period. In terms of GNI, Ireland was just above the EU 27 level in 2001 and 2002 and at the same level in 2003. When expenditure is examined per pupil/student in Purchasing Power Standards (PPS), Ireland was also at the EU 27 average in 2003 (see Table 5.3).

<sup>55</sup> For all levels of education combined. EU 27 figures for 2003 are Eurostat estimates. See Appendix 1 for details of PPS.



#### 5.4 EU: Ratio of students to teachers, 2003/2004<sup>56</sup>

Country	ISCED 1-3	ISCED 1	ISCED 2	ISCED 3
Luxembourg	9.8	10.7	10.3	9.0
Italy	10.9	10.7	10.3	11.5
Hungary	11.0	10.7	10.2	12.3
Denmark	11.4	10.8	11.3	13.4
Lithuania	9.3	11.0	8.7	8.3
Portugal	9.6	11.1	10.0	7.3
Greece	9.5	11.3	8.2	8.4
Poland	12.5	11.9	12.6	13.5
Sweden	12.5	12.1	11.9	14.0
Belgium	10.8	12.9	10.6	9.2
Spain	12.2	14.3	12.9	8.0
Latvia	13.1	14.9	12.8	12.1
Austria	11.9	15.1	10.4	11.0
Slovenia	13.7	15.2	11.8	14.3
Netherlands	15.9	15.9	:	15.8
Finland	14.3	16.3	10.0	16.2
Bulgaria	13.5	16.8	12.9	12.1
Cyprus	14.0	17.8	12.1	11.3
Romania	15.7	17.8	13.4	16.8
Czech Republic	14.4	17.9	13.5	12.6
<b>Ireland</b>	<b>16.3</b>	<b>18.3</b>	<b>14.3</b>	
Germany	16.1	18.8	15.6	13.9
Slovakia	15.1	18.9	13.9	14.2
Malta	12.9	19.0	10.2	10.1
France	14.3	19.4	14.1	10.4
United Kingdom	16.7	21.1	17.1	12.6
Iceland	11.3	11.3	11.4	11.1
Norway	11.0	11.9	10.5	9.6
Croatia	13.8	18.3	13.2	11.5
Turkey	23.7	26.5	:	16.9
Macedonia, TFYR	17.4	:	:	18.0

Source: Eurostat, Department of Education and Science

- ◆ Ireland had a student to teacher ratio of 18.3 at primary education level (ISCED 1) in 2003/2004. This was the sixth highest reported ratio in the EU 27. The overall student to teacher ratio for first and second level education for Ireland in 2003/2004 was 16.3 (see Table 5.4).

#### 5.5 EU: Average class size at ISCED levels 1 and 2, 2003/2004

Country	ISCED 1	ISCED 2
Lithuania	14.9	22.2
Luxembourg	15.8	19.7
Latvia	16.3	19.4
Portugal	16.4	23.5
Greece	18.3	25.2
Slovenia	18.3	20.9
Italy	18.4	20.9
Romania	18.6	21.0
Denmark	19.5	19.4
Austria	19.5	23.0
Slovakia	19.9	22.9
Hungary	20.2	21.5
Estonia	20.3	23.3
Bulgaria	20.4	22.4
Poland	20.4	24.3
Czech Republic	20.6	23.2
Spain	20.7	24.9
Cyprus	21.0	24.4
Malta	21.7	23.2
Germany	22.1	24.7
Netherlands	22.2	:
<b>Ireland</b>	<b>23.9</b>	<b>19.8</b>
United Kingdom	24.3	21.0
France	:	24.1
Iceland	17.1	18.5
Switzerland	19.2	18.7
Croatia	19.9	22.6
Macedonia, TFYR	21.3	23.6
Turkey	26.4	:

Source: Eurostat, Department of Education and Science

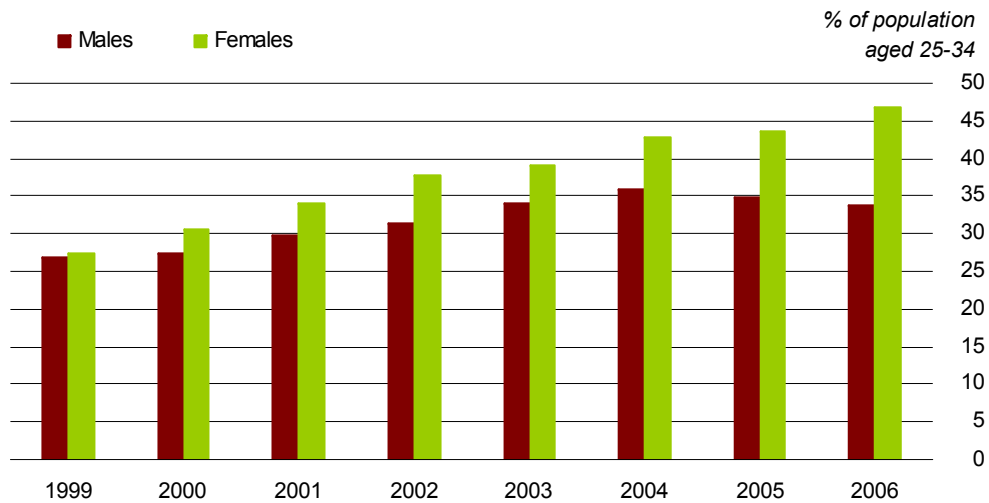
- ◆ In 2003/2004, the average class size in Ireland for primary education was 23.9 which, mirroring the student to teacher ratio, was the second highest among reporting EU 27 countries (see Table 5.5).

<sup>56</sup> ISCED 2 data for Ireland includes ISCED 3. Data for Luxembourg (ISCED 2), Lithuania (ISCED 3), Denmark (ISCED 1 & 3), Poland (ISCED 1-3) and Iceland (ISCED 1) refer to 2002/2003.

### 5.6 Ireland: Persons aged 25–34 with 3<sup>rd</sup> level<sup>57</sup> education, 1999–2006

Year	% of population aged 25-34		
	Persons	Males	Females
1999	27.1	26.7	27.5
2000	29.0	27.5	30.5
2001	31.9	29.8	34.0
2002	34.5	31.3	37.7
2003	36.6	34.2	39.0
2004	39.4	36.0	42.7
2005	39.2	34.9	43.7
2006	40.2	33.7	46.9

Source: CSO QNHS



- ◆ Over the period 1999-2006, the proportion of females aged 25-34 in Ireland with 3<sup>rd</sup> level education rose from 27.5% in 1999 to 46.9% in 2006. Over the same period, the rate for males increased from 26.7% to 36% in 2004 before falling back to 33.7% in 2006 (see Table 5.6). The widening gap reflects the increasing tendency for females to remain in education for longer than males.
- ◆ In 2006, 40.2% of the population aged 25-34 in Ireland had 3<sup>rd</sup> level education compared with 28.6% across the EU 27 (see Table 5.7).

<sup>57</sup> ISCED 97 levels 5-6.

### 5.7 EU: Persons aged 25–34 with 3<sup>rd</sup> level education by sex, 2006<sup>58</sup>

Country	% of population aged 25-34			
	Persons	Males	Females	Sex difference
Cyprus	43.8	42.7	44.9	-2.2
Belgium	40.5	35.6	45.5	-9.9
France	40.4	35.5	45.2	-9.7
<b>Ireland</b>	<b>40.2</b>	<b>33.7</b>	<b>46.9</b>	-13.1
Lithuania	39.3	33.5	45.2	-11.7
Denmark	39.3	34.7	44.0	-9.3
Spain	39.2	34.4	44.3	-9.9
Sweden	39.1	33.3	45.1	-11.8
Finland	38.4	29.6	47.6	-18.0
Luxembourg	37.0	35.5	38.7	-3.3
United Kingdom	36.5	35.2	37.7	-2.4
Netherlands	35.0	33.1	36.8	-3.7
Estonia	34.5	29.0	39.9	-10.9
<b>EU 27</b>	<b>28.6</b>	<b>25.4</b>	<b>31.9</b>	-6.6
Poland	27.9	22.3	33.6	-11.4
Slovenia	26.5	19.7	33.1	-13.4
Greece	25.9	22.9	28.9	-6.0
Bulgaria	24.0	16.2	31.8	-15.6
Malta	22.3	18.9	25.9	-7.0
Germany	22.1	22.0	22.3	-0.3
Latvia	21.7	13.7	29.9	-16.2
Hungary	20.7	17.2	24.4	-7.2
Portugal	19.8	14.5	25.2	-10.7
Austria	19.2	18.9	19.5	-0.6
Italy	16.4	13.1	19.8	-6.7
Slovakia	16.3	15.1	17.5	-2.5
Czech Republic	15.2	14.7	15.7	-1.0
Romania	14.4	13.4	15.5	-2.1
Norway	39.3	32.9	45.6	-12.7

Source: Eurostat LFS

<sup>58</sup> Quarter 2 2006. Data for Malta and Estonia are provisional.

## 5.8 Ireland: Student performance on the combined reading, mathematical and scientific literacy scales by sex, 2003

Mean score of 15 year old students

Literacy type	Ireland		All OECD countries	
	Males	Females	Males	Females
Combined reading	501	530	477	511
Mathematical	510	495	506	494
Scientific	506	504	503	497

Source: OECD, Educational Research Centre

- ◆ Girls in Ireland performed much better than boys in reading literacy tests in 2003<sup>59</sup> with an average score of 530 for females compared to 501 for males (see Table 5.8). These scores combined to give Ireland the second highest reading literacy for 15 year old students among participating EU countries in 2003 (see Table 5.9).
- ◆ Boys in Ireland performed better than girls in mathematical literacy, reflecting a similar trend across OECD countries. The PISA study focussed primarily on mathematical literacy in 2003 (see Table 5.8 and Appendix 1).
- ◆ There was a less pronounced gender difference in scientific literacy in 2003, with an average score for males of 506 and 504 for females. Ireland was just above the OECD average for scientific literacy (see Table 5.8 and Table 5.9).

## 5.9 EU: Student performance on the combined reading, mathematical and scientific literacy scales, 2003

Mean score of 15 year old students

Country	Reading literacy	Mathematical literacy	Scientific literacy
Finland	543	544	548
Netherlands	513	538	524
Belgium	507	529	509
Czech Republic	489	516	523
Denmark	492	514	475
France	496	511	511
Sweden	514	509	506
Austria	491	506	491
Germany	491	503	502
<b>Ireland</b>	<b>515</b>	<b>503</b>	<b>505</b>
<b>OECD average</b>	<b>494</b>	<b>500</b>	<b>500</b>
Slovakia	469	498	495
Luxembourg	479	493	483
Poland	497	490	498
Hungary	482	490	503
Spain	481	485	487
Portugal	478	466	468
Italy	476	466	486
Greece	472	445	481
Switzerland	499	527	513
Iceland	492	515	495
Norway	500	495	484

Source: OECD, Educational Research Centre

<sup>59</sup> PISA is conducted every three years. Results from PISA 2006 should be available for inclusion in the 2007 report.

### 5.10 Ireland: Early school leavers<sup>60</sup> by labour force status and sex, 2006

Labour force status	000s		
	Persons	Males	Females
In employment	33.2	24.3	8.9
Unemployed	7.8	5.4	2.3
Unemployment rate of persons aged 18-24 (%)	8.2	8.5	7.8
Unemployment rate of early school leavers (%)	19.0	18.2	20.5

Source: CSO QNHS

### 5.11 Ireland: Proportion of the population aged 20–64 with at least upper secondary education, 2006

Age group	% of age group		
	Persons	Males	Females
20-24	86.5	83.4	89.7
25-34	83.6	80.2	87.1
35-44	72.3	68.4	76.2
45-54	58.9	56.6	61.3
55-64	41.8	39.8	43.9

Source: CSO QNHS

- ◆ The unemployment rate for persons in Ireland aged 18-24 with, at most, lower secondary education was 19% in 2006, compared with 8.2% for that age group overall (see Tables 3.6 and 5.10).
- ◆ More than 86% of persons aged 20-24 in 2006 had completed second level education or higher. This figure decreased for older age groups down to 41.8% of persons aged 55-64. Women of all ages in Ireland are more likely than men to have completed at least upper secondary education (see Table 5.11).
- ◆ The proportion of persons aged 18-24 who left school with, at most, lower secondary education in Ireland, was 12.3% in 2006. The EU 27 average rate was 15.4% (see Table 5.12).

<sup>60</sup> Persons aged 18-24 with, at most, lower secondary education and not in further education or training.

### 5.12 EU: Early school leavers<sup>60,61</sup>, 2006

Country	% of population aged 18-24		
	Persons	Males	Females
Slovenia	5.2	6.9	3.3
Czech Republic	5.5	5.7	5.4
Poland	5.6	7.2	3.8
Slovakia	6.4	7.3	5.5
Austria	9.6	9.3	9.8
Lithuania	10.3	13.3	7.0
Finland	10.8	12.6	9.0
Denmark	10.9	12.8	9.1
Sweden	12.0	13.3	10.7
<b>Ireland</b>	<b>12.3</b>	<b>15.6</b>	<b>9.0</b>
Hungary	12.4	14.0	10.7
Belgium	12.6	14.9	10.2
Netherlands	12.9	15.1	10.7
United Kingdom	13.0	14.6	11.4
France	13.1	15.1	11.2
Estonia	13.2	19.6	:
Luxembourg	13.3	17.0	9.6
Germany	13.8	13.9	13.6
<b>EU 27</b>	<b>15.4</b>	<b>17.5</b>	<b>13.2</b>
Greece	15.9	20.7	11.0
Cyprus	16.0	23.5	9.2
Bulgaria	18.0	18.2	17.9
Latvia	19.0	21.6	16.1
Romania	19.0	19.1	18.9
Italy	20.8	24.3	17.3
Spain	29.9	35.8	23.8
Portugal	39.2	46.4	31.8
Malta	41.6	44.4	38.9
Croatia	4.8	5.6	3.8
Norway	5.9	7.4	4.3
Switzerland	7.8	8.7	6.9
Iceland	26.3	30.5	22.0
Turkey	50.0	56.6	42.7

Source: Eurostat LFS

<sup>61</sup> Data for Estonia, Lithuania, Slovenia, Latvia, Portugal, Finland, Croatia, Iceland and Switzerland are provisional.

## 6.1 Ireland: Non-capital public expenditure on health care, 1995–2004

Year	Non-capital public expenditure			Per capita at constant 2003 prices (€)
	Total (€m)	% of GNI	% of GDP	
1995	2,980.4	6.2	5.6	1,231
1996	3,049.0	5.7	5.2	1,226
1997	3,504.0	5.8	5.1	1,318
1998	3,885.6	5.6	4.9	1,391
1999	4,647.0	6.0	5.1	1,555
2000	5,422.7	6.0	5.2	1,693
2001	6,801.5	6.9	5.8	1,951
2002	7,933.4	7.4	6.1	2,099
2003	8,852.8	7.5	6.4	2,225
2004 <sup>62</sup>	9,609.5	7.6	6.5	2,223

Source: Department of Health and Children

- ◆ Non-capital public expenditure on health care in Ireland as a proportion of GNI decreased from 6.2% in 1995 to 5.6% in 1998 but has increased since then to 7.6% in 2004 (see Table 6.1).
- ◆ An average of €2,223 (at constant 2003 prices) per person was spent on non-capital public expenditure on health care in Ireland in 2004. This represented an increase of over 80% on the 1995 level (see Table 6.1 and Appendix 1).
- ◆ Ireland's expenditure on public and private health was 7.1% of GDP and 8.3% of GNI in 2004, both of which were lower than the EU 25 average of 8.7% of GDP in that year (see Table 6.2).

<sup>62</sup> 2004 data forecasted.

## 6.2 EU: Total expenditure<sup>63</sup> on health as percentage of GDP, 2002–2004

Country	% of GDP			PPS \$ per capita
	2002	2003	2004	
France	10.0	10.4	10.5	3,159
Portugal	9.5	9.8	10.0	1,813
Greece	10.1	10.2	9.8	2,162
Austria	9.5	9.6	9.6	3,124
Malta	9.1	9.3	9.2	1,739
Sweden	9.1	9.3	9.1	2,825
Denmark	8.8	8.9	8.9	2,881
Netherlands	8.9	8.9	8.9	3,041
<b>EU 25</b>	<b>8.4</b>	<b>8.6</b>	<b>8.7</b>	<b>2,308</b>
Italy	8.3	8.2	8.7	2,392
Slovenia	8.9	8.8	8.6	1,801
<b>Ireland (% of GNI)</b>	<b>8.7</b>	<b>8.4</b>	<b>8.3</b>	<b>2,596</b>
Hungary	7.7	8.3	8.3	1,323
United Kingdom	7.7	7.9	8.3	2,546
Spain	7.3	7.9	8.1	2,094
Luxembourg	6.8	7.7	8.0	5,089
Finland	7.2	7.4	7.5	2,235
Czech Republic	7.2	7.5	7.3	1,361
<b>Ireland (% of GDP)</b>	<b>7.2</b>	<b>7.2</b>	<b>7.1</b>	<b>2,596</b>
Poland	6.6	6.5	6.5	805
Cyprus	6.1	6.4	6.3	1,437
Latvia	4.9	5.0	6.3	734
Lithuania	5.9	5.7	6.0	786
Estonia	4.9	5.1	5.3	771
Romania	4.2	4.1	3.7	314
Germany	10.8	10.9	:	:
Belgium	8.9	9.9	:	:
Slovakia	5.6	5.9	:	:
Switzerland	11.1	11.5	11.6	4,077
Iceland	10.0	10.5	10.2	3,331
Norway	9.9	10.1	9.7	3,966
Turkey	7.4	7.6	7.7	580
Macedonia, TFYR	6.6	6.8	:	:

Source: WHO Health for All Database

<sup>63</sup> Public and private. See Appendix 1 for details of PPS.

### 6.3 Ireland: Life expectancy at birth and at age 65 by sex, 1925–2003

Period	years			
	At birth		At 65 years	
	Males	Females	Males	Females
1925-1927	57.4	57.9	12.8	13.4
1935-1937	58.2	59.6	12.5	13.1
1940-1942	59.0	61.0	12.3	13.2
1945-1947	60.5	62.4	12.0	13.1
1950-1952	64.5	67.1	12.1	13.3
1960-1962	68.1	71.9	12.6	14.4
1965-1967	68.6	72.9	12.4	14.7
1970-1972	68.8	73.5	12.4	15.0
1978-1980	69.5	75.0	12.4	15.4
1980-1982	70.1	75.6	12.6	15.7
1985-1987	71.0	76.7	12.6	16.2
1990-1992	72.3	77.9	13.4	17.1
1995-1997	73.0	78.5	13.8	17.4
2001-2003	75.1	80.3	15.4	18.7

Source: CSO Vital Statistics

- ◆ Life expectancy at birth in Ireland increased from under 58 years in 1925-1927 to 75.1 years for males and 80.3 years for females in 2001-2003. Over the same period, there was an increase of just over two and a half years in the life expectancy of men aged 65 compared with an increase of over five years in the life expectancy of older women (see Table 6.3).
- ◆ In 2005, the estimated life expectancy at birth for males in Ireland was 1.3 years higher than the EU 25 average of 75.8 years, while that of females was slightly lower than the EU 25 average of 81.9 years (see Table 6.4).
- ◆ The difference between life expectancy at birth for men and women was lowest in Malta at 3.7 years. The corresponding difference for Ireland was 4.7 years and 6.1 years for the EU 25 as a whole (see Table 6.4).

### 6.4 EU: Life expectancy at birth by sex, 2005<sup>64</sup>

Country	years		
	Males	Females	Sex difference
Spain	77.4	83.9	6.5
France	76.7	83.8	7.1
Italy	77.6	83.2	5.6
Sweden	78.4	82.8	4.4
Belgium	76.7	82.4	5.7
Luxembourg	76.2	82.3	6.1
Finland	75.5	82.3	6.8
Austria	76.7	82.2	5.5
<b>EU 25</b>	<b>75.8</b>	<b>81.9</b>	<b>6.1</b>
Germany	76.2	81.8	5.6
<b>Ireland</b>	<b>77.1</b>	<b>81.8</b>	<b>4.7</b>
Cyprus	77.0	81.7	4.7
Netherlands	77.2	81.6	4.4
Greece	76.6	81.5	4.9
Malta	77.7	81.4	3.7
Portugal	74.9	81.4	6.5
Slovenia	74.1	81.3	7.2
United Kingdom	76.9	81.1	4.2
Denmark	75.6	80.2	4.6
Poland	70.8	79.4	8.6
Czech Republic	72.9	79.1	6.2
Estonia	67.3	78.1	10.8
Slovakia	70.1	77.9	7.8
Latvia	65.6	77.4	11.8
Lithuania	65.4	77.4	12.0
Hungary	68.6	76.9	8.3
Bulgaria	69.0	76.3	7.3
Romania	68.2	75.4	7.2
Switzerland	78.7	83.9	5.2
Iceland	79.2	83.1	3.9
Norway	77.7	82.5	4.8
Croatia	72.3	79.2	6.9
Macedonia, TFYR	71.3	76.1	4.8
Turkey	68.9	73.8	4.9

Source: Eurostat

<sup>64</sup> Data for EU 25, Belgium, Ireland, Luxembourg, Croatia and TFYR of Macedonia are provisional Eurostat estimates.

### 7.1 Ireland: Population distribution by age group, 1997–2006

% 000 persons

Year	0-14 years	15-24 years	25-44 years	45-64 years	65 years and over	Total
1997	23.1	17.5	28.3	19.7	11.4	3,664.3
1998	22.6	17.4	28.6	20.1	11.3	3,703.1
1999	22.2	17.2	28.9	20.5	11.3	3,741.6
2000	21.8	16.9	29.2	20.8	11.2	3,789.5
2001	21.5	16.6	29.7	21.0	11.2	3,847.2
2002	21.1	16.4	30.1	21.2	11.1	3,917.2
2003	21.0	16.2	30.3	21.5	11.1	3,978.9
2004	20.9	15.8	30.5	21.7	11.1	4,043.8
2005	20.7	15.4	31.0	21.8	11.2	4,130.7
2006	20.4	14.9	31.7	21.9	11.0	4,239.8

Source: CSO Population and Migration estimates, Census of Population<sup>65</sup>

### 7.2 Ireland: Household composition, 1997–2006

Year	000 households				Persons
	Total households	1 person households	2 person households	3 or more person households	Average household size
1997	1,191.9	269.7	288.5	633.7	3.07
1998	1,224.6	264.9	297.1	662.7	3.02
1999	1,253.9	276.8	304.1	672.9	2.98
2000	1,283.6	292.8	311.4	679.4	2.95
2001	1,302.5	283.4	331.5	687.6	2.95
2002	1,344.4	296.9	347.0	700.5	2.91
2003	1,383.8	305.2	370.6	708.0	2.88
2004	1,405.9	297.8	385.6	722.5	2.88
2005	1,453.9	315.9	399.5	738.5	2.84
2006	1,488.4	324.9	412.0	751.5	2.85

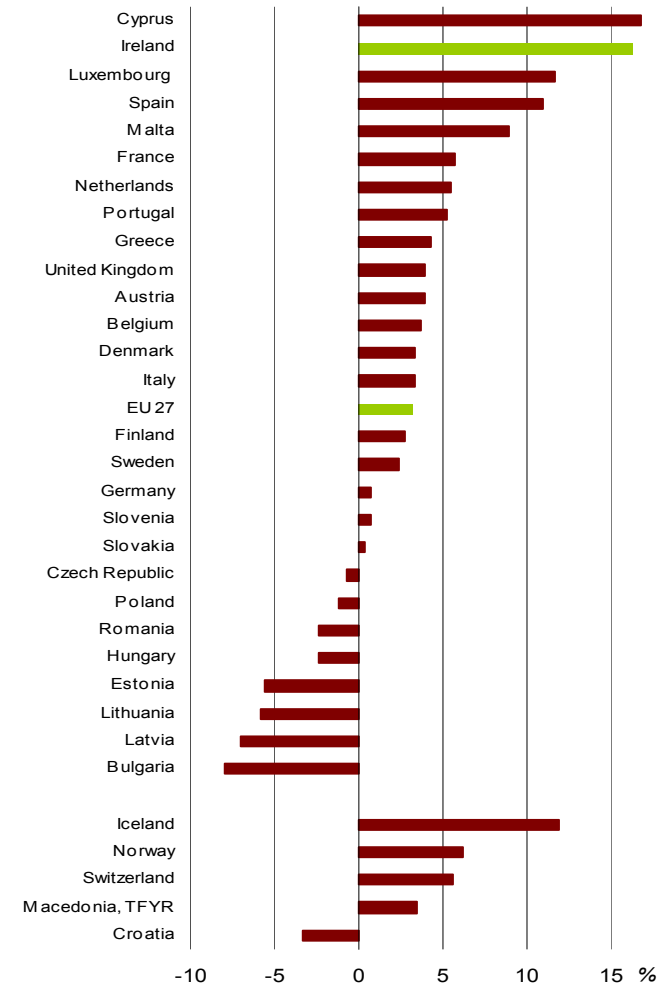
Source: CSO QNHS<sup>66</sup>

- ◆ The population increased by 15.6% to almost 4.24 million persons over the period 1997-2006. The proportion of the population aged 25-64 increased from 48.0% in 1997 to 53.6% in 2006. Conversely, there was a decrease in the 0-24 age group from 40.6% in 1997 to 35.3% of the population in 2006 (see Table 7.1).

<sup>65</sup> See Appendix 1 – Domain 7. Following release of Census of Population 2006, estimates for intercensal years are subject to revision.

<sup>66</sup> LFS (April 1997) and QNHS (March-May, 1998-2004).

### 7.3 EU: Population change, 1996–2006



Source: Eurostat

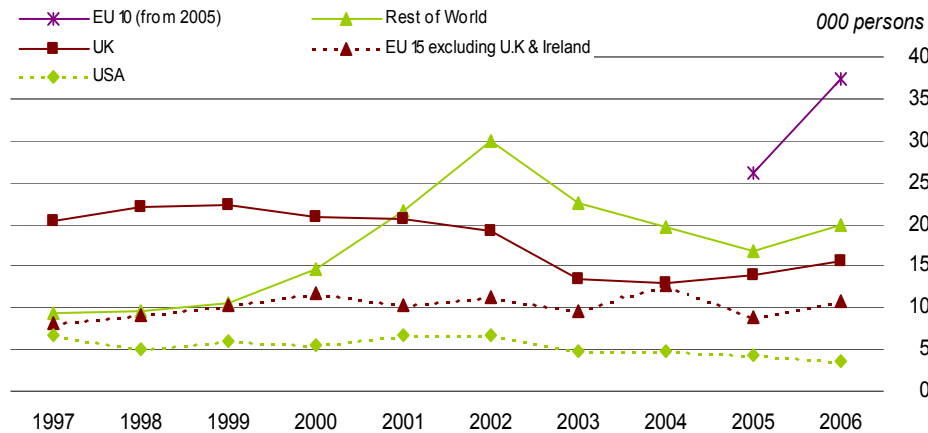
- ◆ In Ireland, average household size decreased from 3.07 persons in 1997 to 2.85 persons in 2006. There was a 42.8% increase in the number of 2 person households, a 20.5% increase in 1 person households and an 18.6% increase in 3 or more person households over the same period (see Table 7.2).
- ◆ Ireland had the second highest percentage increase in population between 1996 and 2006 in the EU 27 after Cyprus (see Graph 7.3).

## 7.4 Ireland: Migration and natural increase, 1997–2006

Year	000 persons				
	Inward migration	Outward migration	Net migration	Natural increase	Population change
1997	44.5	25.3	19.2	19.0	38.2
1998	46.0	28.6	17.4	21.5	38.8
1999	48.9	31.5	17.3	21.2	38.5
2000	52.6	26.6	26.0	21.8	47.9
2001	59.0	26.2	32.8	24.8	57.7
2002	66.9	25.6	41.3	28.8	70.0
2003	50.5	20.7	29.8	31.9	61.7
2004	50.1	18.5	31.6	33.3	64.9
2005	70.0	16.6	53.4	33.5	87.0
2006	86.9	17.0	69.9	34.2	104.1

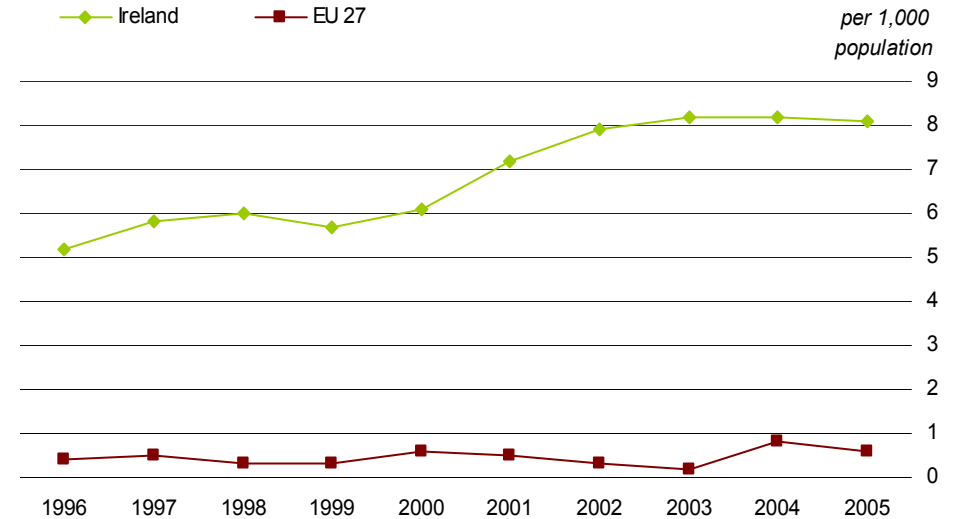
Source: CSO Migration estimates

## 7.5 Ireland: Immigration by country of origin, 1997–2006



Source: CSO Migration estimates

## 7.6 Ireland and EU: Rate of natural increase of population<sup>67</sup>, 1996–2005



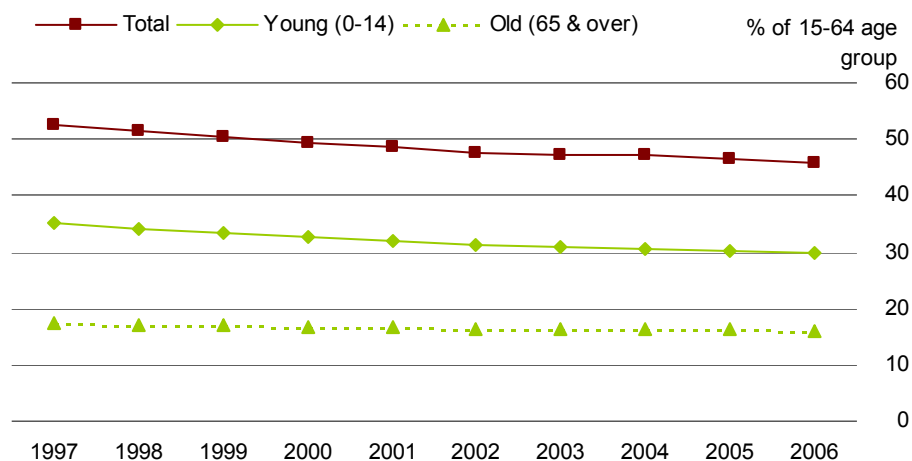
Source: Eurostat

- ◆ There has been net migration into Ireland in each year since 1997. The level of net inward migration increased from 19,200 in 1997 to 69,900 in 2006 (see Table 7.4).
- ◆ The level of annual gross emigration from Ireland decreased from 25,300 persons in 1997 to 17,000 persons in 2006 (see Table 7.4).
- ◆ An estimated 37,400 persons moved to Ireland from the 10 new EU countries in 2006 compared to 26,200 in 2005. Around 10,700 persons moved to Ireland from the other EU 15 countries (other than the UK) in 2006 (see Graph 7.5).
- ◆ The rate of natural increase of the population in Ireland was 8.1 per 1,000 population in 2005 compared to an average of just 0.6 per 1,000 in the EU 27. The EU 27 rate has been consistently below 1.0 over the 1996-2005 period, whereas the rate for Ireland increased from 5.2 per 1,000 in 1996 (see Table 7.4 and Graph 7.6).

<sup>67</sup> Break in EU 27 figure in 1998. Irish 2005 data provisional.



## 7.7 Ireland: Age dependency ratio, 1997–2006



Source: CSO Census of Population, Population and Migration estimates<sup>68</sup>

- ◆ Expressed as a percentage of those aged 15-64, Ireland had the highest proportion of persons aged under 15 in the EU 27 (30.4%) and the second lowest proportion of persons aged 65 and over (16.4%) after Slovakia in 2005 (see Table 7.8).
- ◆ This resulted in a combined age dependency ratio of 46.8% in Ireland in 2005 which was similar to other EU 27 member states although markedly different in composition (see Table 7.8).

## 7.8 EU: Young and old as proportion of population aged 15–64, 2005

Country	% of population aged 15-64		
	Young and old	Young (0-14)	Old (65 & over)
<b>Ireland</b>	<b>46.8</b>	<b>30.4</b>	<b>16.4</b>
Denmark	51.1	28.4	22.7
France	53.6	28.3	25.2
Cyprus	45.2	27.9	17.3
Luxembourg	49.2	27.9	21.3
United Kingdom	52.0	27.7	24.3
Netherlands	48.1	27.3	20.8
Sweden	53.4	27.0	26.5
Belgium	52.5	26.4	26.1
Finland	50.0	26.2	23.8
Malta	44.8	25.6	19.3
Lithuania	47.4	25.2	22.3
<b>EU 27</b>	<b>48.6</b>	<b>24.0</b>	<b>24.6</b>
Slovakia	40.2	23.9	16.3
Poland	42.6	23.8	18.7
Austria	47.3	23.7	23.5
Estonia	47.4	23.5	23.9
Portugal	48.5	23.2	25.2
Hungary	45.5	22.8	22.7
Romania	43.9	22.8	21.1
Germany	49.4	21.6	27.8
Latvia	45.6	21.6	24.1
Greece	47.8	21.4	26.4
Italy	50.1	21.2	28.9
Spain	45.6	21.1	24.4
Czech Republic	40.8	21.0	19.8
Slovenia	42.2	20.4	21.8
Bulgaria	44.9	20.0	24.8
Iceland	51.8	33.9	17.9
Norway	52.6	30.1	22.4
Macedonia, TFYR	44.6	28.8	15.7
Croatia	48.9	24.2	24.6
Switzerland	47.3	23.9	23.3

Source: Eurostat

<sup>68</sup> Following release of Census of Population 2006, estimates for intercensal years are subject to revision.

### 7.9 Ireland and EU: Total fertility rate<sup>69</sup>, 1996–2005

*Expected number of children a woman will have*

Year	EU 25	Ireland
1996	1.44	1.89
1997	1.44	1.94
1998	1.43	1.95
1999	1.42	1.91
2000	1.48	1.90
2001	1.46	1.96
2002	1.46	1.98
2003	1.48	1.98
2004	1.51	1.95
2005	1.52	1.88

*Source: Eurostat, CSO Vital Statistics*

- ◆ In 1996 the fertility rate in Ireland was at a historical low level of 1.89. It rose again to reach 1.98 in 2002 before declining to 1.88 in 2005 (see Table 7.9).
- ◆ Ireland had the second highest fertility rate in the EU 27 in 2005, with France the only EU 27 country having a higher rate (see Table 7.10).
- ◆ The fertility rate increased in 14 of the EU 25 Member States between 2000 and 2005, resulting in a small increase in the EU 25 average rate from 1.48 to 1.52 (see Table 7.10).
- ◆ The new Accession countries (including Bulgaria and Romania), together with the Mediterranean countries, tended to have the lowest fertility rates (see Table 7.10).

<sup>69</sup> Break in EU 25 series in 1998. EU data from 2000 is provisional.

### 7.10 EU: Total fertility rate<sup>70</sup>, 1995–2005

*Expected number of children a woman will have*

Country	1995	2000	2005
France	1.70	1.89	1.94
<b>Ireland</b>	<b>1.84</b>	<b>1.90</b>	<b>1.88</b>
Denmark	1.80	1.77	1.80
Finland	1.81	1.73	1.80
United Kingdom	1.71	1.64	1.80
Sweden	1.73	1.55	1.77
Netherlands	1.53	1.72	1.73
Belgium	1.55	1.61	1.72
Luxembourg	1.69	1.78	1.70
<b>EU 25</b>	<b>1.44</b>	<b>1.48</b>	<b>1.52</b>
Estonia	1.32	1.39	1.50
Cyprus	2.13	1.64	1.42
Austria	1.42	1.36	1.41
Portugal	1.41	1.55	1.40
Malta	1.83	1.67	1.37
Germany	1.25	1.38	1.34
Spain	1.18	1.27	1.34
Italy	1.18	1.26	1.34
Hungary	1.58	1.33	1.32
Romania	1.34	1.31	1.32
Bulgaria	1.24	1.27	1.31
Latvia	1.26	1.24	1.31
Czech Republic	1.28	1.14	1.28
Greece	1.32	1.27	1.28
Lithuania	1.55	1.39	1.27
Slovenia	1.29	1.26	1.26
Slovakia	1.52	1.30	1.25
Poland	1.61	1.37	1.24
Turkey	:	2.57	2.19
Iceland	2.08	2.08	2.05
Norway	1.87	1.85	1.84
Macedonia, TFYR	1.97	1.88	1.46
Croatia	1.58	1.40	1.42
Switzerland	1.48	1.50	1.42

*Source: Eurostat*

<sup>70</sup> For 2005, EU 25 data is provisional, data for Belgium are Eurostat estimates.

**7.11 Ireland: Lone parent families with children aged under 20 by sex of parent, 1997–2006**

*000 families*

Year	Male	Female	Total
1997	8.1	65.6	73.7
1998	9.2	83.4	92.6
1999	9.9	78.1	88.0
2000	10.3	93.0	103.4
2001	10.5	102.9	113.3
2002	11.8	103.9	115.6
2003	10.0	105.5	115.6
2004	10.7	106.5	117.1
2005	10.1	111.9	122.0
2006	10.6	115.0	125.6

*Source: CSO QNHS<sup>71</sup>*

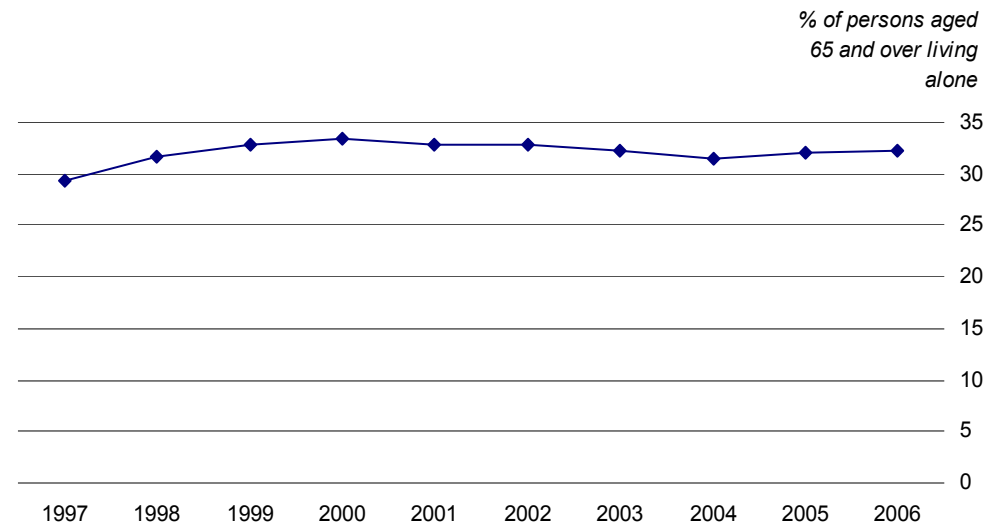
- ◆ The number of lone parent families with children aged under 20 increased by 70.4% between 1997 and 2006. The ratio of female to male heads of household for lone parent families with children aged under 20, increased from over 8:1 in 1997 to almost 11:1 in 2006 (see Table 7.11).

<sup>71</sup> LFS (April 1997) and QNHS (March-May, 1998-2006).

### 7.12 Ireland: Persons aged 65 and over living alone by sex, 1997–2006

Year	000 persons aged 65 and over living alone			% of all households
	Persons	Males	Females	
1997	122.3	39.7	82.6	10.3
1998	132.9	42.0	90.9	10.9
1999	138.9	42.4	96.5	11.1
2000	142.1	45.4	96.8	11.1
2001	141.0	45.2	95.7	10.9
2002	142.9	45.8	97.1	10.6
2003	142.6	45.0	97.6	10.3
2004	141.9	45.2	96.7	10.1
2005	147.7	46.3	101.4	10.2
2006	151.9	47.6	104.3	10.2

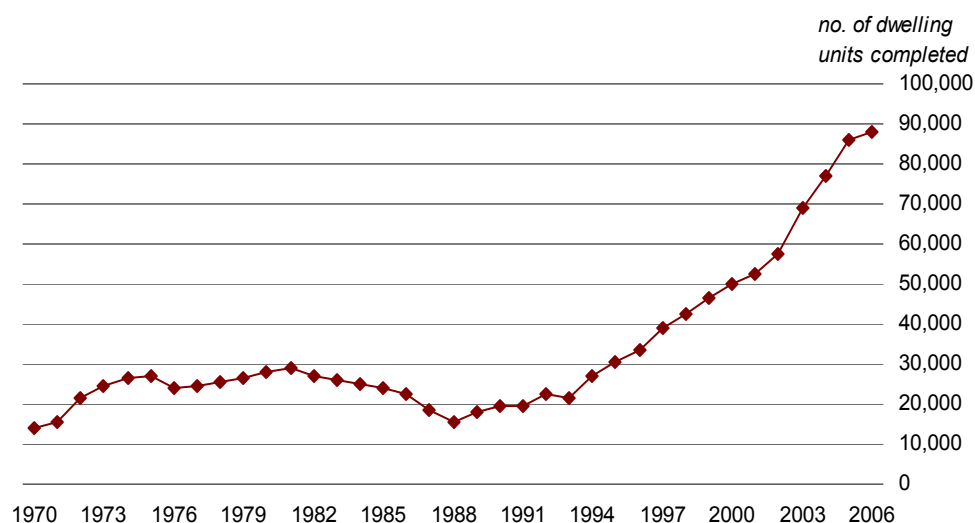
Source: CSO QNHS<sup>72</sup>



- ◆ Almost 152,000 persons aged 65 and over were living alone in 2006 compared with 122,300 in 1997 (see Table 7.12).
- ◆ There were over twice as many women aged 65 and over living alone in 2006 as there were men (see Table 7.12).
- ◆ Almost one-third of persons aged 65 and over were living alone in 2006 (see Tables 7.1 and 7.12).

<sup>72</sup> LFS (April 1997) and QNHS (March-May, 1998-2006).

### 8.1 Ireland: Dwelling unit completions, 1970–2006<sup>73</sup>



Source: Department of the Environment, Heritage and Local Government, CSO

### 8.2 Ireland: Dwelling unit completions, 1997–2006<sup>73</sup>

Year	number of dwelling units			
	Total dwellings	Private dwellings	Local Authority dwellings	Voluntary dwellings
1997	38,842	35,454	2,632	756
1998	42,349	39,093	2,771	485
1999	46,512	43,024	2,909	579
2000	49,812	46,657	2,204	951
2001	52,602	47,727	3,622	1,253
2002	57,695	51,932	4,403	1,360
2003	68,819	62,686	4,516	1,617
2004	76,954	71,808	3,539	1,607
2005	86,189	:	:	:
2006	88,187	:	:	:

Source: Department of the Environment, Heritage and Local Government, CSO

<sup>73</sup> House completions data series are based on the number of new dwellings connected by ESB Networks. These represent the number of homes completed and available, and do not reflect any work-in progress. ESB Networks have indicated that there was a higher backlog in work-in-progress in 2005 than usual (estimated as being in the region of 5,000 units). This backlog was cleared through the connection of an additional 2,000 houses in Quarter 1 2006 and 3,000 houses in Quarter 2 2006. CSO have amended the 2005 and 2006 completion figures accordingly.

### 8.3 Ireland: Nature of occupancy<sup>74</sup> of private households, 1961–2006

Year	% of private households		
	Owner-occupied	Rented	Other
1961	59.8	35.6	4.6
1971	68.8	28.9	2.3
1981	74.7	22.6	2.6
1991	80.0	17.9	2.1
2002	79.8	18.5	1.7
2006	77.2	21.3	1.5

Source: CSO Census of Population

- ◆ There were 13,887 dwelling unit completions in 1970. This figure gradually rose to 28,917 in 1981 before falling to 15,654 in 1988. Since 1988, there has been an increase in the number of completions each year apart from 1993 (see Graph 8.1 and footnote).
- ◆ The total number of dwelling unit completions increased by a factor of 2.3 from 38,842 units in 1997 to 88,187 units in 2006 (see Table 8.2 and footnote).
- ◆ The proportion of households in Ireland that were owner-occupied increased from 59.8% in 1961 to 80% in 1991. There were decreases to 79.8% in 2002 and to 77.2% in 2006 (see Table 8.3).

<sup>74</sup> 'Not stated' replies excluded.

#### 8.4 Ireland: Housing loans paid<sup>75</sup>, 1996–2005

Year	New Houses	Other houses	Total	Value (€m)	Average value of mortgage (€000)	Representative mortgage interest rate for building societies (%)
1996	25,628	30,381	56,009	2,960	52.8	6.80
1997	28,193	29,708	57,901	3,589	62.0	7.22
1998	27,355	34,052	61,407	4,587	74.7	7.10
1999	31,359	39,458	70,817	6,517	92.0	4.93
2000	31,533	42,725	74,258	7,598	102.3	5.38
2001	29,431	37,355	66,786	7,664	114.8	5.69
2002	32,298	46,994	79,292	10,825	136.5	4.66
2003	35,292	49,457	84,749	13,524	159.6	3.74
2004	44,231	54,478	98,709	16,933	171.5	3.48
2005	53,758	53,922	107,680	21,536	200.0	3.49

Source: Department of the Environment, Heritage and Local Government

- ◆ The average value of a new housing loan in Ireland rose from €52,800 in 1996 to €200,000 in 2005. Mortgage interest rates almost halved in this period while the number of loans taken out for housing almost doubled (see Table 8.4).
- ◆ Interest rates for new mortgages in Ireland were slightly higher than the Eurozone average at the end of 2006 (see Table 8.5).

<sup>75</sup> These data contain an unquantified element of refinancing of existing mortgages (e.g. involving the redemption of an existing mortgage and its replacement with a mortgage from a different lender).

#### 8.5 Eurozone: Interest rates for household mortgages (new business), 2004–2006

Country	interest rate <sup>76,77</sup>		
	2004	2005	2006
Greece	4.21	3.86	4.07
France	3.61	3.37	4.12
Finland	3.12	3.25	4.17
Portugal	3.39	3.51	4.40
Belgium	3.36	3.18	4.47
Luxembourg	3.38	3.62	4.51
Spain	3.19	3.29	4.53
<b>Eurozone</b>	<b>3.43</b>	<b>3.49</b>	<b>4.54</b>
Austria	4.17	4.02	4.54
Netherlands	3.10	3.44	4.57
<b>Ireland</b>	<b>3.39</b>	<b>3.47</b>	<b>4.57</b>
Italy	3.54	3.60	4.71
Germany	4.37	4.44	5.23

Source: Eurostat, European Central Bank

<sup>76</sup> Rates shown are as at end of period.

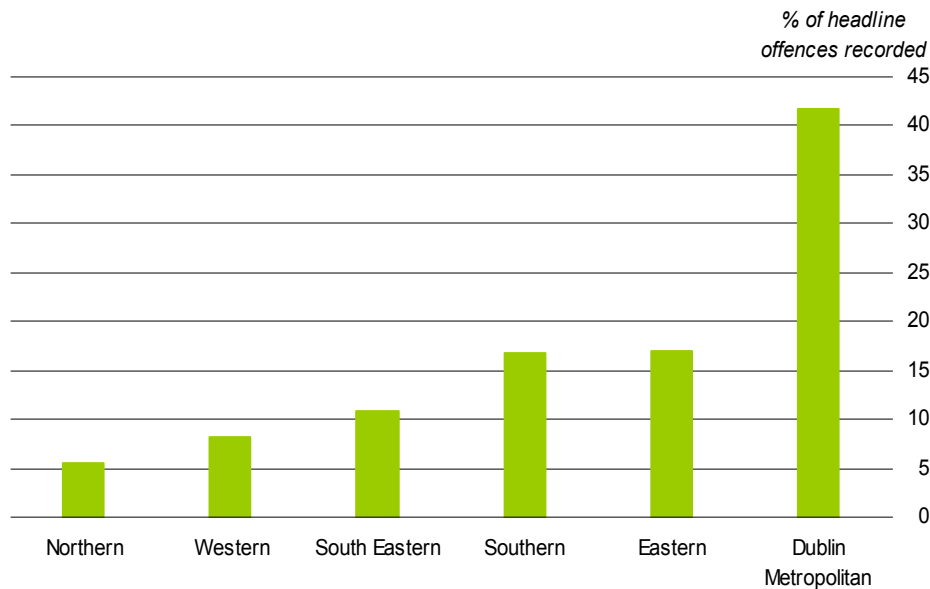
<sup>77</sup> Rates shown in this table cover both floating (variable) rates and rates fixed for up to one year.

**9.1 Ireland: Headline offences detection rates by Garda Division<sup>78</sup>, 2003–2006**

Garda Division	% headline offences detection rate			
	2003	2004	2005	2006
Eastern	31.6	31.4	31.8	33.7
Dublin Metropolitan	34.0	32.1	34.1	38.6
Northern	37.2	35.6	38.1	43.5
South Eastern	44.6	42.3	42.6	43.9
Southern	40.4	44.4	43.9	48.0
Western	37.2	37.6	35.4	37.4
<b>State</b>	<b>36.1</b>	<b>35.4</b>	<b>36.5</b>	<b>40.1</b>

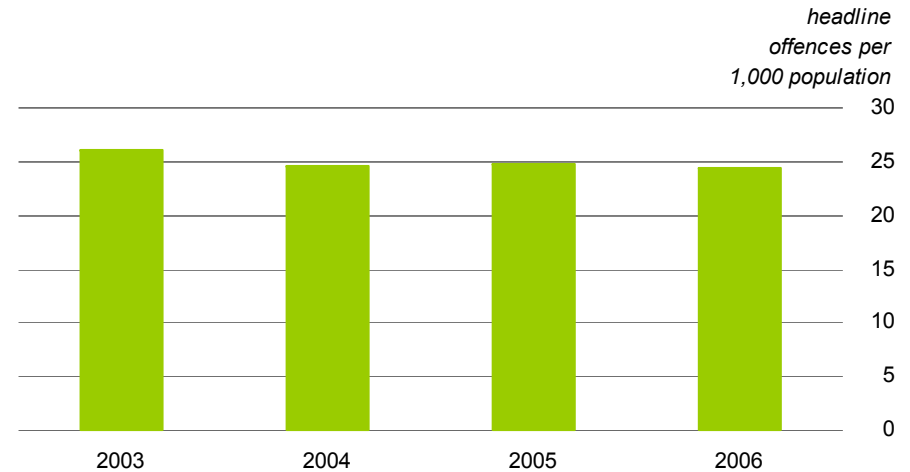
Source: CSO Headline crime statistics

**9.2 Ireland: Headline offences recorded by Garda Division, 2006**



Source: CSO Headline crime statistics

**9.3 Ireland: Headline offences recorded per 1,000 population<sup>79</sup>, 2003–2006**



Source: CSO Headline crime statistics

- ◆ The detection rate for headline offences was 40.1% in 2006. Detection rates were highest in the Southern region (48.0%) and lowest in the Eastern region at 33.7% (see Table 9.1).
- ◆ The Dublin Metropolitan region accounted for almost 42% of headline offences recorded in 2006 (see Graph 9.2).
- ◆ The number of headline offences recorded decreased from 26.0 per 1,000 population in 2003 to 24.5 in 2006 (see Graph 9.3).

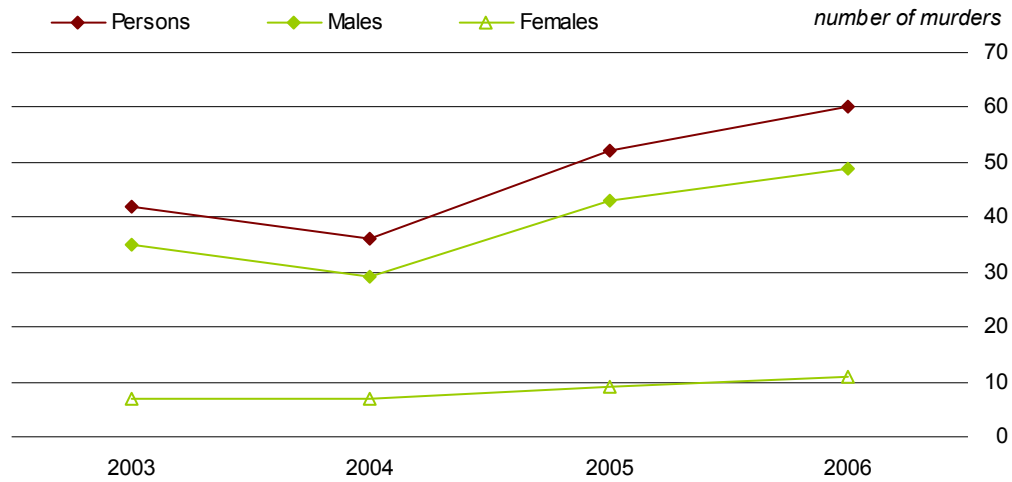
<sup>78</sup> The CSO commenced publishing Headline Crime Statistics in 2006. The indicators in this domain are now based on these data. New crime domain indicators may be introduced in the 2007 report.

<sup>79</sup> 2003-2005 figures based on annual population estimates for April of each year, 2006 figure based on 2006 Census of Population data.

#### 9.4 Ireland: Murders recorded, 2003–2006

Year	number of murders			% female
	Persons	Males	Females	
2003	42	35	7	17
2004	36	29	7	19
2005	52	43	9	17
2006	60	49	11	18

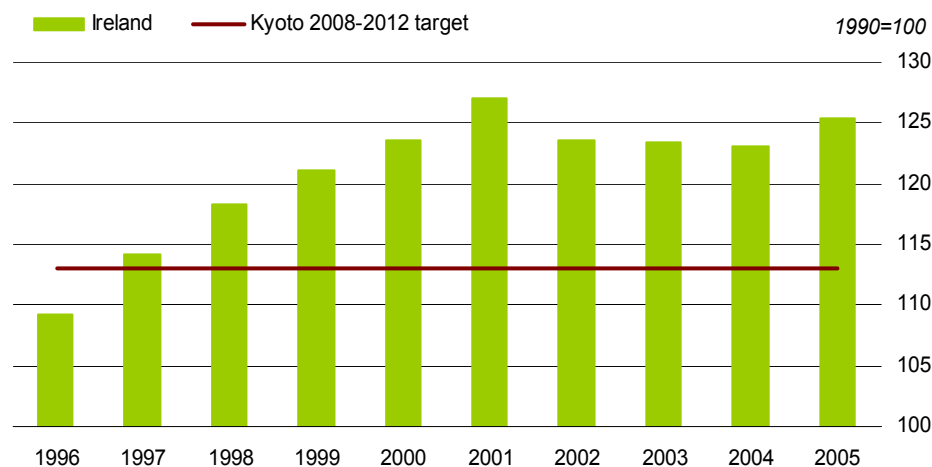
Source: CSO Headline crime statistics



- ◆ The number of murders recorded in Ireland was 60 in 2006. Men were the victims in over 80% of these murders (see Table and Graph 9.4).



### 10.1 Ireland: Total net greenhouse gas emissions, 1996–2005<sup>80</sup>



Source: Eurostat

- ◆ Under the Kyoto protocol, EU countries agreed to reduce total greenhouse gas emissions in the EU to 8% below 1990 levels for the period 2008-2012. Ireland's Kyoto burden-sharing target is to ensure that average levels in the 2008-2012 period are no more than 13% above the 1990 emissions (see Graph 10.1).
- ◆ However, Ireland exceeded the 2008-2012 Kyoto target of 113 for greenhouse gas emissions in 1997 and reached 127.1% of the 1990 level in 2001. The situation slightly improved between 2002 and 2004, but the 2005 level increased again to 125.4% of the 1990 level (see Graph 10.1).
- ◆ Ireland's levels of emissions of 123.1% were considerably higher than the EU 25 average of 92.7% of 1990 levels in 2004 (see Table 10.2).

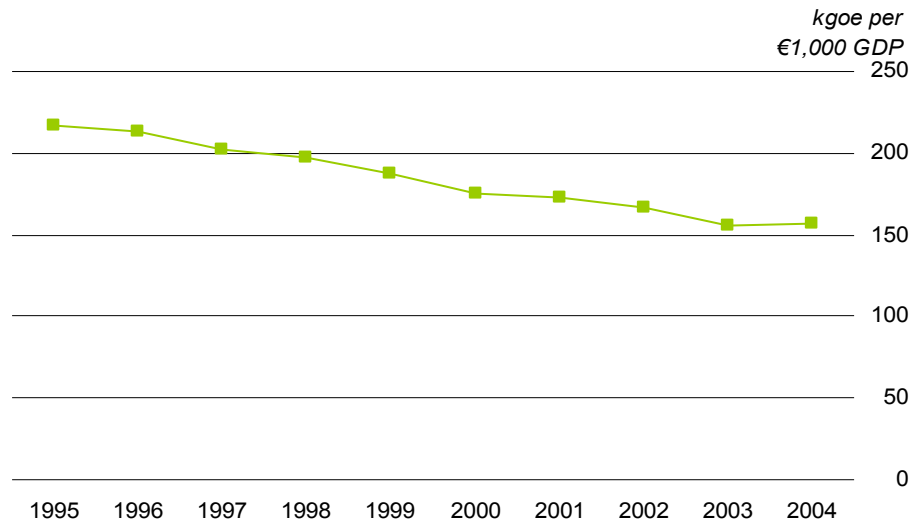
### 10.2 EU: Net greenhouse gas emissions, 2004, and Kyoto 2008–2012 target

Country	2004	1990=100	%
		2008-2012 Kyoto target	2004 level as % of target
Lithuania	39.9	92.0	43.4
Latvia	41.5	92.0	45.1
Estonia	50.0	92.0	54.3
Bulgaria	51.0	92.0	55.4
Romania	59.0	92.0	64.1
Hungary	68.0	94.0	72.3
Poland	68.4	94.0	72.8
Slovakia	69.7	92.0	75.8
Czech Republic	74.9	92.0	81.4
Germany	82.5	79.0	104.4
United Kingdom	85.9	87.5	98.2
<b>EU 25</b>	<b>92.7</b>	:	:
Sweden	96.4	104.0	92.7
Denmark	98.2	79.0	124.3
<b>EU 15</b>	<b>99.1</b>	<b>92.0</b>	<b>107.7</b>
France	99.2	100.0	99.2
Slovenia	99.2	92.0	107.8
Luxembourg	100.3	72.0	139.3
Belgium	100.7	92.5	108.9
Netherlands	101.6	94.0	108.1
Italy	112.1	93.5	119.9
Finland	114.5	100.0	114.5
Austria	115.7	87.0	133.0
<b>Ireland</b>	<b>123.1</b>	<b>113.0</b>	<b>108.9</b>
Greece	123.9	125.0	99.1
Portugal	141.0	127.0	111.0
Malta	145.9	:	:
Spain	147.9	115.0	128.6
Cyprus	148.2	:	:
Croatia	94.6	95.0	99.6
Iceland	96.8	110.0	88.0
Norway	110.3	101.0	109.2
Turkey	210.0	:	:

Source: Eurostat

<sup>80</sup> See Appendix 1 for note on revision to series.

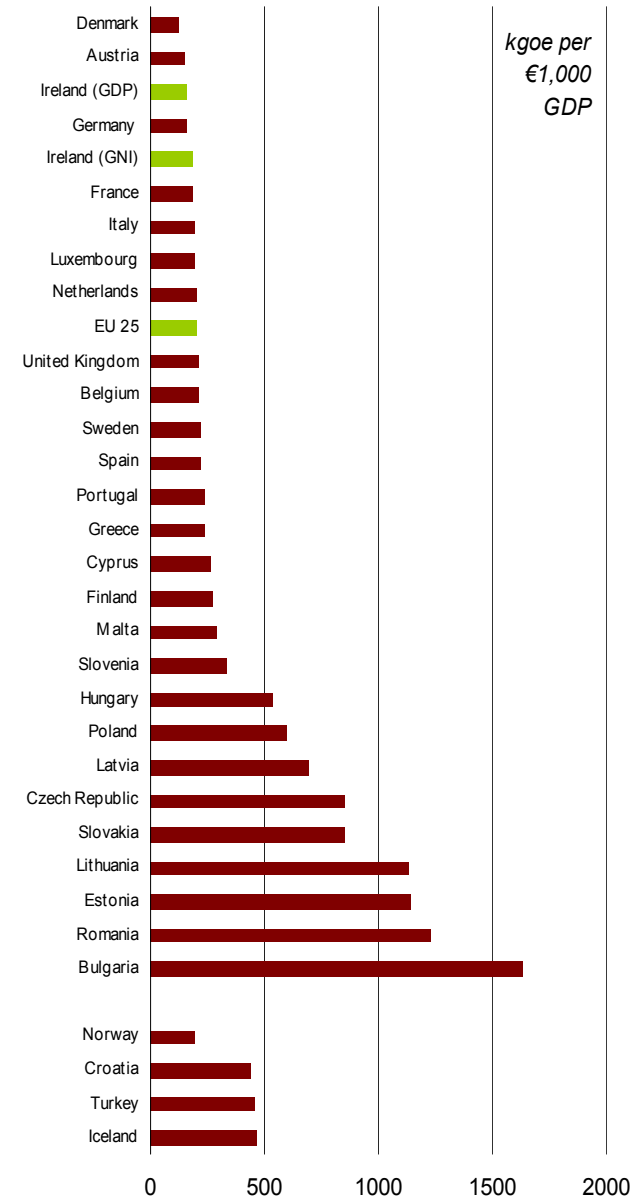
**10.3 Ireland: Gross inland consumption of energy divided by GDP<sup>81</sup>, 1995–2004**



Source: Eurostat

- ◆ Ireland's energy intensity ratio improved from 217 in 1995 to 157 in 2004 (see Graph 10.3). This ratio is calculated by dividing total usage of coal, electricity, oil, natural gas and renewable energy by GDP (see Appendix 1).
- ◆ The ratio for Ireland in terms of both GDP and GNI was lower than the EU 25 figure of 205 in 2004. In terms of GDP, Ireland had the third lowest ratio of the EU 25 countries (see Graph 10.4).

**10.4 EU: Gross inland consumption of energy divided by GDP, 2004**



Source: Eurostat

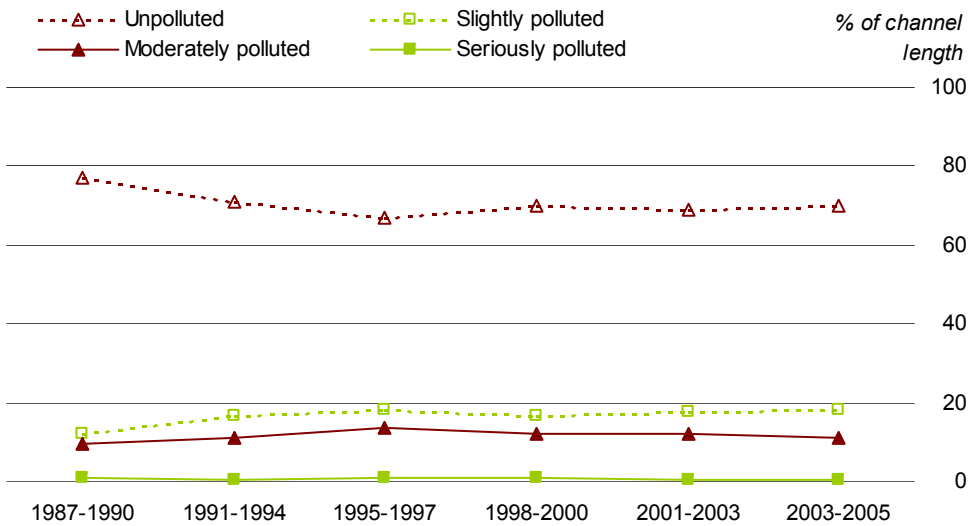
<sup>81</sup> Energy intensity of the economy is the gross inland consumption of energy divided by GDP (at constant prices, 1995=100) - kgoe (kilogram of oil equivalent) per 1000 Euro.

### 10.5 Ireland: River water quality, 1987–2005

Quality	% of channel length				Total
	Unpolluted	Slightly polluted	Moderately polluted	Seriously polluted	
1987-1990	77.3	12.0	9.7	0.9	100
1991-1994	71.2	16.8	11.4	0.6	100
1995-1997	67.0	18.2	13.8	0.9	100
1998-2000	69.8	17.0	12.4	0.8	100
2001-2003	69.2	17.9	12.3	0.6	100
2003-2005	70.2	18.1	11.1	0.6	100

Source: Environmental Protection Agency

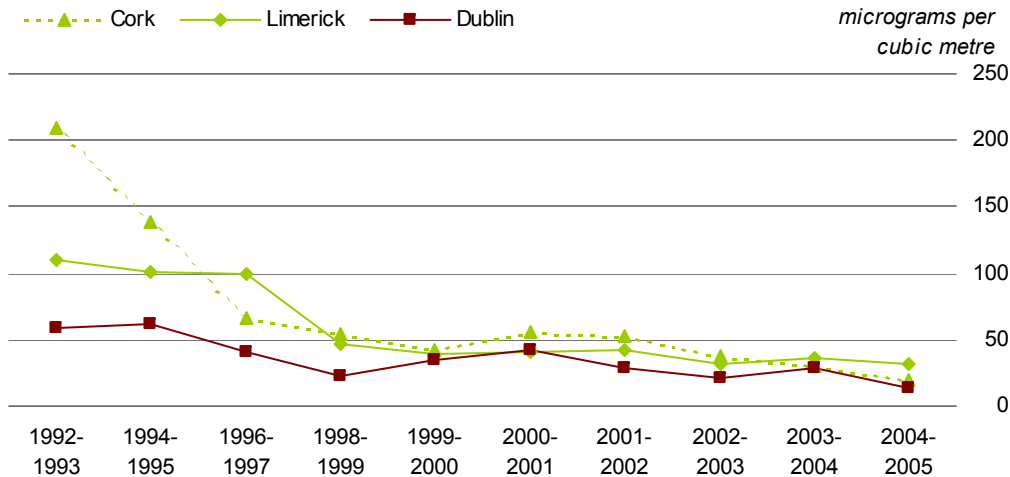
- ◆ The percentage of unpolluted river water in Ireland decreased from 77.3% in the period 1987-1990 to 67.0% in 1995-1997 after which there was an improvement to 70.2% by 2003-2005 (see Table 10.5).
- ◆ The percentage of seriously polluted water has remained below 1% throughout the entire 1987-2005 period (see Table 10.5).



### 10.6 Ireland: Smoke concentrations<sup>82</sup> in urban areas, 1992–2005

Year	$\mu\text{g per m}^3$		
	Dublin	Cork	Limerick
1992-1993	58	209	110
1994-1995	62	138	101
1996-1997	41	66	99
1998-1999	23	54	47
1999-2000	35	42	39
2000-2001	42	56	41
2001-2002	29	53	42
2002-2003	21	37	32
2003-2004	29	30	36
2004-2005	13	19	31

Source: Environmental Protection Agency



- ◆ Smoke pollution levels in Dublin decreased dramatically from 269  $\mu\text{g per m}^3$  in 1989-1990 to 58  $\mu\text{g per m}^3$  in 1992-1993, following the introduction of legal restrictions on the sale of non-smokeless coals in 1990. Similar improvements occurred when the ban was extended to Cork in 1995 and Limerick in 1998. In 2004-2005, the smoke concentrations in Dublin were 13  $\mu\text{g per m}^3$ , Cork 19  $\mu\text{g per m}^3$  and Limerick 31  $\mu\text{g per m}^3$  (see Table 10.6).

<sup>82</sup>98 percentile of daily mean.

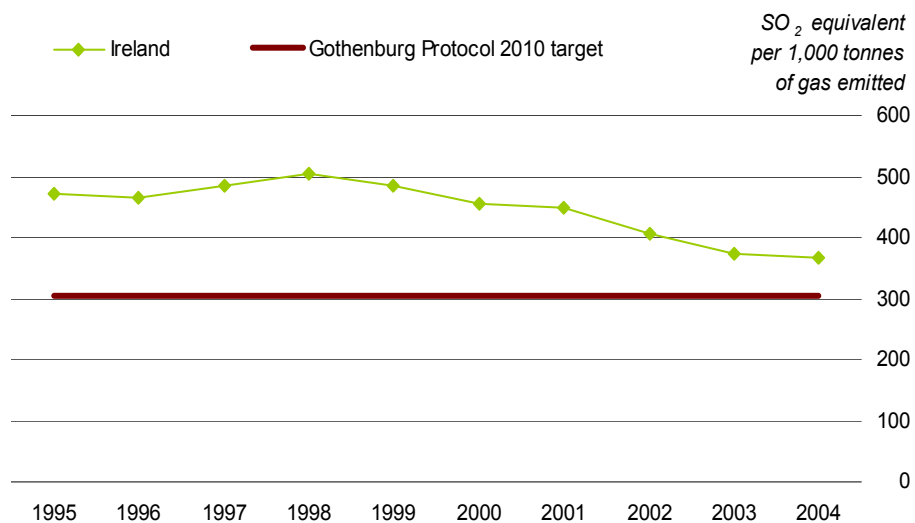
- ◆ European legislation has set limit values of not exceeding 50  $\mu\text{g per m}^3$  on more than 35 days per annum from 2005.

## 10.7 Ireland: Acid rain precursor emissions, 1995–2004

*SO<sub>2</sub> equivalent per 1,000 tonnes of gas emitted*

Year	Sulphur dioxide (SO <sub>2</sub> )	Nitrogen oxides (NO <sub>x</sub> )	Ammonia (NH <sub>3</sub> )	Total
1995	161.3	85.1	225.3	<b>471.6</b>
1996	147.5	88.2	229.5	<b>465.2</b>
1997	166.3	86.9	232.3	<b>485.4</b>
1998	176.1	89.5	238.2	<b>503.8</b>
1999	157.5	87.9	239.0	<b>484.4</b>
2000	130.9	92.3	230.5	<b>453.7</b>
2001	126.9	93.9	230.8	<b>451.5</b>
2002	96.4	87.2	224.0	<b>407.6</b>
2003	76.7	83.4	214.3	<b>374.4</b>
2004	70.9	82.8	215.1	<b>368.8</b>

Source: Environmental Protection Agency, CSO



Source: Environmental Protection Agency, CSO

- ◆ The level of acid rain precursor emissions in Ireland decreased in each of the last three years, down to a level of 368.8 in 2004. The decrease is mainly due to lower levels of sulphur dioxide emissions (see Table and Graph 10.7).
- ◆ The Gothenburg Protocol 2010 target emissions level is 306. In 1998, Ireland's emissions were 64% above this target, but by 2004 the levels had reduced to 20% above the target at 368.8 (see Graph 10.7).

### 10.8 Ireland: Total waste collected and percentage landfilled by type, 2003–2005

Material	000 tonnes			% of category collected		
	Waste collected			Waste landfilled		
	2003	2004	2005	2003	2004	2005
Paper	925.2	821.9	891.3	61.2	54.3	50.5
Glass	170.8	123.4	150.2	57.2	44.3	35.6
Plastic	252.9	295.9	300.1	81.0	81.1	80.4
Ferrous, aluminium & other metals	73.9	107.4	123.3	82.7	53.1	46.2
Textiles	57.0	157.5	158.0	93.9	93.3	92.9
Organic waste	701.2	891.9	929.2	75.0	76.4	73.3
Others	378.3	305.5	236.4	85.5	63.0	82.1
<b>Total</b>	<b>2,559.4</b>	<b>2,737.6</b>	<b>2,788.4</b>	<b>71.6</b>	<b>67.3</b>	<b>65.4</b>

Source: Environmental Protection Agency

- ◆ There was a 9% increase in Ireland's total waste collected between 2003 and 2005. In the same period, the proportion of total waste landfilled decreased by 6.2 percentage points from 71.6% in 2003 to 65.4% in 2005 (see Table 10.8).
- ◆ The proportion of municipal waste landfilled in Ireland in 2005 was 60%, which was above the EU 27 average of 45%. The Netherlands had the lowest proportion of landfilled waste at 1.4% in 2005 (see Table 10.9).

### 10.9 EU: Municipal waste collected and landfilled, 2005<sup>83</sup>

Country	Generated	kg per person	
		Landfilled	% of municipal waste
			% Landfilled
Netherlands	624	9	1.4
Sweden	482	23	4.8
Denmark	737	38	5.2
Belgium	464	43	9.3
Germany	601	89	14.8
Austria	630	113	17.9
Luxembourg	705	127	18.0
France	543	196	36.1
<b>EU 27</b>	<b>518</b>	<b>233</b>	<b>45.0</b>
Spain	597	317	53.1
Italy	542	296	54.6
<b>Ireland</b>	<b>740</b>	<b>444</b>	<b>60.0</b>
Finland	468	282	60.3
Portugal	446	278	62.3
Estonia	436	274	62.8
United Kingdom	584	375	64.2
Czech Republic	289	209	72.3
Slovenia	423	330	78.0
Latvia	310	243	78.4
Hungary	459	362	78.9
Slovakia	289	228	78.9
Romania	382	310	81.2
Greece	438	380	86.8
Bulgaria	463	405	87.5
Cyprus	739	653	88.4
Malta	611	543	88.9
Lithuania	378	340	89.9
Poland	245	226	92.2
Switzerland	666	4	0.6
Norway	759	233	30.7
Iceland	521	368	70.6
Turkey	413	339	82.1
Croatia	504	486	96.4

Source: Eurostat

<sup>83</sup> Estimated values for 2005 for Belgium, Germany, Austria, Luxembourg, Spain, Italy, Estonia, UK, Romania, Turkey and Croatia.

### 10.10 Ireland: Private cars under current licence, 1996–2005

000s		
Year	Private cars under current licence	Private cars per 1,000 population aged 15 and over
1996	1,057.4	382.2
1997	1,134.4	402.5
1998	1,196.9	417.4
1999	1,269.2	436.0
2000	1,319.3	445.5
2001	1,384.7	458.6
2002	1,447.9	468.6
2003	1,507.1	479.2
2004	1,582.8	494.5
2005	1,662.2	507.2

Source: Department of the Environment, Heritage and Local Government

- ◆ The number of private cars per 1,000 population aged 15 and over in Ireland has risen from 382 in 1996 to 507 in 2005 (see Table 10.10).
- ◆ In 2005, the number of cars per 1,000 population aged 15 and over varied from 810 in Luxembourg to 339 in Hungary (see Table 10.11).

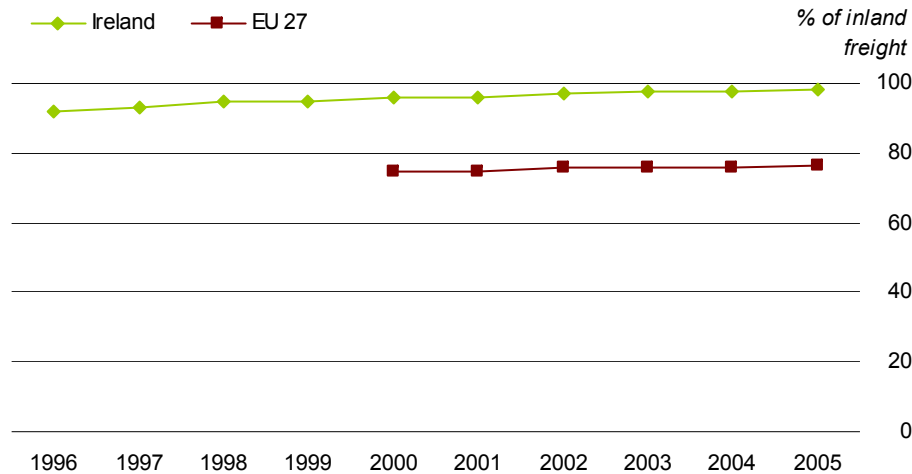
### 10.11 EU: Passenger cars per 1,000 population aged 15 and over, 2003–2005

cars per 1,000 population aged 15 and over			
Country	2003	2004	2005
Luxembourg	789.3	799.8	810.5
Sweden	667.2	671.6	674.4
Malta	646.6	646.5	641.1
Germany	636.9	639.8	642.9
France	610.4	604.9	599.7
Austria	599.5	603.3	:
Cyprus	534.4	574.4	:
Belgium	563.6	566.9	568.6
<b>EU 25<sup>84</sup></b>	<b>:</b>	<b>553.2</b>	<b>:</b>
Slovenia	538.8	549.2	:
Finland	531.5	545.8	562.3
Spain	524.7	539.9	:
Netherlands	524.1	528.0	:
<b>Ireland</b>	<b>479.2</b>	<b>494.5</b>	<b>507.2</b>
Lithuania	444.2	463.8	:
Czech Republic	430.3	440.7	:
Denmark	433.5	437.4	:
Greece	408.6	431.5	:
Estonia	383.6	415.0	433.4
Poland	357.9	378.8	:
Latvia	330.9	349.2	377.4
Hungary	326.4	332.3	339.1
Slovakia	307.9	269.9	:
Italy	697.7	:	:
United Kingdom	556.1	:	:

Source: Eurostat

<sup>84</sup> Estimated figure, subject to revision.

### 10.12 Ireland and EU: Share of road in total inland freight transport<sup>85</sup>, 1996–2005



Source: Eurostat

- ◆ Road transport accounted for 91.7% of total inland freight transport in Ireland in 1996. This share has gradually increased to reach 98.3% in 2005, compared to an EU 27 average of 76.5% (see Graph 10.12 and Table 10.13).
- ◆ Ireland's use of road in inland freight transport in 2005 was among the highest in the EU with only Cyprus and Malta having higher proportions of freight transported by road (see Table 10.13).

<sup>85</sup> Road, rail and inland waterways, measured in tonne-km. EU 27 figures are Eurostat estimates. Break in EU series in 2004.

### 10.13 EU: Share of road in total inland freight transport, 2003–2005<sup>86</sup>

Country	% of inland freight		
	2003	2004	2005
Latvia	27.5	28.4	29.8
Estonia	29.1	32.7	35.4
Lithuania	50.0	51.3	56.1
Sweden	64.5	63.9	64.0
Austria	67.4	65.6 <sup>87</sup>	64.4
Netherlands	64.6	65.0	65.8
Germany	67.8	66.1	66.0
Romania	62.4	63.7 <sup>87</sup>	67.3
Poland	63.0	66.1 <sup>87</sup>	69.0
Hungary	65.6	65.9	69.2
Slovakia	62.1	65.4	70.3
Bulgaria	61.7	66.9	70.8
Belgium	76.5	74.9	72.4
Czech Republic	74.5	75.2	74.5
<b>EU 27</b>	<b>75.8</b>	<b>76.0</b>	<b>76.5</b>
Finland	75.3	76.0	76.5
Slovenia	68.2	74.1	77.3
France	78.8	79.9	80.5
United Kingdom	89.8	88.1	88.1
Italy	89.5	89.9 <sup>87</sup>	90.3
Denmark	92.0	90.9	92.2
Luxembourg	92.0	90.9	92.5
Portugal	93.0	94.7 <sup>87</sup>	94.7
Spain	94.3	94.9 <sup>87</sup>	95.2
Greece	97.7 <sup>87</sup>	:	97.4
<b>Ireland</b>	<b>97.5</b>	<b>97.7</b>	<b>98.3</b>
Cyprus	100.0	100.0	100.0
Malta	100.0	100.0	100.0
Croatia	76.1 <sup>87</sup>	76.7	76.0
Norway	86.3	86.0	85.3
Macedonia, TFYR	91.7	90.4	88.8
Turkey	94.6	94.4	94.4
Iceland	100.0	100.0	100.0

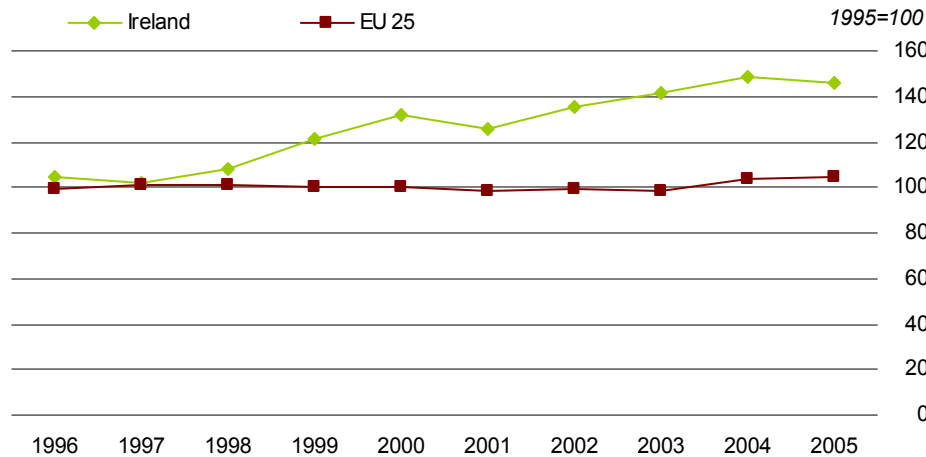
Source: Eurostat

<sup>86</sup> EU 27, UK, Slovakia, Italy and Turkey figures are estimates.

<sup>87</sup> Break in series.



### 10.14 Ireland and EU: Index of inland freight transport volume<sup>88</sup>, 1996–2005



Source: Eurostat

- ◆ The volume increase of freight tonne-kilometres, relative to the volume change in GDP, was 146.0 in Ireland over the 1995-2005 period. By contrast the EU 25 figure remained quite static at 1995 levels over the period. This indicates that GDP growth in Ireland was accompanied by a much greater increase in freight activity on Irish roads (see Graph 10.14 and Table 10.15).

### 10.15 EU: Index of inland freight transport volume<sup>88</sup>, 2003–2005<sup>89</sup>

Country	1995=100		
	2003	2004	2005
Bulgaria	35.0	38.5	41.4
Slovakia	48.3	48.1	51.5
United Kingdom	84.7	84.1	82.3
Czech Republic	98.7	92.8	83.4
Belgium	95.0	89.3	83.7
Denmark	87.6	87.4	84.4
Finland	90.5	90.5	86.1
France	92.9	93.3	88.5
Poland	81.9	88.7 <sup>90</sup>	89.6
Sweden	90.6	88.9	90.2
Cyprus	99.5	76.5	91.7
Luxembourg	113.0	109.5	95.2
Hungary	82.9	89.1	99.3
Netherlands	93.7	102.7	101.3
<b>EU 25</b>	<b>98.9</b>	<b>104.0<sup>90</sup></b>	<b>104.6</b>
Germany	103.2	109.2	110.6
Slovenia	87.2	98.3	111.0
Italy	93.7	104.5 <sup>90</sup>	111.9
Austria	118.3	117.5 <sup>90</sup>	112.2
Greece	108.0 <sup>90</sup>	:	120.8
Lithuania	116.9	113.7	125.4
Latvia	133.1	128.6	126.4
Romania	95.6	104.3 <sup>90</sup>	131.2
<b>Ireland</b>	<b>141.6</b>	<b>148.4</b>	<b>146.0</b>
Spain	135.3	149.2 <sup>90</sup>	151.7
Estonia	150.8	159.5	152.5
Portugal	114.2	164.9 <sup>90</sup>	172.6
Turkey	103.6	98.3	89.9
Iceland	108.4	109.3	112.7
Norway	123.9	127.0	130.9

Source: Eurostat

<sup>88</sup> Measured in tonne-km / GDP (in constant 1995 Euro), 1995=100. EU 25 figures are Eurostat estimates. Break in series in 2004.

<sup>89</sup> EU 25, Italy, UK and Turkey figures are Eurostat estimates.

<sup>90</sup> Break in series.



# Appendices

---

# Appendix 1 Definitions

## 1 Economy

### Gross Domestic Product (1.1 to 1.3)

Gross Domestic Product (GDP) is the central aggregate of National Accounts. GDP represents the total value added (output) in the production of goods and services in the country. GDP at market prices is the final result of the production activity of resident producer units. GDP is compiled both in constant prices and in current prices. Constant price data indicate the development of volumes, while current price data reflect volume and price movements.

GDP expressed at market prices equals gross value added at factor cost plus national taxes on production less national subsidies on production.

GDP less net primary incomes from abroad less EU taxes plus EU subsidies is equal to Gross National Income (GNI).

Gross National Product (GNP) is the sum of GDP and Net Factor Income (NFI). NFI from the rest of the world is the difference between investment income (interest, profits etc.,) and labour income earned abroad by Irish resident persons and companies (inflows) and similar incomes earned in Ireland by non-residents (outflows). Because NFI is the difference between two large gross flows, its magnitude can fluctuate greatly from one quarter to another. This can lead to significant differences between the GDP and GNP growth rate for the same quarter.

Gross National Income (GNI) is conceptually equal to Gross National Product (GNP) plus EU subsidies less EU taxes.

Purchasing Power Parities (PPPs) are a weighted average of relative price ratios in respect to a homogeneous basket of goods and services, both comparable and representative for each country. They show the ratio of the prices in national currency of the same goods or services in different countries. The application of PPPs eliminates the effects of differences in price levels between countries thus allowing volume comparisons of GDP components and comparisons of price levels.

Purchasing Power Standards (PPS) are an artificial common reference currency used in the EU to eliminate differences in purchasing power, or price levels, between countries. They are fixed in a way that makes the average purchasing power of one euro in the European Union equal to one PPS. Hence one PPS buys the same average volume of goods and services in all countries. Economic volume aggregates in PPS are obtained by dividing their original value in national currency units by the respective PPPs.

The population of a country consists of all persons, national or foreign, who are permanently settled in the economic territory of the country on a particular date, even if they are temporarily absent from it (see also Population domain definitions). GDP per capita is calculated by dividing GDP by the population.

GDP per capita in PPS allows the comparison of levels of economic activity of different sized economies (per capita) irrespective of their price levels (in PPS). It is less suited for comparisons over time.

The euro (€) is the national currency of 13 EU Member States (from January 1<sup>st</sup> 2007). These are Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Portugal, The Netherlands, Spain and Slovenia.

### Government debt (1.4 and 1.5)

General government consolidated gross debt at nominal value is the standardised measure of indebtedness of EU governments. The general government sector comprises the sub-sectors of central government, local government, and social security funds. The debt of commercial State companies/public corporations is excluded. It takes account of all liabilities included in the traditional national definition of National Debt, without any offsetting of liquid assets, together with the liabilities of non-commercial State agencies and local authorities.

Debt is valued at nominal (face) value, and foreign currency debt is converted into national currency using end-year market exchange rates.

GDP at current market prices is used as the denominator for calculating the General Government Consolidated Debt as a percentage of GDP ratio.

GNI at current market prices, is used as the denominator for calculating the General Government Consolidated Debt as a percentage of GNI ratio.

### **Public balance (1.6 to 1.8)**

Public balance (or General Government balance) measures the difference between incomes and outlays of the General Government. It refers to the concept of general government net borrowing (negative balance) or net lending (positive balance) in the European System of Accounts.

Central and Local Government current expenditure is composed of subsidies, national debt interest, transfer payments, and expenditure on goods and services. It is one of the elements of the public balance.

### **Gross fixed capital formation (1.9 and 1.10)**

Gross fixed capital formation (GFCF) is an indicator of investment in assets such as building and construction, and machinery and equipment. Such investment is generally regarded as leading to higher productivity and an improved living infrastructure. GFCF is a component of GDP.

GDP valued at current market prices is used as a denominator.

### **International transactions (1.11 and 1.12)**

The Balance of Payments accounts consist of three tables or accounts: the Current account; the Capital account; and the Financial account.

The current account consists of trade in merchandise and services, income inflows and outflows, and current transfers. In the current account, credit items are exports of merchandise and services, income inflows, and current transfer receivables. Debit items are imports, income outflows, and transfer payables.

The current account balance is the total of all current account credits less the total of all current account debits.

Direct investment flows is a category of international investment that reflects a lasting interest by a resident in one economy in an enterprise resident in another economy. The extent of equity ownership should be at least 10%. Flows reflect the transactions that occurred during a particular year rather than the cumulative stock or aggregate position.

Direct investment inward covers the investment by foreign companies in Ireland. From the point of view of the country being invested in, this can be regarded as a liability. A negative figure indicates that disinvestments exceeded any investments during the period. Hence a minus figure indicates a reduction in liabilities of the country being invested in.

Direct investment outward covers the investment abroad by parent companies resident in Ireland. From the point of view of the country making the investment, this can be regarded as an asset. A negative figure indicates that investments abroad exceeded any disinvestments, or disposals, during the period. Hence a minus figure indicates an increase in assets for the country making the investment.

GDP valued at current market prices is used as a denominator.

### **International trade (1.13 and 1.14)**

Goods and services incorporates both merchandise exports and imports and services exports and imports.

Merchandise trade refers to Ireland's external trade in goods with other countries. The data sources for these estimates are a combination of Customs-based non-EU trade statistics and the Revenue Commissioners Intrastat survey of Irish traders engaged in trade with other EU Member States.

Services exports and imports include transport, tourism and travel, communications, insurance and financial services, computer services, royalties and licences, and some business and other services.

The valuation of goods and services is based on Balance of Payments principles. In the official external trade statistics, exports and imports are valued cost, insurance and freight. In Balance of Payments, they are valued free on board.

### **Exchange rates (1.15 and 1.16)**

Trade weighted competitiveness indicators<sup>91</sup> (TWCIs) measure how changes in the value of the Irish currency and changes in the prices of imports and exports combine to improve or worsen the competitiveness of Irish exports and imports. An increase in the index signifies an erosion of Ireland's trade competitiveness.

TWCIs are essentially measures of change in nominal and real exchange rates. These changes are examined through changes in exchange rates, and changes in domestic prices and costs relative to those in our trading partners. The weighting system, on which an exchange rate index is based, is a double weighting scheme that seeks to assign an export weight to the currency of each trading partner according to that trading partner's share of both its own market and the markets of all other trading partners. This is because exporters compete in foreign markets not only with domestic producers of import substitutes but also with exporters from other countries. Overall trade weights combine the double export weight with a bilateral import weight in proportion to the relative size of Irish exports and imports.

The European Central Bank (ECB) calculates the effective exchange rates for the euro based on a narrow group of 12 trading partners and a broad group of 38 countries. The Irish Central Bank added the 11 euro countries to the narrow group of 12 countries used by the ECB, and calculated weights for each of these 23 countries. Using late 1990s trade data for weighting, ten countries accounted for 83% of total Irish manufacturing trade (UK, USA, Germany, France, Japan, Netherlands, Italy, Belgium, Singapore and Spain). For practical reasons, such as improved timeliness, the TWCIs for Ireland were calculated using these ten countries.

Gains and losses in trade competitiveness depend on the balance between changes in our consumer and producer prices relative to our competitors, and to changes in the value of the euro relative to the dollar, sterling and the yen.

Bilateral exchange rates shown are annual period averages, shown in units per euro. The reference rates are based on the European Central Bank's regular daily concertation procedure between central banks within and outside the European System of Central Banks.

### **Interest rates (1.17 to 1.18)**

Convergence of interest rates is defined as the coefficient of variation of national retail interest rates across the Eurozone 12 members and the EU Member States. The indicator measures the trend towards integration of financial markets. A decline in the variation coefficient of interest rates over time shows an increasing degree of financial market integration.

Monetary Financial Institution (MFI) interest rate statistics are compiled by national Central Banks within the euro area, according to the European Central Bank Regulation (EC) No 63/2002. The scope of euro area MFI interest rate statistics is all interest rates that MFIs resident in the euro area apply to euro-denominated deposits and loans vis-à-vis non-financial sectors (other than government) resident in the euro area, i.e. vis-à-vis households and non-financial corporations of any size. In practice, mainly credit institutions need to report MFI interest rate statistics.

The statistics are compiled for the euro area as a whole and individually for each Member State in order to give information about the level and development of interest rates both at euro area and at national level.

---

<sup>91</sup> See article by John Kelly and Brian Golden in the Winter 2001 Central Bank quarterly bulletin "Trade Weighted Competitiveness Indicators for Ireland".

MFI interest rate statistics are collected at monthly frequency. The interest rates shown in the tables in this publication refer to end December of each year.

### **Harmonised Index of Consumer Prices (1.19 and 1.20)**

The EU Harmonised Index of Consumer Prices (HICP) is calculated in each Member State. HICPs are designed to allow the comparisons of consumer price trends in the different EU countries. The index measures the change in the average level of prices (inclusive of all indirect taxes) paid for consumer goods and services by all private households in a country and by all foreign visitors to that country.

HICPs were designed specifically for EMU convergence. They are calculated according to a harmonised approach and a regulated set of definitions. They were not intended to replace existing national Consumer Price Indices, which are calculated based on national definitions.

### **Price levels (1.21 and 1.22)**

Comparative price levels are the ratio between PPPs and the market exchange rate for each country. The ratio is shown in relation to the EU average (EU 25=100). If the index of the comparative price levels shown for a country is higher (lower) than 100, the country concerned is relatively expensive (cheap) as compared with the EU average.

See indicator 2.7 for the definition of Private households.

### **Regional accounts (1.23)**

Gross Value Added (GVA) at basic prices is a measure of the value of the goods and services produced in a region (less the materials and services used which come from outside the region) priced at the value which the producers received minus any taxes payable and plus any subsidies receivable as a consequence of their production or sale.

Basic prices: GVA at basic prices excludes product taxes and includes product subsidies.

### **Regional Disposable Income (1.24)**

Total income is defined as: primary income plus social benefits plus other current transfers.

Current taxes is defined as income taxes, other current taxes.

Disposable income is defined as total income minus current taxes on income minus social insurance contributions (employers', employees', self employed, etc.).

## 2 Innovation and technology

### Science and technology graduates (2.1 and 2.2)

Science and technology comprises Life sciences; Physical sciences; Mathematics and statistics; Computing; Engineering and engineering trades; Manufacturing and processing; and Architecture and building. For data prior to 1998, the corresponding fields are: Natural sciences; Mathematics and computer science; Engineering; Architecture and town planning; and Trade, craft and industrial programmes.

These indicators include tertiary graduates from public and private institutions. Tertiary education refers to International Standard Classification of Education (ISCED 97) levels 5 and 6. See Section 5 for detailed information on ISCED 97 classifications.

Data on science and technology graduates are collected through the joint UNESCO-OECD-EUROSTAT data collection questionnaires on graduates.

### Research and development expenditure (2.3 and 2.4)

Research and experimental development (R&D) comprises creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society and the use of this stock of knowledge to devise new applications.

Gross domestic expenditure on R&D is composed of: Business enterprise expenditure in R&D; Higher Education expenditure in R&D; Government expenditure in R&D; and Private Non-profit expenditure in R&D. R&D basic data are provided to Eurostat directly by the Member States of the European Union.

### Patent applications (2.5 and 2.6)

Patents covered refer to applications filed directly under the European Patent Convention or to applications filed under the Patent Co-operation Treaty and designating the European Patent Office (EPO). Patent applications are counted according to the year in which they were filed at the EPO. The regional distribution of patent applications is assigned according to the inventor's place of residence. If one application has more than one inventor, the application is divided equally among all of them and subsequently among their regions, thus avoiding double counting.

Data are expressed per million of the population.

### Household internet access (2.7 and 2.8)

Household internet access data were collected in an Information and Communications Technology survey that was asked of a sub-sample of the main CSO Quarterly National Household Survey (QNHS) sample. One member of each household in the survey was asked "Does any member of this household have access to the internet at home?". Persons answered Yes to this question if they accessed the internet at home via a PC, TV set, mobile phone, games console and other devices.

A private household is defined as a person or group of persons with common housekeeping arrangements, separately occupying all or part of a private house, flat, apartment or other private habitation of any kind. The persons who make up a private household jointly occupy living accommodation, share main meals in general, and have common provision for basic living needs.

Each of the following is regarded as one private household:

- ◆ All persons living in the same private dwelling and having their meals together;
- ◆ A person living alone or with domestic employees;
- ◆ A lodger living in a room or rooms in a house or flat, and not sharing in any housekeeping arrangements with the other residents;
- ◆ A resident caretaker of a house, office, etc. whether living alone or with family/others; and
- ◆ Persons living in the same private dwelling and sharing much of the expenses - such as rent, food, electricity, gas, etc.



### 3 Employment and unemployment

The International Labour Office (ILO) classification distinguishes the following main subgroups of the population aged 15 or over:

Persons in employment are all persons:

- ♦ who worked in the week before the survey for one hour or more for payment or profit, including work on the family farm or business; and
- ♦ all persons who had a job but were not at work because of illness, holidays, etc. in the week.

Persons classified as unemployed are persons who, in the week before the survey:

- ♦ were without work;
- ♦ were available for work within the next two weeks; and
- ♦ had taken specific steps, in the preceding four weeks, to find work.

The labour force comprises persons in employment plus persons unemployed.

The inactive population is all other persons in the population who are not part of the labour force.

#### Employment rate (3.1 and 3.2)

The employment rate is calculated by dividing the number of employed persons aged 15-64 by the number of persons in the population aged 15-64. The Labour Force Survey (or the QNHS for Ireland) covers persons aged 15 years and over, living in private households.

Persons living in collective households (halls of residence, medical care establishments, religious institutions, collective workers' accommodation, hostels, etc.) and persons carrying out obligatory military service are not included.

#### Labour productivity (3.3 and 3.4)

GDP in PPS per person employed is intended to give an overall impression of the productivity of national economies. This measure depends on the structure of total employment and therefore could be lowered by a shift from full-time to part-time work. See section 1 for details of PPS.

GDP in PPS per hour worked is intended to give a clearer picture of productivity. Total hours worked represents the aggregate number of hours actually worked as an employee or self-employed during the accounting period. Total hours worked is the preferred measure of labour inputs for the system of national accounts. It is more difficult to measure than total employment. See notes on section 1 for details of PPS.

#### Unemployment rate (3.5 to 3.8)

The unemployment rate is the number of people unemployed as a percentage of the labour force.

The long-term unemployment rate is calculated as the number of persons unemployed for one year or more expressed as a percentage of the total labour force.

#### Jobless households (3.9 and 3.10)

The proportion of the population aged 18-59 living in jobless households is calculated by dividing the number of persons aged 18-59 living in households where no one is working by the total population aged 18-59. Both the numerator and the denominator excludes persons living in households where everyone is aged 18-24 and either in education or inactive.

The definitions apply to persons living in private households. The unemployment figures prior to 2001 are not strictly comparable with 2001 and later years. Before 1998, education was related only to education and vocational training which was relevant for the current or possible future job of the respondent.

### **Older workers (3.11 and 3.12)**

Effective average exit age from the labour force gives the average age of withdrawal from labour market. It is based on a probability model considering the relative changes of activity rates from one year to another at a specific age. The starting points are the activity rates per age and year coming from the EU quarterly Labour Force Survey.

The activity rate (also known as the participation rate) represents the labour force as a percentage of the total population for a given age. Both the numerators and the denominators come from the LFS. The definitions apply to persons living in private households.

The small sample sizes in higher ages in some countries makes it necessary to artificially smooth the decline of activity rates linearly from age 65 to age 70 so that in the age 71 the active population in terms of the model is zero. In such cases, the moving average activity rates over the ages 64 to 66 is used instead of the actual activity rate for age 65.

The starting year for this indicator is 2001 when most EU countries carried out quarterly LFS surveys. The activity rates taken into consideration were the average over four quarterly observed rates in the year considered. Quarter 1 or 2 data were used in cases where LFS data for all quarters were not available.

The EU 25 average exit age is computed on the basis of the EU activity rates (EU labour force as a percentage of the EU population of a given age).

## 4 Social cohesion

### Social protection expenditure (4.1 to 4.4)

Social protection expenditure data are drawn up according to the ESSPROS (European System of integrated Social Protection Statistics) methodology. The data include the expenditure broken down in social benefits, administration cost and other expenditure. In addition, social benefits are classified by functions of social protection. Data are available for all EU Member States except Cyprus. Annual data for the European Union are derived from all countries, for which the respective data are available, usually by adding up the aggregates for all Member States after expressing them in a common currency (ECU/Euro). National Statistical Institutes and/or Ministries of Social Affairs are responsible for data collection in national currency. Most of the data are administrative data. See notes on section 1 for details on PPPs and notes on Tables 5.3 and 6.2 for definitions of the education and health expenditure data shown in Table 4.2.

### Risk of poverty (4.5 to 4.8)

The at risk of poverty rate indicator is defined as the share of persons with an equivalised disposable income below the at risk of poverty threshold, which is set at 60% of the national median equivalised disposable income (after social transfers). This share is calculated for: the original income before pensions and social transfers; the original income including pensions; and the original income after pensions and social transfers (total income). This indicator focuses on the relative risk of poverty in relation to the rest of the population in a country rather than the absolute risk of poverty. Hence a person classified as in poverty in one country would not necessarily be classified as in poverty in another country if they were at the same absolute income level.

The data in Table 4.5 is obtained from the EU Survey on Income and Living Conditions (EU SILC). EU SILC is carried out under EU legislation and commenced in Ireland in June 2003. The primary focus of the survey is the collection of information on the income and living conditions of different types of households. The survey also provides information on poverty, deprivation and social exclusion. The first set of results for Ireland from the survey based on data collected in the period June to December 2003 was published in January 2005. EU SILC replaced the European Community Household Panel (ECHP) survey which was discontinued after the 2001 survey.

While the income definitions used in the ECHP and EU SILC are similar, there are some operational differences. The income reference period in the ECHP was a standard 12-month calendar period whereas in EU SILC a floating 12-month reference period is used (i.e. for each respondent the income reference period is the 12 months preceding the date of interview).

In Ireland, the interviewing period for the EU SILC in 2003 ran from June through to December and therefore any seasonal issues such as the timing of bonus/commission payments (and hence recall issues) may not be fully accounted for in the EU SILC 2003 data. However EU SILC is a continuous survey and EU SILC 2004 and 2005 data are based on a 12-month interviewing period. The at risk of poverty rates are broadly comparable in both surveys.

For Table 4.5, the EU definition of income is used. The key differences between the national and EU definitions of income are:

- ◆ The EU definition of gross income does not include income from private pensions. These are defined as private schemes fully organised by the individual, where contributions are at the discretion of the contributor independently of their employer or the State. Thus, private pensions do not include occupational or State pensions.
- ◆ All contributions to pension plans, except for those to private pension plans, are deducted from gross income when calculating disposable income under the EU definition. No pension contributions of any kind are deducted from gross income in the calculation of disposable income for national purposes from the national definition of income.

For EU at risk of poverty rates, the equivalised disposable income for each person is calculated as the household total net income divided by the equivalised household size according to the modified OECD scale (which gives a weight of 1.0 to the first adult, 0.5 to other persons aged 14 or over who are living in the household and 0.3 to each child aged less than 14).

In Tables 4.6 to 4.8 the national equivalence scale and definition of income are used to calculate at risk of poverty rates. The national equivalence scale used to obtain the equivalised household size attributes a weight of 1 to the first adult in a household, 0.66 to each subsequent adult (aged 14+ living in the household) and 0.33 to each child aged less than 14. The purpose of an equivalence scale is to account for the size and composition of different income units (households) and thus allows for a more accurate comparison between households. However, numerous scales have been developed, and there is no real consensus as regards the most appropriate scale to use. For EU purposes, the modified OECD scale has been accepted to allow comparison across countries. At a national level, the alternative national scale has been used in the past in the calculation of relative poverty and consistent poverty rates, and thus is used for retrospective comparison nationally.

For all tables the population consists of all the persons living in private households in a country. The term person therefore includes all the members of the households, whether they are adults or children.

In the EU SILC income details and household composition are collected for all households. Where income is missing, it is imputed based on industry and occupation

### **Consistent poverty**

The consistent poverty measure considers those persons who are defined as being at risk of poverty (using the national income definition and equivalence scale) and assesses the extent to which this group may be excluded and marginalised from participating in activities which are considered the norm for other people in society. The identification of the marginalised or deprived is achieved on the basis of a set of eight basic deprivation indicators:

- ◆ No substantial meal for at least one day in the past two weeks due to lack of money;
- ◆ Without heating at some stage in the past year due to lack of money;
- ◆ Experienced debt problems arising from ordinary living expenses;
- ◆ Unable to afford two pairs of strong shoes;
- ◆ Unable to afford a roast once a week;
- ◆ Unable to afford a meal with meat, chicken or fish (or vegetarian equivalent) every second day;
- ◆ Unable to afford new (not second-hand) clothes; and
- ◆ Unable to afford a warm waterproof coat.

An individual is defined as being in consistent poverty if they are:

- ◆ Identified as being at risk of poverty; and
- ◆ Living in a household deprived of one or more of the eight basic deprivation items listed above

Note that it is enforced deprivation that is relevant in this context. For example, a household may not have a roast once a week. The household is classified as deprived of this basic indicator only if the reason they didn't have it was because they could not afford it.

### **Gender pay gap (4.9 and 4.10)**

The gender pay gap in unadjusted form is given as the average gross hourly earnings of female paid employees as a percentage of average gross hourly earnings of male paid employees. The gender pay gap is based on several data sources, including the European Community Household Panel (ECHP), the EU Survey on Income and Living Conditions (EU SILC) and national sources. The target population consists of all paid employees aged 16-64 who are 'at work 15+ hours per week'.

Administrative data are used for Luxembourg and the labour force survey is used for France (up to 2002) and Malta. All other sources are national surveys except as follows:

- ◆ 2004 & 2005: Statistics on Income and Living Conditions (EU-SILC) – Belgium, Greece, Spain, Ireland, Italy, Austria, Portugal and United Kingdom. The results of this new EU survey are provisional and subject to further quality revisions.
- ◆ 2003: Statistics on Income and Living Conditions - Greece, Ireland and Austria.

- ◆ 2002: European Community Household Panel (ECHP) – Greece.
- ◆ 2001 and before: European Community Household Panel (ECHP) - Belgium, Germany, Italy, Denmark, Ireland, United Kingdom, Greece, Spain, Portugal, Austria and Finland.

### **Voter turnout (4.11 and 4.12)**

Persons entitled to vote refers to the total number of persons in a given country who are registered to vote.

Voting is compulsory by law in Belgium, Cyprus, France (Senate only), Greece, Italy, Luxembourg, the Netherlands and parts of Austria and Switzerland. There is weak or no enforcement of this law in Austria, Italy, Greece and the Netherlands. For further information on compulsory voting and related issues see <http://www.idea.int/>.

### **Official development assistance (4.13 and 4.14)**

Official development assistance, or foreign aid, consists of loans, grants, technical assistance and other forms of co-operation extended by governments to developing countries. A significant proportion of official development assistance is aimed at promoting sustainable development in poorer countries, particularly through natural resource conservation, environmental protection and population programmes.

The United Nations Millennium Development goals set a target for net ODA as 0.7% of donor countries Gross National Income to be reached by 2007.

## 5 Education

### Education expenditure (5.1 to 5.3)

Non-capital public expenditure on education includes direct public expenditure on educational institutions, public subsidies to other private entities for education matters and public subsidies to households such as scholarships and loans to students for tuition fees and student living costs.

The expenditure has been deflated to real prices by using the National Accounts series for net expenditure by central and local government on current goods and services at base year 2004. For comparison purposes, the all items CPI index rescaled to base December 2001 is also shown in the table below:

Price index bases:                      2004=100    Dec 2001=100

Year	Government current expenditure	All items CPI index
1995	61.8	82.6
1996	63.0	84.0
1997	66.7	85.2
1998	69.3	87.2
1999	73.4	88.7
2000	77.7	93.6
2001	83.2	98.2
2002	88.9	102.7
2003	92.2	106.3
2004	100.0	108.6
2005	105.5	111.3

Public expenditure on education as used for the international comparison includes both current and capital expenditure.

In the mid-1990s, undergraduate tuition fees were abolished in Ireland. In 1995/96, third level students paid half-fees and from 1996/97 undergraduate fees were abolished.

Educational institutions are defined as entities that provide instructional services to individuals or education-related services to individuals and other educational institutions.

International data are collected through the joint UNESCO-OECD-EUROSTAT data collection questionnaires on educational finance. Countries provide data coming usually from administrative sources on the basis of commonly agreed definitions.

Data on total public expenditure on education are expressed as a percentage of GDP. National public expenditure as a percentage of the GDP is calculated using figures in national currency both for public expenditure and for GDP. European averages are weighted and therefore take into account the relative proportion of the student population or the education expenditure of the considered countries. They are calculated taking into account all relevant countries for which data are available. They are considered of sufficient quality if countries with available data exceed 70% of the population or of the GDP of the European aggregate. See section 1 notes for details of PPS.

### Pupil-teacher ratio (5.4 and 5.5)

Pupil-teacher ratio is calculated by dividing the number of full-time equivalent pupils at a given level of education by the number of full-time equivalent teachers teaching at that level. Data are collected through the joint UNESCO-OECD-EUROSTAT data collection questionnaires on educational personnel. The following qualifications regarding the data in Table 5.4 should be borne in mind:

Belgium	Data exclude the German Community and all independent private institutions. Teachers in social advancement education (ISCED 3) in the French Community are not included. ISCED 4 included in ISCED 3.
Denmark	ISCED 2 is included in ISCED 1.
Finland	ISCED 3 includes ISCED 4 and 5 vocational and technical programmes.
Iceland	ISCED 4 is partly included in ISCED 3. ISCED 2 is included in ISCED 1.

Ireland	ISCED 2 includes ISCED 3 and 4.
Lithuania	ISCED 3 includes vocational programmes only, general programmes are included in ISCED 2. The methodology to calculate full-time equivalent teachers improved in 2002, therefore data is not comparable with previous years.
Luxembourg	Public sector only. ISCED 2 includes ISCED 3.
Netherlands	ISCED 1 includes ISCED 0. ISCED 3 includes ISCED 2. The methodology for statistics on personnel in secondary education changed in 2002. The decrease in the pupil/teacher ratio is mainly a result of the changed methodology.
Norway	ISCED 2 includes ISCED 1. ISCED 3 includes ISCED 4.
Spain	ISCED 3 includes ISCED 4.
United Kingdom	ISCED 3 includes ISCED 4.

Average class size is calculated by dividing the number of pupils at a given level of education by the number of classes at that level. Data refer only to regular pupils/classes so special needs programmes are excluded. Data are collected through the joint UNESCO-OECD-EUROSTAT data collection questionnaires on class size.

EU 25 aggregates are not currently available for these indicators due to difficulties in comparing data between countries as illustrated by the country specific notes.

The International Standard Classification of Education (ISCED 97) is the basis for international education statistics. It incorporates 6 levels of education:

ISCED 0 Pre-primary level of education: Initial stage of organised instruction, designed primarily to introduce very young children to a school-type environment. This level of education should be centre or school based, be designed to meet the educational and developmental needs of children at least 3 years of age and have staff that are adequately trained and qualified to provide an educational programme for these children.

ISCED 1 Primary level of education: Programmes normally designed to give students a sound basic education in reading, writing and mathematics. This level represents the beginning to systematic studies characteristic of primary education, e.g. reading, writing and mathematics. It is marked by entry into the nationally designated primary institutions or programmes. The commencement of reading activities alone is not a sufficient criterion for classification of an educational programme to ISCED 1.

ISCED 2 Lower secondary level of education: The lower secondary level of education generally continues the basic programmes of the primary level, although teaching is typically more subject-focused. Programmes at the start of level 2 should correspond to the point where programmes begin to be organised in a more subject-oriented pattern, using more specialised teachers conducting classes in their field of specialisation.

ISCED 3 Upper secondary level of education: The final stage of secondary education in most countries. Instruction is often more organised along subject-matter lines than at ISCED level 2 and teachers need to have a higher level, or more subject-specific, qualification than at ISCED 2. Admission into ISCED 3 usually requires the completion of ISCED 2 or a combination of basic education and life experience that demonstrates the ability to engage with ISCED 3 subject matter. There are substantial differences in the typical duration of ISCED 3 programmes both across and between countries, typically ranging from 2 to 5 years of schooling.

ISCED 4 Post secondary non-tertiary education: These programmes straddle the boundary between upper secondary and post-secondary education from an international point of view, even though they may be considered as upper secondary or post-secondary in a national context. They are often not significantly more advanced than programmes at level 3 but they serve to broaden the knowledge of participants who have already completed a level 3 programme. The students tend to be older than those in ISCED 3 programmes and have usually completed ISCED 3. The duration of these programmes will generally be between 6 months and two years (full-time equivalent duration).

ISCED 5 First stage of tertiary education: ISCED 5 programmes have an educational content more advanced than those offered at levels 3 and 4. Entry to these programmes normally requires the successful completion of ISCED level 3 or a similar qualification at ISCED level 4.

ISCED 5A: These programmes are largely theoretically based and are intended to provide sufficient qualifications for gaining entry into advanced research programmes and professions with high skills requirements. The minimum cumulative theoretical duration of these programmes is three years (full-time equivalent). The faculty must have advanced research credentials. Completion of a research project or thesis may be required.



ISCED 5B: These programmes are generally more practical/technical and occupational specific than ISCED 5A programmes. They do not prepare students for direct access to advanced research programmes. The programme content is typically designed to prepare students to enter a particular occupation.

ISCED 6 Second stage of tertiary education: This level is reserved for tertiary programmes leading to the award of an advanced research qualification. The programmes are developed to advanced study and original research. This level requires the submission of a thesis or dissertation of publishable quality that is the product of original research and represents a significant contribution to knowledge. It is not solely based on course work and it prepares recipients for faculty posts in institutions offering ISCED 5A programmes, as well as research posts in government and industry.

### **Third level education (5.6 and 5.7)**

See notes on ISCED 97 under indicators 5.4 and 5.5.

### **Literacy (5.8 and 5.9)**

The OECD Programme for International Student Assessment (PISA) assesses young people's capacity to use their knowledge and skills in order to meet real-life challenges, rather than merely examining how well the students had mastered their school curriculum. PISA assesses literacy in reading, mathematics and science. The PISA survey was first conducted in 2000 in 32 countries. Two thirds of the assessment in 2000 focussed on reading literacy. The second study, conducted in 2003 in 41 countries focussed primarily on mathematical literacy. In 2006, the primary focus was on science and the study will return to focussing on reading in 2009.

Students aged between 15 years and 3 months and 16 years and 2 months at the beginning of the assessment period and who were enrolled in an educational institution were eligible to be included in the study. No distinction was made on the basis of whether they were attending full-time or part-time.

The PISA scale for each literacy area was devised so that across OECD countries, the average score is 500 points, and around two-thirds of students achieve between 400 and 600 points.

The OECD average is the mean of the data values for all OECD countries for which data are available or can be estimated. The OECD average can be used to see how one country compares on a given indicator with another country. Each country contributes equally to the OECD average. Hence it does not take into account the absolute size of the student population in each country.

The OECD total takes the OECD countries as a single entity, to which each country contributes in proportion to the number of 15 year-olds enrolled in its schools. It illustrates how a country compares with the OECD area as a whole.

### **Early school leavers (5.10 to 5.12)**

Early school leavers are persons aged 18 to 24 in the following two conditions (numerator): the highest level of education or training attained is ISCED 0, 1 or 2; and respondents declared not having received any education or training in the four weeks preceding the survey.

The denominator is the total population of the same age group, excluding non-response answers to the questions 'highest level of education or training attained' and 'participation to education and training'. Both the numerators and the denominators come from the Labour Force Survey (Quarterly National Household Survey (QNHS) in Ireland). A reference period of four weeks has been chosen for the questions on participation in order to avoid distortion of information due to recall problems. The reference period is the last four weeks preceding the survey. The information collected relates to all education or training received whether or not relevant to the respondent's current or possible future job. It includes initial education, further education, continuing or further training, training within the company, apprenticeship, on-the-job training, seminars, distance learning, evening classes, self-learning etc. It includes also courses followed for general interest and may cover all forms of education and training such as language, data processing, management, art/culture, and health/medicine courses. Before 1998, education was related only to education and vocational training which was relevant for the current or possible future job of the respondent. The data for Ireland are not strictly comparable between 2003 and earlier years as modifications to the questionnaire in 2003 increased capture of information on receipt of education in the four weeks prior to the survey.



## 6 Health

### Health care expenditure (6.1 and 6.2)

Public non-capital expenditure on health care in Ireland includes expenditure on items such as services and administration in hospitals, community health and welfare expenditure, and services for the disabled.

The expenditure has been deflated to real prices by using the National Accounts series for net expenditure by central and local government on current goods and services at base year 2004 (see series under Indicator 5.1 definitions). See notes on section 1 for details of PPS.

Total expenditure on health as used for the international comparison includes both public and private capital and non-capital expenditure on health. These figures are compiled by the World Health Organisation. Whenever possible, the OECD definition of total expenditure on health is applied. It includes: household health expenses, including goods and services purchased at the consumer's own initiative and the cost-sharing part of publicly financed or supplied care; government-supplied health services including those in schools, prisons and armed forces and special public health programmes such as vaccination; investment in clinics, laboratories etc.; administration costs; research and development, excluding outlays by pharmaceutical firms; industrial medicine; outlays of voluntary and benevolent institutions. In the case of most central and eastern European countries the following has to be included: direct state budget allocated to the health sector, state subsidies to the mandatory health insurance system; mandatory health insurance contributions by employers and employees; direct health expenditure of employers for running industrial medical facilities; direct health expenditures of ministries and governmental agencies; charity health expenditures; foreign assistance; outstanding debt at the end of the year; private health insurance and direct private health charges. The OECD Health Database is used as the primary data source for those countries that are OECD Member States.

### Life expectancy (6.3 and 6.4)

Life expectancy at birth or at age 65 is the average number of years that a person at that age can be expected to live, assuming that age-specific mortality levels remain constant. See section 1 for details of Purchasing Power Standards.

## 7 Population

### Population distribution (7.1 to 7.3)

The total population of the country may comprise either all of the usual residents of the country (de jure) or all persons present in the country on a particular date (de facto). Published census figures for Ireland are on a de facto basis.

Ireland last conducted a Census of Population in April 2006. This source is used for 2006 data in indicators 7.1 and 7.7. Population estimates for the period 2003-2005 will be revised following the results of this Census. All other data in tables in this publication are based on the revised estimates from the 2002 Census of Population.

### Migration (7.4 to 7.6)

Emigration refers to persons resident in Ireland leaving to live abroad for over one year.

Immigration refers to persons coming to Ireland from another country for the purposes of taking up residence for over one year.

Net migration is the net effect of emigration and immigration on a country's population in a given time period.

The natural increase is calculated by subtracting deaths from births within a population in a given time period. The figures for births include babies born in Ireland to non-residents and immigrants.

Country of origin refers to a person's previous country of residence.

### Age of population (7.7 and 7.8)

The young age dependency ratio is calculated by dividing the number of persons in the population aged between 0 and 14 years by the number of persons aged between 15 and 64 years. The old age dependency ratio is calculated by dividing the number of persons aged 65 and over by the number of persons aged 15-64.

The total age dependency ratio is the sum of persons aged 0-14 and 65 and over divided by the number of persons aged 15-64.

### Fertility (7.9 and 7.10)

The crude birth rate is the number of births actually occurring in a country in a given time period, divided by the population of the area as estimated at the middle of the particular time period. The rate is usually expressed per 1,000 of population.

Total fertility rate refers to the average number of children that would be born alive to a woman during her life if she were to pass through her childbearing years conforming to the age-specific fertility rates for a given year. The rate is calculated by the summation of the age-specific fertility rates. A rate of 2.1 is considered to be replacement level for the population of developed countries.

### Lone parent families (7.11)

A family unit consists of either:

1. A married couple, or
2. A married couple and one or more of their never-married children, or
3. One parent and one or more of his or her never-married children, or
4. A couple living together (with never-married children, if any) who are not married to each other, where it is clear that the couple form a "de facto" family unit.

Households may contain more than one family unit or may contain a family together with other persons not in a family unit.

The number of lone parent family units may be understated as there are problems identifying lone parent families particularly where the lone parent lives with his/her parents. The information recorded in the Labour Force Survey, on the relationship of each person in the household to the reference person of the household, does not clearly identify multiple parent/child relationships. In such cases, the lone parent family may not be identified as a distinct family unit. This is a general problem that arises in multiple family households and the difficulties affect the identification of other family units also.

### **Living alone (7.12)**

See the household internet access indicator in domain 2 for a definition of private households.

## 8 Housing

### Dwelling completions (8.1 to 8.3)

Dwelling unit completions comprise units built for private sale, for Local Authority (LA) use, and voluntary housing completions. The LA figures exclude acquisitions of private units for social housing use. Social housing use comprises LA and voluntary housing.

Local Authority housing has traditionally been the main option for those who could not afford decent housing from their own means. Local Authorities charge rents based on the income of the household. Persons who have been a tenant of a local authority house for at least one year, may apply to the Local Authority to purchase it at a discounted price.

Voluntary housing bodies play an important role in Ireland in providing rental housing throughout the country for people who could not otherwise afford to provide suitable accommodation from their own resources. The voluntary housing bodies are responsible for tenancy allocations in consultation with the Local Authorities. They are non-profit organisations. Voluntary bodies must be approved by the Department of the Environment, Heritage and Local Government in order to qualify for financial and other aid for the provision of housing.

Owner-occupiers refer to persons who either own outright or are purchasing the property of which they are a household member. Typically the owner should possess a title deed to the property. Persons purchasing Local Authority or Voluntary housing are included.

Nature of occupancy data have in the past been collected in each Census of Population conducted at the start of a decade. These data will now be collected at each Census of Population.

Owner-occupied includes accommodation being purchased from a Local Authority or under a Tenant Purchase Scheme as well as owner-occupied premises with and without outstanding mortgages.

Other occupancy refers to rent-free accommodation that is not owned by the occupier.

Cases where this question was not answered (or not stated) in the census are excluded from the calculations.

### Mortgages (8.4 and 8.5)

Mortgages are loans made against the security of a property.

In Table 8.3 mortgage interest rates are calculated from Building Society information in Ireland. Rates from Permanent TSB and First Active plc. are included in the Building Society information. Annuity and endowment mortgages are included.

The interest rates shown in Table 8.4 are part of the MFI interest rate statistics as described in the notes on Table 1.18. Rates are as at end December of each year.

## 9 Crime

### Headline offences (9.1 to 9.3)

The CSO commenced a new quarterly series 'Headline Crime Statistics' from the third quarter of 2006. The first release provided figures for the number of headline offences recorded by An Garda Síochána relating to the period from July to September 2006. A retrospective quarterly series was provided to the year 2003. New crime domain indicators may be introduced in the 2007 report.

Headline/Indictable offences are crimes such as murder, fraud, burglary and sexual offences. Non-indictable offences, such as failing to wear a seat belt or begging, can be tried in lower Courts. Crime figures up to 1999 used an old classification system that divided crimes into categories of indictable/non-indictable. With the introduction of the PULSE information system in the Garda Síochána, a new classification of crimes as headline/non-headline was adopted. Figures for 2000 and subsequent years referred to the new classification of headline crimes. While this category reflects to a large extent what in the past was defined as indictable crime, the terms are not identical and therefore direct comparisons cannot be made between years prior to 2000 and subsequent years.

Garda Divisions are composed of the following areas (with some overlaps between neighbouring counties):

Region	County composition
Eastern	Carlow; Kildare; Laois; Longford; Louth; Meath; Offaly; and Westmeath
Dublin Metropolitan	Dublin
South-Eastern	Kilkenny; Tipperary; Waterford; Wexford; and Wicklow
Southern	Cork; Kerry; and Limerick
Western	Clare; Galway; Mayo; and Roscommon
Northern	Cavan; Donegal; Leitrim; Monaghan; and Sligo

### Murders (9.4)

Murder (along with manslaughter) is the most important offence in the group of headline offences described as Homicide by An Garda Síochána. Murder refers to intentional killing, death deliberately inflicted on a person by another person.

Intentional homicide refers to death deliberately inflicted on a person by another person, including infanticide.

Non-intentional homicide refers to death not deliberately inflicted on a person by another person. This includes the crime of manslaughter, but excludes traffic accidents that result in the death of persons.

## 10 Environment

### Greenhouse gases (10.1 and 10.2)

This indicator shows trends in anthropogenic emissions of the greenhouse gases: carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), methane (CH<sub>4</sub>) and three halocarbons, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF<sub>6</sub>), weighted by their global warming potentials. The figures are given in CO<sub>2</sub> equivalents.

Under the Kyoto Protocol, industrialised countries have a legally binding commitment to reduce their collective greenhouse gas emissions by at least 5% compared to 1990 levels by the period 2008-2012. For EU countries, Member States agreed that some countries be allowed to increase their emissions, within limits, provided these are off-set by reductions in others and the EU Kyoto target of a reduction of 8% compared to 1990 is achieved by 2008/2012. Each country's emissions target must be achieved by that period. It will be calculated as an average over the five years.

Data are expressed as an index reference year (1990 or base year)=100, original data refers to Gigagramme (Gg) = thousands tonnes of CO<sub>2</sub> equivalent.

Global warming potentials can be used to convert the emissions of individual gases into CO<sub>2</sub> equivalents. The global warming potential of each gas takes account of the fact that different gases remain in the atmosphere for differing lengths of time. The conversion factors for the three main greenhouse gases are:

<b>Emitted gas</b>	<b>Global warming potential over 100 years</b>
Carbon dioxide (CO <sub>2</sub> )	1
Methane (CH <sub>4</sub> )	21
Nitrous oxide (N <sub>2</sub> O)	310

The EPA made significant revisions to the data series for Ireland in February 2006.

### Energy intensity of economy (10.3 and 10.4)

The energy intensity ratio is the result of dividing the Gross Inland Consumption by the GDP. Since Gross Inland Consumption is measured in kgoe (kilogram of oil equivalent) and GDP in 1,000 euro, this ratio is measured in kgoe per 1,000 euro. It measures the energy consumption of an economy and its overall energy efficiency.

The Gross Inland Consumption of Energy is calculated as the sum of the Gross Inland Consumption of the five types of energy: coal, electricity, oil, natural gas and renewable energy sources. The GDP figures are taken at constant prices to avoid the impact of inflation using a base year of 1995 for 10.3 and 10.4.

Data are compiled through five annual Joint Questionnaires (one for each type of energy). The methodology is harmonised for all EU and OECD countries.

EU 25 figures are calculated simply by the addition of national data.

### River water quality (10.5)

River water is the principal source of drinking water in Ireland. The Environmental Protection Agency (EPA) conducts an assessment of river water quality every three years on behalf of Local Authorities. Samples are taken from over 3,000 locations around Ireland. These biological surveys began in 1971. River water quality is classified into four quality classes based on a scheme of biotic indices, which codify the characteristic changes induced in flora and fauna of rivers and streams in the presence of pollution. Unpolluted waters include pristine waters and also waters of a less high but acceptable standard. Slightly polluted and moderately polluted waters are mainly characterised by eutrophication and may not be able to support fish survival. Seriously polluted waters are characterised by the presence of high concentrations of biodegradable organic waste. These waters are of very little beneficial use.

## Urban air quality (10.6)

Urban air quality comprises two sub-elements based on concentration levels of ozone and fine particulates in ambient air in urban areas. Ozone is a strong photochemical oxidant, which causes serious health problems and damage to ecosystem, agricultural crops and materials. Human exposure to elevated ozone concentrations can give rise to inflammatory responses and decreases in lung function.

The indicator target and limit values, as set in EC legislation, are as follows:

- ◆ The target value for Ozone for the protection of human health is 120 µg /m<sup>3</sup> (max. daily 8h-mean), not to be exceeded on more than 25 days per calendar year averaged over three years, from 2010; and
- ◆ The limit value for PM<sub>10</sub> is 50 µg /m<sup>3</sup> (24 h average) not to be exceeded on more than 35 days per calendar year, from 2005.

The year to year variability of exceedances is large, particularly for ozone. The occurrence of high ozone peaks is strongly dependent on weather conditions. Comparisons between countries are only justified if coverage with stations is either sufficiently large, or if there is a really representative number of monitoring stations reporting regularly. These conditions are rarely satisfied.

The PM<sub>10</sub> indicator shows percentages of urban population potentially exposed to concentration levels exceeding the limit value for the protection of human health in a calendar year. The limit value for PM<sub>10</sub> is 50 µg/m<sup>3</sup> (24h average) not to be exceeded on 35 or more days per calendar year, from 2005. For each urban station the number of days with a daily averaged concentration in excess of the limit value is calculated from the available hourly or daily values. The selected urban stations include station types "urban" and "street". Only time series with a data capture of at least 75% are used. The number of exceedance days per city, is obtained by averaging the results of all urban stations. The stations classified as "street" are influenced by local (traffic) emissions and might not be representative for the concentrations in more residential areas. Both station types have been included in the analysis to maximise the coverage; this may imply, however, that urban air quality concentrations are overestimated. Urban population data is obtained from the GISCO database.

Legislation in Ireland forbids the sale of bituminous coal in the following urban areas: Dublin (since 1990); Cork (since 1995); Arklow, Drogheda, Dundalk, Limerick and Wexford (all since 1998); Celbridge, Galway, Leixlip, Naas and Waterford (all since 2000); and Bray, Kilkenny, Sligo and Tralee (all since 2003).

## Acid rain precursors (10.7)

Acid rain occurs when acidic gases and particles are transported in the air before falling as wet or dry deposition. High concentrations can be harmful to health, to water and soil quality, to buildings, and can reduce plant growth.

Burning of coal with a high sulphur content is a significant source of sulphur dioxide (SO<sub>2</sub>).

Oxides of nitrogen (NO<sub>x</sub>) arise when fossil fuels are burnt under certain conditions. There are three major forms of fossil fuels: coal, oil and natural gas.

Ammonia (NH<sub>3</sub>) emissions arise primarily from animal manure and nitrogen based fertilisers.

Acid rain precursor emissions are expressed in sulphur dioxide equivalents using the following conversion factors:

<i>SO<sub>2</sub> equivalents per tonne of gas emitted</i>	
<b>Emitted gas</b>	<b>Acid rain precursors</b>
Sulphur dioxide (SO <sub>2</sub> )	1.0000
Oxides of nitrogen (NO <sub>x</sub> )	0.6957
Ammonia (NH <sub>3</sub> )	1.8824

## **Waste management (10.8 and 10.9)**

Municipal waste refers to the waste collected by local municipal authorities. This is a part of the overall amount of waste generated. This indicator presents the amount of waste collected by or on behalf of municipal authorities. The bulk of this waste stream is from households though 'similar' wastes from sources such as commerce, offices and public institutions are also included.

Municipal waste includes among other things the following types of materials: paper, paperboard and paper products, plastics, glass, metals, food and garden waste and textiles. Present statistical data collection provides, when available, separate figures for household waste and similar waste according to the 6 categories mentioned above.

Landfill is defined as deposit of waste into or onto land, including specially engineered landfill, and temporary storage of over one year on permanent sites. The definition covers both landfill in internal sites (i.e. where a generator of waste is carrying out its own waste disposal at the place of generation) and in external sites.

The quantity collected is expressed in tonnes per year. Indicator data is measured in kg per person per year using population figures on January 1<sup>st</sup> of each year.

## **Transport (10.10 to 10.15)**

Private cars are used for personal purposes and not for carrying persons or goods for a fee. Taxis, small company vans and exempt vehicles are not taxed as private cars.

Passenger cars are road vehicles intended for the carriage of passengers and designed to seat no more than nine persons including the driver.

Inland freight transport includes transport by road, rail and inland waterway. Road transport is based on all movements of vehicles registered in the reporting country on national territory. Rail and inland waterways transport are based on movements on national territory, regardless of the nationality of the vehicle or vessel.

The index of inland freight transport volume indicator is the ratio between tonne-kilometres and GDP indexed on 1995.

One tonne-kilometre represents the movement of one-tonne over a distance of one kilometre.

GDP is measured in euro at constant 1995 prices.



## Appendix 2 Data sources

Domain and sub-domain	Indicator	Data source	
<b>Economy</b>			
<b>Gross Domestic Product</b>	1.1	Ireland: GDP and GNI, 1996-2005	CSO, National Accounts CSO, Annual Population estimates
	1.2	EU: GDP and GNI at current market prices, 2005	Eurostat data explorer <sup>92</sup> : Economy and Finance\National accounts\Annual national accounts\Income, saving and net lending/net borrowing – Current prices
	1.3	EU: GDP per capita in Purchasing Power Standards, 2003-2005	Eurostat data explorer: Key indicators on EU policy\Structural indicators\General economic background
<b>Government debt</b>	1.4	Ireland, EU and Eurozone: General government consolidated gross debt, 1996-2005	Eurostat data explorer: Economy and Finance\Government statistics\Government deficit and debt
	1.5	EU: General government consolidated gross debt, 2003-2005	Eurostat data explorer: Economy and Finance\Government statistics\Government deficit and debt
<b>Public balance</b>	1.6	Ireland and Eurozone: Public balance, 1996-2005	Eurostat data explorer: Economy and Finance\Government statistics\Government deficit and debt
	1.7	EU: Public balance, 2003-2005	Eurostat data explorer: Economy and Finance\Government statistics\Government deficit and debt
	1.8	Ireland: Central and Local Government current expenditure, 1996-2005	CSO, National Accounts
<b>Gross fixed capital formation</b>	1.9	Ireland and EU: Gross fixed capital formation, 1996-2005	Eurostat data explorer: Economy and Finance\National accounts\Annual national accounts\GDP and main aggregates\GDP and main components - current prices
	1.10	EU: Gross fixed capital formation, 2003-2005	Eurostat data explorer: Economy and Finance\National accounts\Annual national accounts\GDP and main aggregates\GDP and main components - current prices
<b>International transactions</b>	1.11	EU: Current account balance, 2003-2005	Eurostat data explorer: Economy and Finance\Balance of payments – International transactions\Balance of payments statistics\Balance of payments by country Economy and Finance\National accounts\Annual national accounts\GDP and main aggregates\GDP and main components - current prices
	1.12	EU: Direct investment flows, 2004-2005	Eurostat data explorer: Economy and Finance\Balance of payments – International transactions\Balance of payments statistics\Balance of payments by country Economy and Finance\National accounts\Annual national accounts\GDP and main aggregates\GDP and main components - current prices
<b>International trade</b>	1.13	EU: Exports of goods and services, 2003-2005	Eurostat data explorer: Economy and Finance\Balance of payments – International transactions\Balance of payments statistics\Balance of payments by country Economy and Finance\National accounts\Annual national accounts\GDP and main aggregates\GDP and main components - current prices

<sup>92</sup> [http://europa.eu.int/comm/eurostat/newcronos/reference/display.do?screen=welcomeref&open=/&product=EU\\_MAIN\\_TREE&depth=1&language=en](http://europa.eu.int/comm/eurostat/newcronos/reference/display.do?screen=welcomeref&open=/&product=EU_MAIN_TREE&depth=1&language=en)

Domain and sub-domain	Indicator	Data source	
<b>Exchange rates</b>	1.14	EU: Imports of goods and services, 2003-2005	Eurostat data explorer: Economy and Finance\Balance of payments – International transactions\Balance of payments statistics\Balance of payments by country
	1.15	International: Bilateral euro exchange rates, 1999-2006	Economy and Finance\National accounts\Annual national accounts\GDP and main aggregates\GDP and main components - current prices
	1.16	Ireland: Trade weighted competitiveness indicator, 1999-2006	European Central Bank, Monthly Bulletin, Table 8.2 Bilateral exchange rates
<b>Interest rates</b>	1.17	Eurozone: Convergence of interest rates for loans to non-financial corporations up to one year, 1997-2006	CSO, National Accounts Central Bank, Financial Services Authority of Ireland
	1.18	Eurozone: Interest rates for short-term loans (new business) to non-financial corporations, 2005-2006	Eurostat data explorer: Key indicators on European policy\Structural indicators\Economic reform
<b>Harmonised Index of Consumer Prices</b>	1.19	Ireland and EU: Harmonised Index of Consumer Prices, 1997-2006	Central Bank, Financial Services Authority of Ireland European Central Bank
	1.20	EU: Harmonised Index of Consumer Prices, 2004-2006	Eurostat data explorer: Economy and Finance\Prices\Harmonised indices of consumer prices\Harmonised indices of consumer prices – Annual data
<b>Price levels</b>	1.21	Ireland and EU: Comparative price levels of final consumption by private households including indirect taxes, 1996-2005	Eurostat data explorer: Key indicators on European policy\Structural indicators\Economic reform
	1.22	EU: Comparative price levels of final consumption by private households including indirect taxes, 2003-2005	Eurostat data explorer: Key indicators on European policy\Structural indicators\Economic reform
<b>Regional income</b>	1.23	Ireland: Gross Value Added per capita by region, 2002-2004	Eurostat data explorer: Key indicators on EU policy\Structural indicators\General economic background
	1.24	Ireland: Disposable income per capita by region, 2002-2004	CSO, National Accounts CSO, National Accounts
<b>Innovation and technology</b>			
<b>Science and technology graduates</b>	2.1	Ireland: Science and technology graduates, per 1,000 population aged 20-29, 1995-2004	Eurostat data explorer Population and social conditions\Education and training\Education\Education indicators non-finance\Tertiary education graduates
	2.2	EU: Mathematics, science and technology PhDs awarded per 1,000 population aged 25-34, 2002-2004	CSO, Annual population estimates Eurostat data explorer Population and social conditions\Education and training\Education\Education indicators non-finance\Tertiary education graduates
<b>Research and development expenditure</b>	2.3	Ireland and EU: Gross domestic expenditure on R&D, 1996-2005	Eurostat data explorer: Key indicators on European policy\Structural indicators\Innovation and research
	2.4	EU: Gross domestic expenditure on R&D, 1995-2005	Eurostat data explorer: Key indicators on European policy\Structural indicators\Innovation and research
<b>Patent applications</b>	2.5	Ireland and EU: European Patent Office applications, 1994-2003	Eurostat data explorer: Key indicators on European policy\Structural indicators\Innovation and research

Domain and sub-domain	Indicator	Data source
<b>Household internet access</b>	2.6	EU: European Patent Office applications, 2003 Eurostat data explorer: Key indicators on European policy\Structural indicators\Innovation and research
	2.7	Ireland: Private households with internet access, 1998-2006 CSO, Information society and telecommunications
	2.8	EU: Private households with internet access, 2004-2006 Eurostat data explorer: Science and technology\Information society statistics\Policy indicators\Citizens access to and use of the Internet
<b>Employment and unemployment</b>		
<b>Employment rate</b>	3.1	Ireland: Employment rates, 1997-2006 CSO, QNHS
	3.2	EU: Employment rates by sex, 2005 Eurostat data explorer: Key indicators on EU policy\Structural indicators\Employment
<b>Labour productivity</b>	3.3	Ireland: GDP in PPS per hour worked and per person employed, 1996-2005 CSO, QNHS
	3.4	EU: GDP in PPS per person employed, 2005 Eurostat data explorer: Key indicators on EU policy\Structural indicators\General economic background
<b>Unemployment rate</b>	3.5	Ireland and EU: Unemployment rates, 1997-2006 Eurostat data explorer: Key indicators on EU policy\Structural indicators\Employment
	3.6	EU: Unemployment rates by sex, 2006 Eurostat data explorer: Key indicators on EU policy\Structural indicators\Employment
	3.7	Ireland and EU: Long-term unemployment rates, 1997-2006 Eurostat data explorer: Key indicators on EU policy\Structural indicators\Social cohesion
	3.8	EU: Long-term unemployment rates by sex, 2005 Eurostat data explorer: Key indicators on EU policy\Structural indicators\Social cohesion
<b>Jobless households</b>	3.9	Ireland: Population aged 18-59 living in jobless households, 1997-2006 Eurostat data explorer: Key indicators on EU policy\Structural indicators\Social cohesion
	3.10	EU: Population aged 18-59 living in jobless households, 2004-2006 Eurostat data explorer: Key indicators on EU policy\Structural indicators\Social cohesion
<b>Older workers</b>	3.11	EU: Employment rate of workers aged 55-64 by sex, 2005 Eurostat data explorer: Key indicators on EU policy\Structural indicators\Employment
	3.12	EU: Average exit age from the labour force by sex, 2005 Eurostat data explorer: Key indicators on EU policy\Structural indicators\Employment
<b>Social cohesion</b>		
<b>Social protection expenditure</b>	4.1	Ireland and EU: Social protection expenditure, 1995-2004 Eurostat data explorer: Population and social conditions\Living conditions and welfare\Social protection\Social protection expenditure\Expenditure-main results

Domain and sub-domain	Indicator	Data source	
	4.2	EU: Expenditure on social protection, education and health, 2003	Eurostat data explorer: Population and social conditions\Living conditions and welfare\Social protection\Social protection expenditure\Expenditure-main results Population and social conditions\Education and training\Education\Indicators on education finance World Health Organisation, Health for All Database <a href="http://data.euro.who.int/hfadb/">http://data.euro.who.int/hfadb/</a>
	4.3	EU: Social protection expenditure in Purchasing Power Parities per capita, 2004	Eurostat data explorer: Population and social conditions\Living conditions and welfare\Social protection\Social protection expenditure\Expenditure-main results
	4.4	EU: Social protection expenditure by type, 2004	Eurostat data explorer: Population and social conditions\Living conditions and welfare\Social protection\Social protection expenditure\Expenditure-main results
<b>Risk of poverty</b>	4.5	EU: At risk of poverty rates, 2005	Eurostat data explorer: Population and social conditions\Living conditions and welfare\Income and living conditions\Monetary (income) poverty\Low income
	4.6	Ireland: At risk of poverty rates by age and sex, 2004-2005	CSO, EU Survey on Income and Living Conditions
	4.7	Ireland: Persons in consistent poverty by age and sex, 2004-2005	CSO, EU Survey on Income and Living Conditions
	4.8	Ireland: Persons in consistent poverty by principal economic status, 2005	CSO, EU Survey on Income and Living Conditions
<b>Gender pay gap</b>	4.9	Ireland and EU: Gender pay gap, 1996-2005	Eurostat data explorer: Key indicators on EU policy\Structural indicators\Employment
	4.10	EU: Gender pay gap, 2003-2005	Eurostat data explorer: Key indicators on EU policy\Structural indicators\Employment
<b>Voter turnout</b>	4.11	Ireland: Numbers voting in Dáil elections, 1973-2002	Department of the Environment, Heritage and Local Government, Franchise Section
	4.12	EU: Votes recorded at national parliamentary elections, 1981-2006	International Institute for Democracy and Electoral Assistance, Statistics on voter turnout, <a href="http://www.idea.int/vt/index.cfm">http://www.idea.int/vt/index.cfm</a>
<b>Official development assistance</b>	4.13	Ireland: Net official development assistance, 1996-2005	Department of Foreign Affairs, Development Co-operation Ireland Annual report, Annex 1, Ireland's Official Development Assistance
	4.14	EU: Net official development assistance, 2003-2005	OECD, Development Co-operation Report, 2006, Statistical Annex, Table 4
<b>Education</b>			
<b>Education expenditure</b>	5.1	Ireland: Real non-capital public expenditure on education, 1996-2005	Department of Education and Science, Key Education Statistics
	5.2	Ireland: Student numbers by level, 1996-2006	Department of Education and Science, Key Education Statistics
	5.3	EU: Public expenditure on education, 2001-2003	Eurostat data explorer: Population and social conditions\Education and training\Education\Indicators on education finance
<b>Pupil-teacher ratio</b>	5.4	EU: Ratio of students to teachers, 2003/2004	Eurostat data explorer: Population and social conditions\Education and training\Education\Education indicators non-finance\Pupil/Student – teacher ratio and average class size

Domain and sub-domain	Indicator	Data source	
<b>Third level education</b>	5.5	EU: Average class size at ISCED levels 1 and 2, 2003/2004	Eurostat data explorer: Population and social conditions\Education and training\Education\Education indicators non-finance\Pupil/Student – teacher ratio and average class size
	5.6	Ireland: Persons aged 25-34 with 3rd level education, 1999-2006	CSO, QNHS CSO, Annual population estimates
	5.7	EU: Persons aged 25-34 with 3rd level education by sex, 2006	Eurostat data explorer Population and social conditions\Labour market\Employment and unemployment\Socio-demographic labour force statistics\Population and households
<b>Literacy</b>	5.8	Ireland: Student performance on the combined reading, mathematical and scientific literacy scales by sex, 2003	OECD, Learning for Tomorrow's World – First Results from PISA 2003, Tables 2.5, 6.3, 6.7
	5.9	EU: Student performance on the combined reading, mathematical and scientific literacy scales, 2003	OECD, Learning for Tomorrow's World – First Results from PISA 2003, Tables 2.5, 6.2, 6.6
<b>Early school leavers</b>	5.10	Ireland: Early school leavers by labour force status and sex, 2006	CSO, QNHS
	5.11	Ireland: Proportion of the population aged 20-64 with at least upper secondary education, 2006	CSO, QNHS
	5.12	EU: Early school leavers, 2006	Eurostat data explorer: Key indicators on EU policy\Structural indicators\Social cohesion
<b>Health</b>			
<b>Health care expenditure</b>	6.1	Ireland: Non-capital public expenditure on health care, 1995-2004	Department of Health and Children, Health Statistics, Table L6 CSO, Annual population estimates CSO, National accounts
	6.2	EU: Total expenditure on health as percentage of GDP, 2002-2004	World Health Organisation, Health for All Database <a href="http://data.euro.who.int/hfad/">http://data.euro.who.int/hfad/</a>
<b>Life expectancy</b>	6.3	Ireland: Life expectancy at birth and at age 65 by sex, 1925-2003	CSO, Vital Statistics, Irish Life Tables No 14, 2001-2003
	6.4	EU: Life expectancy at birth by sex, 2005	Eurostat data explorer: Population and social conditions\ Population\Demography\National data\Mortality
<b>Population</b>			
<b>Population distribution</b>	7.1	Ireland: Population distribution by age group, 1997-2006	CSO, Annual population estimates
	7.2	Ireland: Household composition, 1997-2006	CSO, QNHS
	7.3	EU: Population change, 1996-2006	Eurostat data explorer: Population and social conditions\ Population\Demography\National data\Population
<b>Migration</b>	7.4	Ireland: Migration and natural increase, 1997-2006	CSO, Annual migration estimates
	7.5	Ireland: Immigration by country of origin, 1997-2006	CSO, Annual migration estimates
	7.6	Ireland and EU: Rate of natural increase of population, 1996-2005	Eurostat data explorer: Population and social conditions\ Population\Demography\National data\Population
<b>Age of population</b>	7.7	Ireland: Age dependency ratio, 1997-2006	CSO, Annual population estim
	7.8	EU: Young and old as proportion of population aged 15-64, 2005	Eurostat data explorer: Population and social conditions\ Population\Demography\National data\Population

Domain and sub-domain	Indicator		Data source
<b>Fertility</b>	7.9	Ireland and EU: Total fertility rate, 1996-2005	CSO, Vital Statistics Eurostat data explorer: Population and social conditions\ Population\Demography\National data\Fertility
	7.10	EU: Total fertility rate, 1995-2005	Eurostat data explorer: Population and social conditions\ Population\Demography\National data\Fertility
<b>Lone parent families</b>	7.11	Ireland: Lone parent families with children aged under 20 by sex of parent, 1997-2006	CSO, QNHS
<b>Living alone</b>	7.12	Ireland: Persons aged 65 and over living alone by sex, 1997-2006	CSO, QNHS
<b>Housing</b>			
<b>Dwelling completions</b>	8.1	Ireland: Dwelling unit completions, 1970-2006	Department of the Environment, Heritage and Local Government, Annual Housing Statistics Bulletin
	8.2	Ireland: Dwelling unit completions, 1997-2006	Department of the Environment, Heritage and Local Government, Annual Housing Statistics Bulletin
<b>Mortgages</b>	8.3	Ireland: Nature of occupancy of private households, 1961-2006	CSO, Census of Population
	8.4	Ireland: New housing loans, 1996-2005	Department of the Environment, Heritage and Local Government, Annual Housing Statistics Bulletin
	8.5	Eurozone: Interest rates for household mortgages (new business), 2004-2006	Central Bank, Financial Services Authority of Ireland European Central Bank
<b>Crime</b>			
<b>Headline offences</b>	9.1	Ireland: Headline offences detection rates by Garda Division, 2003-2006	CSO, Headline crime statistics
	9.2	Ireland: Headline offences recorded by Garda Division, 2006	CSO, Headline crime statistics
	9.3	Ireland: Headline offences recorded per 1,000 population, 2003-2006	CSO, Headline crime statistics
<b>Murders</b>	9.4	Ireland: Murders recorded, 2003-2006	CSO, Headline crime statistics
<b>Environment</b>			
<b>Greenhouse gases</b>	10.1	Ireland: Total net greenhouse gas emissions, 1996-2005	Eurostat data explorer: Key indicators on EU policy\Structural indicators\Environment
	10.2	EU: Net greenhouse gas emissions, 2004, and Kyoto 2008-2012 target	Eurostat data explorer: Key indicators on EU policy\Structural indicators\Environment
<b>Energy intensity of economy</b>	10.3	Ireland: Gross inland consumption of energy divided by GDP, 1995-2005	Eurostat data explorer: Key indicators on EU policy\Structural indicators\Environment
	10.4	EU: Gross inland consumption of energy divided by GDP, 2004	Eurostat data explorer: Key indicators on EU policy\Structural indicators\Environment
<b>River water quality</b>	10.5	Ireland: River water quality, 1987-2005	Environmental Protection Agency
<b>Urban air quality</b>	10.6	Ireland: Smoke concentrations in urban areas, 1992-2005	Environmental Protection Agency
<b>Acid rain precursors</b>	10.7	Ireland: Acid rain precursor emissions, 1995-2004	CSO, Environmental Accounts

Domain and sub-domain	Indicator	Data source
<b>Waste mangement</b>	10.8	Ireland: Total waste collected and percentage landfilled by type, 2003-2005
	10.9	EU: Municipal waste collected and landfilled, 2005
<b>Transport</b>	10.10	Ireland: Private cars under current licence, 1996-2005
	10.11	EU: Passenger cars per 1,000 population aged 15 and over, 2003-2005
	10.12	Ireland and EU: Share of road in total inland freight transport, 1996-2005
	10.13	EU: Share of road in total inland freight transport, 2003-2005
	10.14	Ireland and EU: Index of inland freight transport volume, 1996-2005
	10.15	EU: Index of inland freight transport volume, 2003-2005

Environmental Protection Agency

Eurostat data explorer:  
Key indicators on EU policy\Structural indicators\Environment

Department of the Environment, Heritage and Local Government, Irish Bulletin of Vehicle and Driver Statistics, Table 1.  
CSO, Annual population estimates

Eurostat data explorer:  
Transport\Transport-horizontal view\Regional transport\Stock of vehicles by category at regional level

Eurostat data explorer:  
Key indicators on EU policy\Structural indicators\Environment

Eurostat data explorer:  
Key indicators on EU policy\Structural indicators\Environment

Eurostat data explorer:  
Key indicators on EU policy\Structural indicators\Environment

Eurostat data explorer:  
Key indicators on EU policy\Structural indicators\Environment

Eurostat data explorer:  
Key indicators on EU policy\Structural indicators\Environment