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An Phríomh-Oifig Staidrimh

Measuring Ireland's Progress

2008

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Contents

Preface

The progress indicators used in this report provide a synoptic analysis of the economic, social and environment situation in Ireland. The indicators are generally presented in a national time series and international context to permit benchmarking over time and across countries. Data are given for the other 26 EU Member States and 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 we received to earlier reports, users have found it useful to have a diverse set of important indicators brought together in one report. A similar approach has also been followed in other CSO publications such as *Women and Men in Ireland* and *Ageing in Ireland*. The CSO published a new report in November 2007, *Equality in Ireland*, that provided a broad national analysis of the economic and social situation of people using the nine equality grounds as a framework. A new regional indicators report, *Regional Quality of Life in Ireland*, was published in June 2008 and a new report on young people was published in June 2009, *Children and Young People in Ireland.*

Internationally, there has been an increasing level of interest in national progress indicators. A number of other EU countries have published similar reports (e.g. Spain and Germany) and the OECD published a 2008 Factbook. The OECD are also actively involved in developing an internationally agreed methodology aimed at *Measuring the Progress of Societies*. These reports provide policy-makers and analysts with an opportunity to review and assess Ireland's position over time and in comparison with other countries for a small selection of important statistical indicators.

We would welcome feedback on this report from users as an input into the further development of the 2009 report.

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Gerry O'Hanlon
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[1] 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[2]. 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*[3]. 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. This report is the sixth 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 107 indicators covering 49 domain themes have been selected. Over 56 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 the 2006 report, two indicators describing disposable income and gross value added in the NUTS3 regions were added to the economy section (domain 1) and two indicators on social expenditure in purchasing power parities and expenditure by type were added to the social cohesion section (domain 4). The data source for the crime section (domain 9) was changed to the new CSO release 'Headline Crime Statistics'.

In the 2007 report an indicator on social protection, health and education expenditure (domain 4) was removed. However, these data are still presented in the three relevant domains (domains 4, 5 & 6) and through the addition of the social protection indicators in the last report. The indicator describing the breakdown of housing unit completions (domain 8) was dropped due to the use of a revised CSO time series. The data source for the crime section (domain 9) was changed to the new CSO classification contained in the 'Garda Recorded Crime Statistics' release.

[1] Department of the Taoiseach (2003): *Sustaining Progress, Social Partnership Agreement 2003-2005.*
[2] Recommendation 10.
[3] NSB (2003), *Strategy for Statistics, 2003-2008*, Stationery Office, Dublin.

In this report, indicator 4.8 (a graph of gender pay gap data for a 10 year period) has been removed as this indicator has been calculated by the EU using new methodology and data is now only available for 3 years. Also in this report indicator 10.6, which previously showed smoke concentrations in urban areas, has been revised, in consultation with the EPA, to show particulate matter (PM_{10}) results as this is the parameter governed by EU legislation and includes black smoke particulates. A longer time series for some indicators has also been included in this report.

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 ranking variable 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 1st January 2007) or 25 EU Member States (post 1st 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 Quarterly National Household Survey (QNHS) is referred to as the EU Labour Force Survey (LFS).

The figures in the tables and graphs reflect the data availability position as of July 2009.

Table A Selected key indicators of national progress

Domain and sub-domain	Indicator	
Economy		
Gross Domestic Product	1.1	Ireland: GDP and GNI, 1999-2008
	1.2	EU: GDP and GNI at current market prices, 2008
	1.3	EU: GDP per capita in Purchasing Power Standards, 2004-2008
Government debt	1.4	Ireland, EU and Eurozone: General government consolidated gross debt, 1999-2008
	1.5	EU: General government consolidated gross debt, 2004-2008
Public balance	1.6	Ireland and Eurozone: Public balance, 1999-2008
	1.7	EU: Public balance, 2004-2008
	1.8	Ireland: Central and Local Government current expenditure, 1998-2007
Gross fixed capital formation	1.9	Ireland and EU: Gross fixed capital formation, 1999-2008
	1.10	EU: Gross fixed capital formation, 2004-2008
International transactions	1.11	EU: Current account balance, 2004-2008
	1.12	EU: Direct investment flows, 2007-2008
International trade	1.13	EU: Exports of goods and services, 2004-2008
	1.14	EU: Imports of goods and services, 2004-2008
Exchange rates	1.15	International: Bilateral euro exchange rates, 1999-2008
	1.16	Ireland: Harmonised competitiveness indicator, 1999-2008
Interest rates	1.17	Eurozone: Convergence of interest rates for loans to non-financial corporations up to one year, 1999-2008
	1.18	Eurozone: Interest rates for short-term loans (new business) to non-financial corporations, 2007-2008
Harmonised Index of Consumer Prices	1.19	Ireland and EU: Harmonised Index of Consumer Prices, 1999-2008
	1.20	EU: Harmonised Index of Consumer Prices, 2005-2008
Price levels	1.21	Ireland and EU: Comparative price levels of final consumption by private households including indirect taxes, 1998-2007
	1.22	EU: Comparative price levels of final consumption by private households including indirect taxes, 2003-2007
Regional income	1.23	Ireland: Gross Value Added per capita by region, 2002-2006
	1.24	Ireland: Disposable income per capita by region, 2002-2006
Innovation and technology		
Science and technology graduates	2.1	Ireland: Mathematics, science and technology graduates, 1997-2006
	2.2	EU: Mathematics, science and technology PhDs awarded, 2002-2006
Research and development expenditure	2.3	Ireland and EU: Gross domestic expenditure on R&D, 1998-2007
	2.4	EU: Gross domestic expenditure on R&D, 1997-2007
Patent applications	2.5	Ireland and EU: European Patent Office applications, 1996-2005
	2.6	EU: European Patent Office applications, 2005
Household Internet access	2.7	Ireland: Private households with a computer connected to the Internet, 1998-2008
	2.8	EU: Private households with Internet access, 2004-2008
Employment and unemployment		
Employment rate	3.1	Ireland: Employment rates, 1999-2008
	3.2	EU: Employment rates by sex, 2007
Labour productivity	3.3	Ireland: GDP in PPS per hour worked and per person employed, 1998-2008
	3.4	EU: GDP in PPS per person employed, 2008
Unemployment rate	3.5	Ireland and EU: Unemployment rates, 1999-2008
	3.6	EU: Unemployment rates by sex, 2008
	3.7	Ireland and EU: Long-term unemployment rates, 1999-2008
	3.8	EU: Long-term unemployment rates by sex, 2007
Jobless households	3.9	Ireland: Population aged 18-59 living in jobless households, 1998-2007
	3.10	EU: Population aged 18-59 living in jobless households, 2003-2007
Older workers	3.11	EU: Employment rate of workers aged 55-64 by sex, 2007
	3.12	EU: Average exit age from the labour force by sex, 2007
Social cohesion		
Social protection expenditure	4.1	Ireland and EU: Social protection expenditure, 1997-2006
	4.2	EU: Social protection expenditure in Purchasing Power Parities per capita, 2002-2006
	4.3	EU: Social protection expenditure by type, 2006

Domain and sub-domain	Indicator	
Risk of poverty	4.4	EU: At risk of poverty rates, 2007
	4.5	Ireland: At risk of poverty rates by age and sex, 2006-2007
	4.6	Ireland: Persons in consistent poverty by age and sex, 2006-2007
	4.7	Ireland: Persons in consistent poverty by principal economic status, 2007
Gender pay gap	4.8	EU: Gender pay gap, 2002-2007
Voter turnout	4.9	Ireland: Numbers voting in Dáil elections, 1973-2007
	4.10	EU: Votes recorded at national parliamentary elections, 1983-2008
Official development assistance	4.11	Ireland: Net official development assistance, 1998-2007
	4.12	EU: Net official development assistance, 2003-2007
Education		
Education expenditure	5.1	Ireland: Real non-capital public expenditure on education, 1998-2007
	5.2	Ireland: Student numbers by level, 1998-2008
	5.3	EU: Public expenditure on education, 2004-2006
Pupil-teacher ratio	5.4	EU: Ratio of students to teachers, 2005/2006
	5.5	EU: Average class size at ISCED levels 1 and 2, 2005/2006
Third level education	5.6	Ireland: Persons aged 25-34 with 3rd level education, 2000-2008
	5.7	EU: Persons aged 25-34 with 3rd level education by sex, 2008
Literacy	5.8	Ireland: Student performance on the combined reading, mathematical and scientific literacy scales by sex, 2006
	5.9	EU: Student performance on the combined reading, mathematical and scientific literacy scales, 2006
Early school leavers	5.10	Ireland: Early school leavers by labour force status and sex, 2008
	5.11	Ireland: Proportion of the population aged 20-64 with at least upper secondary education, 2008
	5.12	EU: Early school leavers, 2007
Health		
Health care expenditure	6.1	Ireland: Non-capital public expenditure on health care, 1997-2006
	6.2	EU: Total expenditure on health as percentage of GDP, 2004-2006
Life expectancy	6.3	Ireland: Life expectancy at birth and at age 65 by sex, 1925-2007
	6.4	EU: Life expectancy at birth by sex, 2007
Population		
Population distribution	7.1	Ireland: Population distribution by age group, 1999-2008
	7.2	Ireland: Household composition, 1999-2008
	7.3	EU: Population change, 1998-2008
Migration	7.4	Ireland: Migration and natural increase, 1999-2008
	7.5	Ireland: Immigration by country of origin, 1999-2008
	7.6	Ireland and EU: Rate of natural increase of population, 1998-2007
Age of population	7.7	Ireland: Age dependency ratio, 1999-2008
	7.8	EU: Young and old as proportion of population aged 15-64, 2008
Fertility	7.9	Ireland and EU: Total fertility rate, 1998-2007
	7.10	EU: Total fertility rate, 1997-2007
Lone parent families	7.11	Ireland: Lone parent families with children aged under 20 by sex of parent, 1999-2008
Living alone	7.12	Ireland: Persons aged 65 and over living alone by sex, 1999-2008
Housing		
Dwelling completions	8.1	Ireland: Dwelling unit completions, 1970-2008
	8.2	Ireland: Nature of occupancy of private households, 1961-2006
Mortgages	8.3	Ireland: Housing loans paid, 1998-2007
	8.4	Eurozone: Interest rates for household mortgages (new business), 2004-2008
Crime		
Recorded incidents	9.1	Ireland: Incident detection rates by Garda Division, 2003-2007
	9.2	Ireland: Recorded incidents by Garda Division, 2007
	9.3	Ireland: Recorded incidents per 1,000 population, 2003-2007
Murders	9.4	Ireland: Murders recorded, 2003-2007
Environment		
Greenhouse gases	10.1	Ireland: Total net greenhouse gas emissions, 1998-2007
	10.2	EU: Net greenhouse gas emissions, 2006, and Kyoto 2008-2012 target

Domain and sub-domain	Indicator	
Energy intensity of economy	10.3	Ireland: Gross inland consumption of energy divided by GDP, 1998-2007
	10.4	EU: Gross inland consumption of energy divided by GDP, 2007
River water quality	10.5	Ireland: River water quality, 1987-2006
Urban air quality	10.6	Ireland: Particulate matter in urban areas, 1997-2007
Acid rain precursors	10.7	Ireland: Acid rain precursor emissions, 1998-2006
Waste management	10.8	Ireland: Total waste collected and percentage landfilled by type, 2005-2007
	10.9	EU: Municipal waste collected and landfilled, 2007
Transport	10.10	Ireland: Private cars under current licence, 1998-2007
	10.11	EU: Passenger cars per 1,000 population aged 15 and over, 2003-2007
	10.12	Ireland and EU: Share of road in total inland freight transport, 1998-2007
	10.13	EU: Share of road in total inland freight transport, 2003-2007
	10.14	Ireland and EU: Index of inland freight transport volume, 1998-2007
	10.15	EU: Index of inland freight transport volume, 2003-2007

Chapter 2

Indicators

2.1 Commentary

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

Key findings of the report include:

- GDP in Ireland fell by 4.2% in 2008 compared with 2007 (Table 1.1).
- General government consolidated gross debt increased steeply to 43.2% of GDP in 2008 compared with 25% in 2007 (Table 1.5).
- The public balance, which was in surplus in recent years, was -7.1% of GDP in 2008. This was the largest deficit of any EU member state. (Table 1.7).
- Ireland has become less competitive in the last decade, with the Harmonised competitiveness indicator (deflated by consumer prices) increasing by 25.5% between 1999 and 2008 which indicates a significant deterioration in price competitiveness for Ireland vis-a-vis our main trading partners (Table 1.16). Appreciation of the Euro against other major currencies contributed to this decline (see Table 1.15).
- In 2007, Ireland had the second highest price levels in the EU (see Table 1.22).
- The number of dwelling units built increased steadily to reach a peak of almost 90,000 in 2006 before nearly halving to stand at just under 52,000 in 2008 (Graph 8.1).
- The average value of a new housing loan in Ireland rose from €74,700 in 1998 to €266,400 in 2007. Mortgage interest rates declined over this period from 7.1% to 3.49% in 2005 before rising to 5.25% in 2007 (Table 8.3).
- The number of murders recorded in Ireland increased from 37 in 2003 to 77 in 2007 (see Table 9.4).
- Life expectancy at birth was estimated at 81.6 years for Irish women and 76.8 years for Irish men in the period 2005-2007. In comparison with 2001-2003, men's life expectancy increased by 1.7 years and women's by 1.3 years, reducing the gap between men and women to 4.8 years in 2005-2007, the lowest it has been since the 1970-1972 period (Table 6.3).
- The population in Ireland increased by 18.2% to 4.42 million persons in the period 1999-2008 (Table 7.1). This was the highest rate of increase in the EU 27 (Graph 7.3). The rate of natural increase of the population in Ireland was 9.8 per 1,000 in 2007 compared with an EU 27 average of just 1.0 (Table 7.6).
- In 2008, 42.3% of the population aged 25-34 had completed 3rd level education. This was the second highest rate across the EU and well above the EU 27 average of 30.3% (Table 5.7). Irish students aged 15 years had the second highest levels of reading literacy in 2006 (Table 5.9).
- The pupil-teacher ratio at primary level in Ireland in the school year 2005/2006 was one of the highest in the EU 27 at 19.4. Ten of the reporting EU member states had a pupil-teacher ratio of less than 13 at primary level (Table 5.4).
- In 2008, Ireland had the second highest GDP per capita in the EU 27 at 43.1% above the EU average. However, based on GNI, Ireland was the fourth highest at 21.5% above the EU 27 average (Table 1.3).
- An average of €2,673 (at constant 2005 prices) per person was spent on non-capital public expenditure on health care in Ireland in 2006. This represented an increase of over 72% on the 1997 level (Table 6.1).
- Ireland's net official development assistance increased to 0.54% of GNI in 2007 from 0.37% in 2003. This was below the UN 2007 target of 0.7% of GNI (Table 4.12).
- The employment rate in Ireland rose from 62.5% in 1999 to 68.1% in 2008. The rate for women increased by over 9 percentage points over that period, while the rate for men rose by 2 percentage points (Table 3.1). In 2007, Ireland had the tenth highest employment rate in the EU 27 (see Table 3.2).

- Productivity in Ireland, measured as GDP per person employed, was the second highest in the EU 27 in 2008 (Graph 3.4).

- Ireland had the eighth lowest unemployment rate in the EU in 2008 at less than three-quarters of the EU 27 average of 7.0% (Table 3.6).

- 5.1% of persons in Ireland were in consistent poverty in 2007 (Table 4.6). 17.2% of unemployed persons were in consistent poverty (Graph 4.7).

- Ireland's greenhouse gas emissions were at 124.5% of 1990 levels in 2007. This was 11.5 percentage points higher than the Kyoto 2008-2012 target for Ireland of 113% of 1990 levels (Graph 10.1).

- The percentage of waste landfilled in Ireland decreased from 66% in 2005 to 63.5% in 2007. Glass and metals were the materials most likely to be recycled with 73.7% of glass waste and 62.5% of metal waste recycled in 2007 (Table 10.8).

2.2 Indicators

1.1 Ireland: GDP and GNI, 1999–2008

Year	GDP	GNI	GNI as % of GDP	GNI at constant 2007 prices per capita
	€b	*€b*	*%*	*€000*
1999	90.4	77.8	86.1	28.8
2000	104.8	90.3	86.2	31.1
2001	116.9	98.8	84.5	31.8
2002	130.3	108.1	83.0	32.3
2003	139.8	119.5	85.5	33.5
2004	149.1	127.7	85.6	34.3
2005	162.1	139.0	85.8	35.5
2006	176.8	153.8	87.0	36.8
2007	189.8	162.5	85.6	37.4
2008[4]	181.8	155.9	85.8	35.8

Source: CSO National Accounts

- In 2008 the GNI figure for Ireland was 85.8% of the GDP figure, which was broadly comparable with that observed in previous years (see Table 1.1).
- In 2008 the Irish GNI per capita figure was just over 24% higher than the 1999 figure when measured in constant 2007 prices, in 2007 it had been nearly 30% higher than the 1999 figure (see Table 1.1).
- The relationship between GDP and GNI in Ireland is exceptional among EU countries, with Luxembourg the only other country where the difference between the two measures is more than 10% of GDP (see Table 1.2). The gap reflects the importance of foreign direct investment to the Irish economy.
- Luxembourg had a GNI/GDP ratio of 79 compared with 85.8 for Ireland in 2008. The next four lowest EU countries had ratios in the range 91.5 to 94.2. These were all countries that joined the EU in 2004 (see Table 1.2).

[4] Preliminary data

1.2 EU: GDP and GNI at current market prices, 2008[5]

Country	GDP	GNI	GNI as % of GDP
	€b	*€b*	*%*
Sweden	328.3	335.6	102.2
Denmark	232.5	236.7	101.8
United Kingdom	1,816.1	1,847.7	101.7
Germany	2,491.4	2,531.9	101.6
France	1,950.1	1,963.0	100.7
Belgium	344.2	345.6	100.4
Finland	184.7	184.3	99.8
EU 27	**12,508.3**	**12,445.4**	**99.5**
Netherlands	594.6	589.6	99.2
Bulgaria	34.1	33.6	98.5
Italy	1,572.2	1,548.1	98.5
Austria	281.9	277.4	98.4
Latvia	23.1	22.6	97.9
Slovenia	37.1	36.3	97.8
Slovakia	64.9	63.3	97.5
Spain	1,095.2	1,065.9	97.3
Lithuania	32.3	31.3	96.9
Malta	5.8	5.6	96.7
Greece	242.9	234.2	96.4
Poland	362.1	348.8	96.3
Portugal	166.2	159.6	96.0
Romania	137.0	131.5	96.0
Estonia	15.9	14.9	94.2
Cyprus	16.9	15.7	92.8
Czech Republic	148.6	137.4	92.5
Hungary	105.8	96.9	91.5
Ireland	**181.8**	**155.9**	**85.8**
Luxembourg	36.7	29.0	79.0
Switzerland	341.0	345.8	101.4
Norway	309.9	312.7	100.9
Croatia	47.4	46.0	97.0
Turkey	498.4	372.9	74.8
Iceland	10.2	7.0	68.6
Macedonia, TFYR	6.5	:	:

Source: Eurostat, CSO National Accounts

[5] GDP data is forecast for Macedonia, TFYR and is an estimate for Slovakia. Forecast data for GNI for Hungary, Luxembourg, Lithuania, Poland, Romania and Turkey.

1.3 EU: GDP per capita in Purchasing Power Standards, 2004–2008[6]

EU 27=100

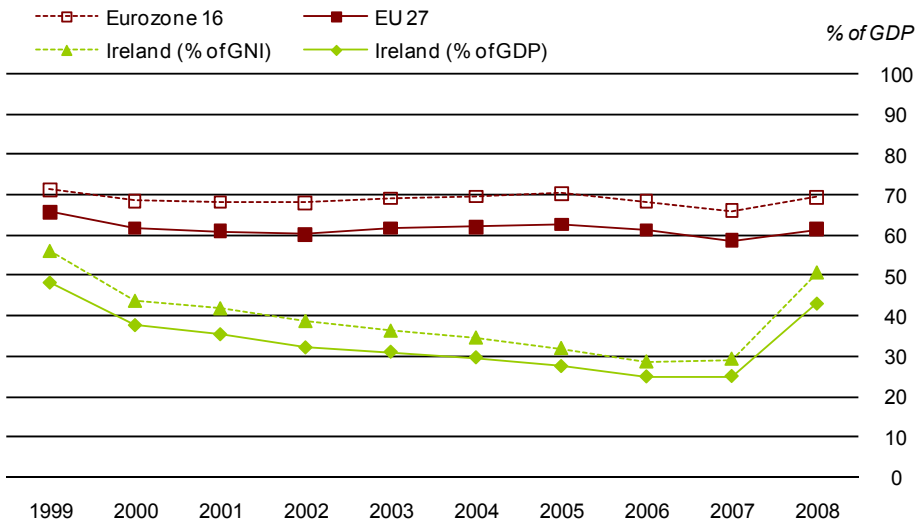
Country	2004	2005	2006	2007	2008
Luxembourg	253.4	254.0	267.0	267.2	258.4
Ireland (GDP)	**142.0**	**144.1**	**147.3**	**150.2**	**143.1**
Netherlands	129.2	130.8	130.9	130.9	132.2
Austria	126.8	124.7	124.3	123.8	124.8
Ireland (GNI)	**121.8**	**123.6**	**128.0**	**127.7**	**121.5**
Sweden	124.8	120.3	121.4	122.2	120.1
Belgium	120.7	119.4	118.4	118.0	118.5
United Kingdom	123.5	121.8	120.3	119.0	118.5
Denmark	125.7	123.6	122.9	120.0	117.1
Germany	116.4	116.9	115.7	114.7	115.6
Finland	116.2	114.1	114.8	115.8	115.5
France	110.0	110.6	109.1	108.9	108.1
Spain	101.0	102.0	104.0	105.4	104.2
EU 27	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Italy	106.7	104.8	103.8	101.9	99.3
Greece	94.0	92.8	94.1	94.8	96.6
Cyprus	90.3	90.9	90.2	90.8	92.6
Slovenia	86.4	87.4	87.6	89.2	90.8
Czech Republic	75.1	75.8	77.4	80.2	81.3
Malta	77.2	78.2	76.7	77.9	79.0
Portugal	74.6	76.9	76.3	76.1	75.5
Slovakia	57.1	60.2	63.5	67.0	70.7
Estonia	57.2	61.1	65.3	67.9	65.1
Hungary	63.1	63.1	63.5	62.7	62.9
Lithuania	50.5	52.9	55.5	59.5	60.6
Poland	50.6	51.3	52.3	53.7	56.1
Latvia	45.7	48.6	52.5	57.9	55.1
Romania	34.1	35.0	38.3	42.1	44.9
Bulgaria	33.7	34.5	36.5	37.2	39.2
Norway	164.4	176.2	183.7	178.4	179.2
Switzerland	136.0	133.5	135.9	137.1	138.2
Iceland	131.1	130.4	123.7	119.1	117.6
Croatia	55.8	56.6	58.4	61.1	63.0
Turkey	37.3	40.4	42.6	44.7	44.4
Macedonia, TFYR	26.6	28.5	29.4	31.2	32.5

Source: Eurostat

- In 2008, Ireland had the second highest GDP per capita within the EU 27, expressed in terms of purchasing power standards. GDP per capita in Ireland increased from 42% above the EU 27 average in 2004 to 50.2% above in 2007, before falling back to 2004 levels (43.1% above the EU 27 average) in 2008 (see table 1.3).
- The pattern of GNI per capita in Ireland is similar; it rose from 21.8% above the EU 27 average in 2004 to 27.7 % above in 2007, falling back to 21.5% in 2008.
- The twelve new EU Member States were all below the EU 27 average in 2008. However, most have shown an improvement over the 2004-2008 period (see Table 1.3).

[6] 2008 data are forecasts, data for 2007 for Romania and Turkey are forecasts. Break in series in 2004 for Belgium and France.

1.4 Ireland, EU and Eurozone[7]: General government consolidated gross debt, 1999–2008



Source: Eurostat, CSO National Accounts

- General government consolidated gross debt as a percentage of GDP in Ireland declined from 48.5% to 25% over the 1999-2007 period but has increased steeply to 43.2% in 2008. The Eurozone 16 figure over the period has remained close to 70% (see Graph 1.4)
- With the exception of Hungary and Malta, the new EU Member States generally had lower than average debt to GDP ratios in 2007 (see Table 1.5).

1.5 EU: General government consolidated gross debt, 2004–2008

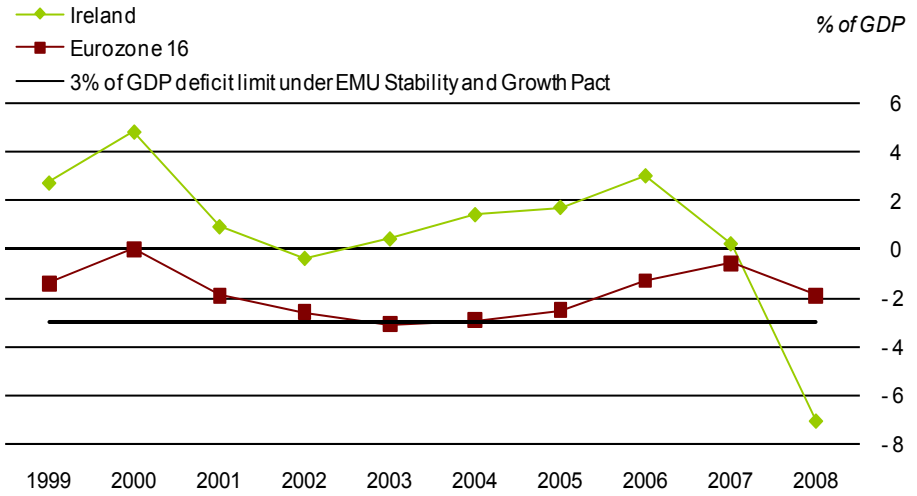
% of GDP

Country	2004	2005	2006	2007	2008
Estonia	5.0	4.5	4.3	3.5	4.8
Romania	18.7	15.8	12.4	12.7	13.6
Bulgaria	37.9	29.2	22.7	18.2	14.1
Luxembourg	6.3	6.1	6.7	6.9	14.7
Lithuania	19.4	18.4	18.0	17.0	15.6
Latvia	14.9	12.4	10.7	9.0	19.5
Slovenia	27.8	27.0	26.7	23.4	22.8
Slovakia	41.4	34.2	30.4	29.4	27.6
Czech Republic	30.4	29.8	29.6	28.9	29.8
Denmark	43.8	37.1	31.3	26.8	33.3
Finland	44.2	41.4	39.2	35.1	33.4
Sweden	51.2	51.0	45.9	40.5	38.0
Spain	46.2	43.0	39.6	36.2	39.5
Ireland (% of GDP)	**29.7**	**27.5**	**24.9**	**25.0**	**43.2**
Poland	45.7	47.1	47.7	44.9	47.1
Cyprus	70.2	69.1	64.6	59.4	49.1
Ireland (% of GNI)	**34.7**	**32.1**	**28.7**	**29.4**	**51.0**
United Kingdom	40.6	42.3	43.4	44.2	52.0
Netherlands	52.4	51.8	47.4	45.6	58.2
EU 27	**62.2**	**62.7**	**61.3**	**58.7**	**61.5**
Austria	64.8	63.7	62.0	59.4	62.5
Malta	72.1	69.8	63.7	62.1	64.1
Germany	65.6	67.8	67.6	65.1	65.9
Portugal	58.3	63.6	64.7	63.5	66.4
France	64.9	66.4	63.7	63.8	68.1
Eurozone 16	**69.7**	**70.4**	**68.6**	**66.2**	**69.6**
Hungary	59.4	61.7	65.6	65.8	73.0
Belgium	94.4	92.2	87.9	84.0	89.6
Greece	98.6	98.8	95.9	94.8	97.6
Italy	103.8	105.8	106.5	103.5	105.8
Norway	45.6	44.5	55.3	52.3	50.0
Iceland	:	25.3	30.1	28.7	70.6
Croatia	43.2	43.7	40.8	37.7	:
Turkey	59.2	52.3	46.1	38.8	:

Source: Eurostat, CSO National Accounts

[7] Eurozone 11 and Greece up to 31 December 2000, Eurozone 12 from 1st January 2001. Slovenia joined the Eurozone on 1st January 2007. Malta and Cyprus joined the Eurozone on 1st January 2008 and Slovakia joined on 1st January 2009.

1.6 Ireland and Eurozone: Public balance, 1999–2008



Source: Eurostat, CSO National Accounts

- The public balance in 2008 fell sharply to -7.1% of GDP, exceeding the 3% of GDP deficit limit in the EMU Stability and Growth Pact. With the exception of 2002, when a small deficit was recorded, the public balance in Ireland had been in surplus each year over the period 1999 to 2007 (see Graph 1.6 and table 1.7).

- In 2008, five Eurozone member states exceeded the 3% of GDP deficit limit under the EMU Stability and Growth Pact: Ireland (-7.1%), Greece (-5.0%), Malta (-4.7%), Spain (-3.8%) and France (-3.4%). Finland at 4.2% had the highest public balance surplus in 2008 (see Table 1.7).

1.7 EU: Public balance, 2004–2008

% of GDP

Country	2004	2005	2006	2007	2008
Finland	2.4	2.8	4.0	5.2	4.2
Denmark	2.0	5.2	5.2	4.5	3.6
Luxembourg	-1.1	0.0	1.4	3.6	2.6
Sweden	0.8	2.3	2.5	3.8	2.5
Bulgaria	1.6	1.9	3.0	0.1	1.5
Netherlands	-1.7	-0.3	0.6	0.3	1.0
Cyprus	-4.1	-2.4	-1.2	3.4	0.9
Germany	-3.8	-3.3	-1.5	-0.2	-0.1
Austria	-4.4	-1.6	-1.6	-0.5	-0.4
Slovenia	-2.2	-1.4	-1.3	0.5	-0.9
Belgium	-0.3	-2.7	0.3	-0.2	-1.2
Czech Republic	-3.0	-3.6	-2.6	-0.6	-1.5
Eurozone 16	**-2.9**	**-2.5**	**-1.3**	**-0.6**	**-1.9**
Slovakia	-2.4	-2.8	-3.5	-1.9	-2.2
EU 27	**-2.9**	**-2.4**	**-1.4**	**-0.8**	**-2.3**
Portugal	-3.4	-6.1	-3.9	-2.6	-2.6
Italy	-3.5	-4.3	-3.3	-1.5	-2.7
Estonia	1.7	1.5	2.9	2.7	-3.0
Lithuania	-1.5	-0.5	-0.4	-1.0	-3.2
France	-3.6	-2.9	-2.3	-2.7	-3.4
Hungary	-6.4	-7.8	-9.2	-4.9	-3.4
Spain	-0.3	1.0	2.0	2.2	-3.8
Poland	-5.7	-4.3	-3.9	-1.9	-3.9
Latvia	-1.0	-0.4	-0.5	-0.4	-4.0
Malta	-4.7	-2.9	-2.6	-2.2	-4.7
Greece	-7.5	-5.1	-2.8	-3.6	-5.0
Romania	-1.2	-1.2	-2.2	-2.5	-5.4
United Kingdom	-3.4	-3.4	-2.7	-2.7	-5.5
Ireland (% of GDP)	**1.4**	**1.7**	**3.0**	**0.2**	**-7.1**
Ireland (% of GNI)	**1.6**	**2.0**	**3.5**	**0.2**	**-8.4**
Norway	11.1	15.1	18.5	17.7	18.8
Iceland	0.1	4.9	6.3	5.4	-14.3
Croatia	-4.3	-4.0	-2.4	-1.6	:
Turkey	-4.5	-0.6	-0.1	-1.2	:

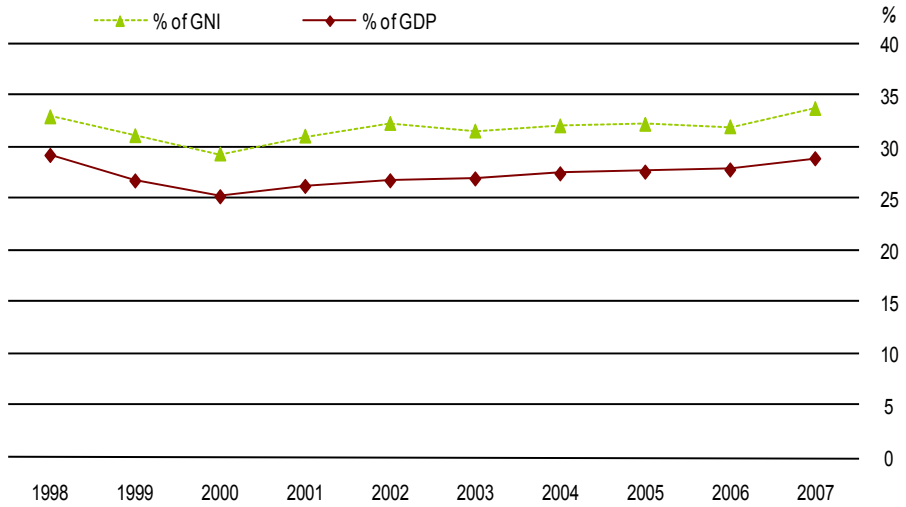
Source: Eurostat, CSO National Accounts

1.8 Ireland: Central and Local Government current expenditure, 1998–2007

Year	% of GDP	% of GNI
	%	%
1998	29.3	33.0
1999	26.8	31.2
2000	25.3	29.4
2001	26.3	31.1
2002	26.9	32.4
2003	27.0	31.6
2004	27.5	32.1
2005	27.7	32.3
2006	27.9	32.0
2007	29.0	33.8

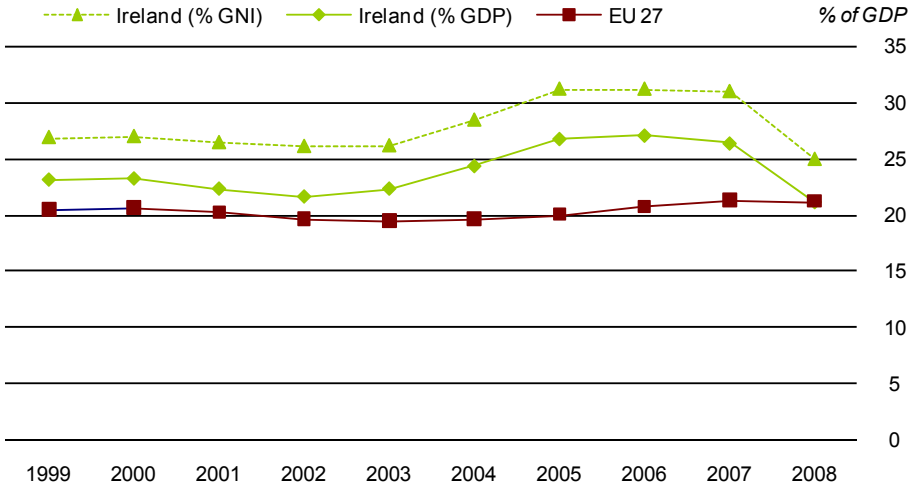
Source: CSO National Accounts

Ireland: Central and Local Government current expenditure as a % of GNI and GDP, 1998 – 2007



- Current expenditure by central and local government decreased from 29.3% of GDP in 1998 to 25.3% in 2000 reflecting Ireland's strong economic growth over the period. Since then it has increased gradually and reached 29% of GDP in 2007 (see Tables 1.1 and 1.8).

1.9 Ireland and EU: Gross fixed capital formation, 1999–2008



Source: Eurostat, CSO

- Between 1999 and 2007, Ireland had a higher rate of investment in gross fixed capital formation than the EU 27 average. However in 2008 the rate of investment in gross fixed capital formation fell sharply in Ireland and is now the same as the EU 27 average (see Graph 1.9 and Table 1.10).

- Within the EU 27 countries, Malta had the lowest rate of investment in gross fixed capital formation at 15.8% of GDP while Bulgaria (33.4%) and Romania (33.3%) had the highest rates (see Table 1.10).

1.10 EU: Gross fixed capital formation, 2004–2008[8]

% of GDP

Country	2004	2005	2006	2007	2008
Bulgaria	20.5	24.2	25.9	29.8	33.4
Romania	21.8	23.7	25.6	30.4	33.3
Latvia	27.5	30.6	32.6	33.7	30.2
Spain	28.0	29.4	30.7	31.0	29.4
Estonia	31.0	30.7	33.9	32.5	28.4
Slovenia	24.9	25.3	26.3	27.5	28.0
Slovakia	24.0	26.5	26.5	26.1	25.9
Ireland (% GNI)	**28.4**	**31.1**	**31.1**	**30.9**	**24.9**
Lithuania	22.3	22.8	25.2	28.0	24.8
Czech Republic	25.8	24.9	24.6	24.3	24.0
Cyprus	19.0	19.3	20.6	22.0	23.3
Belgium	19.6	20.4	21.0	21.7	22.7
Poland	18.1	18.2	19.7	21.6	22.0
France	19.3	20.0	20.7	21.6	21.9
Austria	22.0	21.7	21.6	21.8	21.8
Portugal	22.6	22.2	21.7	21.8	21.7
EU 27	**19.6**	**20.0**	**20.7**	**21.3**	**21.2**
Ireland (% GDP)	**24.3**	**26.7**	**27.0**	**26.3**	**21.1**
Denmark	19.3	19.5	21.3	22.2	21.0
Italy	20.5	20.7	21.1	21.2	20.9
Finland	18.2	18.9	19.3	20.4	20.6
Netherlands	18.8	18.9	19.7	20.0	20.5
Hungary	22.5	22.9	21.6	21.0	20.1
Luxembourg	21.1	20.4	18.5	19.5	20.1
Sweden	16.4	17.4	18.2	19.0	19.5
Greece	22.6	21.6	22.5	22.5	19.3
Germany	17.5	17.4	18.2	18.7	19.2
United Kingdom	16.7	16.7	17.1	17.8	16.9
Malta	19.0	19.6	20.0	19.7	15.8
Croatia	25.5	24.6	26.1	26.2	27.6
Iceland	23.5	28.4	34.0	28.0	23.9
Macedonia, TFYR	17.8	17.0	18.2	20.2	23.7
Switzerland	20.8	21.2	21.3	21.5	20.8
Norway	18.0	18.8	19.6	21.3	20.8
Turkey	20.3	21.0	22.3	21.8	20.3

Source: Eurostat, CSO National Accounts

[8] Forecast data for 2007 and 2008 for Croatia and for 2008 for Macedonia, TFYR. Data for 2008 for Slovakia is an estimate.

1.11 EU: Current account balance, 2004–2008

current account balance as % of GDP

Country	2004	2005	2006	2007	2008
Sweden	7.3	6.9	8.4	8.6	8.4
Netherlands	7.5	7.3	9.3	7.7	7.5
Germany	4.7	5.1	6.5	7.9	6.6
Luxembourg	11.8	11.0	10.4	9.8	5.5
Austria	2.1	2.0	2.8	3.1	3.5
Finland	6.6	3.6	4.5	4.1	2.1
Denmark	3.0	4.3	2.9	0.7	2.0
Eurozone 16[9]	**:**	**:**	**0.0**	**0.3**	**-0.9**
United Kingdom	-2.1	-2.6	-3.4	-2.9	-1.6
France	0.6	-0.6	-0.6	-1.0	-1.9
EU 27[9]	**-0.4**	**-0.8**	**-1.3**	**-1.1**	**-2.0**
Belgium	6.6	2.6	2.0	1.7	-2.5
Czech Republic	-5.3	-1.3	-2.6	-3.2	-3.1
Italy	-0.9	-1.7	-2.6	-2.4	-3.4
Ireland	**-0.6**	**-3.5**	**-3.6**	**-5.4**	**-4.5**
Poland	-4.0	-1.2	-2.7	-4.7	-5.5
Slovenia	-2.6	-1.7	-2.5	-4.2	-5.5
Malta	-6.0	-8.8	-9.2	-6.1	-6.2
Slovakia	-3.4	-8.4	-8.2	-5.7	-6.6
Hungary	-8.6	-7.5	-7.6	-6.4	-8.4
Estonia	-11.7	-10.0	-16.7	-18.1	-9.2
Spain	-5.3	-7.4	-9.0	-10.0	-9.5
Lithuania	-7.7	-7.1	-10.6	-14.6	-11.6
Portugal	-7.6	-9.5	-10.0	-9.4	-12.1
Romania	-8.4	-8.6	-10.5	-13.5	-12.2
Latvia	-12.9	-12.5	-22.5	-22.5	-12.7
Greece	-5.8	-7.5	-11.1	-14.2	-14.4
Cyprus	-5.0	-5.9	-6.9	-11.7	-18.3
Bulgaria	-6.6	-12.4	-18.4	-25.2	-25.3
Norway	13.6	16.3	17.2	16.0	18.3
Turkey	-3.7	-4.6	-6.1	-5.9	-5.6

Source: Eurostat, CSO Balance of Payments

- The current account deficit in Ireland's balance of international payments rose from 0.6 per cent of GDP in 2004 to 5.4% in 2007 before falling to 4.5% in 2008 (see Table 1.11).
- In 2008, the Eurozone 16 current account was in deficit. Eleven of the Eurozone 16 member states had current account deficits and five had current account surpluses. Seven EU 27 member states had current account surpluses in 2008 (see Table 1.11).

[9] Eurozone 16 and EU 27 data are extra-Eurozone and extra-EU 27 balances respectively.

1.12 EU: Direct investment flows, 2007-2008

% of GDP

	Inward		Outward	
Country	2007	2008	2007	2008
Luxembourg	373.7	150.0	-503.3	-193.9
Hungary	52.0	31.1	-48.6	-28.7
Bulgaria	29.3	18.1	-0.7	-1.4
Belgium	24.2	11.8	-20.5	-13.5
Malta	12.5	10.8	-0.4	-3.2
Cyprus	10.1	8.7	-5.6	-5.9
Estonia	12.9	8.6	-7.5	-4.2
Sweden	4.9	8.5	-8.4	-8.4
Romania	5.9	6.5	-0.2	0.1
Czech Republic	6.0	5.0	-0.9	-0.9
France	6.1	4.1	-8.7	-7.7
Spain	4.8	4.1	-9.6	-4.8
Latvia	7.8	4.0	-1.1	-0.6
Lithuania	5.2	3.8	-1.5	-0.7
Slovakia	3.8	3.7	-0.3	-0.3
United Kingdom	6.9	3.7	-9.6	-4.3
Austria	8.1	3.4	-9.1	-7.0
Slovenia	3.0	3.3	-3.8	-2.6
Denmark	3.5	3.2	-6.3	-8.1
Poland	5.4	3.1	-1.1	-0.7
Portugal	1.4	1.5	-2.5	-0.9
Greece	0.6	1.4	-1.7	-0.7
Eurozone 16[10]	**4.3**	**1.1**	**-5.3**	**-3.8**
Germany	1.7	0.7	-5.4	-4.3
Italy	1.9	0.6	-4.3	-2.0
Netherlands	15.3	-0.4	-3.7	-6.6
Finland	5.0	-1.6	-3.1	-0.6
Ireland	**11.7**	**-4.5**	**-8.0**	**-4.9**
Turkey	3.4	2.5	-0.3	-0.3
Norway	1.2	-0.3	-4.0	-6.1
Iceland	15.4	:	-59.4	:

Source: Eurostat, CSO Balance of Payments

- Direct investment in Ireland by foreign companies in 2008 was negative (i.e., disinvestment) and represented 4.5% of GDP compared with investment (positive) of 11.7% in 2007. Outward investment by companies resident in Ireland into their foreign subsidiaries and associates was 4.9% of GDP, a lower figure than the 8.0% recorded in 2007 (see Table 1.12 & Appendix 1). Increases in outward direct investment are shown with a negative sign (see Appendix 1 for details).

[10] Eurozne 16 data are extra-Eurozone 16 flows. On the 1st of January 1999, the euro became the national currency of the 11 participating EU countries. Greece joined on the 1st of January 2001, Slovenia on the 1st January 2007, Malta and Cyprus on the 1st January 2008 and Slovakia on 1st January 2009.

1.13 EU: Exports of goods and services, 2004–2008

exports as % of GDP

Country	2004	2005	2006	2007	2008
Luxembourg	138.8	147.5	157.9	168.4	167.9
Belgium	99.1	84.9	85.3	87.1	90.9
Slovakia	74.6	76.1	84.5	86.2	82.5
Hungary	64.7	67.7	76.7	79.7	81.2
Ireland	**82.5**	**80.7**	**79.1**	**78.7**	**80.2**
Malta	78.3	77.1	87.0	89.3	80.0
Czech Republic	70.1	72.1	76.5	80.1	76.7
Estonia	72.8	79.8	80.5	73.8	75.8
Netherlands	63.4	66.6	70.1	71.8	73.0
Slovenia	57.9	62.0	66.4	69.9	67.9
Bulgaria	56.7	59.5	64.2	63.2	60.5
Austria	53.3	55.3	57.7	60.5	60.2
Lithuania	52.0	57.5	59.0	54.3	60.0
Denmark	45.3	48.9	52.0	52.1	54.6
Sweden	45.3	47.8	50.4	51.6	53.4
Cyprus	46.9	47.5	46.3	47.8	49.8
Germany	38.4	41.1	45.5	47.3	47.5
Finland	40.3	42.2	45.3	46.1	44.6
Latvia	43.5	47.0	43.9	41.2	41.4
Poland	37.6	37.1	40.3	40.8	39.9
Portugal	28.9	29.0	31.7	33.6	33.8
Romania	35.8	33.1	32.3	29.5	30.9
Italy	25.3	26.0	27.7	29.0	28.9
United Kingdom	24.8	26.0	28.0	25.9	27.9
Spain	26.0	25.8	26.5	27.2	26.6
France	26.0	26.2	27.0	26.8	26.6
Greece	21.2	21.0	20.9	21.4	22.2
Norway	44.5	44.4	46.2	45.6	46.9
Croatia	43.4	42.8	43.1	42.8	41.9
Turkey	23.4	21.9	22.6	22.2	23.9
Iceland	34.1	31.6	31.7	34.5	:

Source: Eurostat, CSO Balance of Payments

♦ Exports of merchandise goods and services from Ireland represented 80.2% of GDP in 2008, compared with 82.5% in 2004 (see Table 1.13).

1.14 EU: Imports of goods and services, 2004–2008

imports as % of GDP

Country	2004	2005	2006	2007	2008
France	25.4	26.7	28.0	28.2	29.0
Italy	24.5	26.0	28.5	29.3	29.4
United Kingdom	27.7	29.5	31.3	29.5	31.5
Spain	29.8	30.9	32.7	33.7	32.2
Greece	26.6	27.1	30.2	32.3	33.3
Finland	33.3	37.7	40.3	40.8	40.8
Germany	33.4	35.8	39.8	40.2	41.4
Portugal	36.3	37.4	39.3	40.4	42.7
Poland	39.8	37.8	42.2	43.7	43.5
Romania	44.9	43.3	44.3	43.5	43.7
Sweden	37.3	40.3	42.6	44.3	46.0
Denmark	40.3	43.6	48.4	49.8	52.3
Latvia	59.4	62.2	66.2	61.8	54.4
Austria	50.3	52.0	53.8	55.6	55.5
Cyprus	49.7	50.1	50.3	54.4	61.1
Netherlands	56.0	58.0	61.6	63.2	64.9
Ireland	**68.3**	**69.1**	**68.9**	**68.4**	**68.6**
Slovenia	59.1	62.4	66.9	71.3	70.2
Lithuania	59.0	64.7	69.3	67.8	70.5
Czech Republic	70.0	68.9	73.0	75.1	71.7
Estonia	80.2	86.2	92.3	85.1	80.1
Hungary	67.5	68.9	77.6	78.4	80.2
Malta	82.3	82.4	91.9	91.9	83.7
Bulgaria	68.2	76.0	82.6	85.6	83.8
Slovakia	77.4	80.5	88.9	87.1	84.3
Belgium	92.4	82.0	82.9	85.3	92.9
Luxembourg	111.1	115.6	119.5	122.6	126.9
Norway	30.4	27.9	28.2	29.6	28.6
Turkey	25.9	25.6	27.8	27.4	28.7
Croatia	49.4	48.9	45.0	50.2	50.1
Iceland	39.6	44.0	49.4	44.8	:

Source: Eurostat, CSO Balance of Payments

♦ Imports of goods and services into Ireland represented 68.6% of GDP in 2008 and were relatively unchanged over the period 2004-2008 (see Table 1.14).

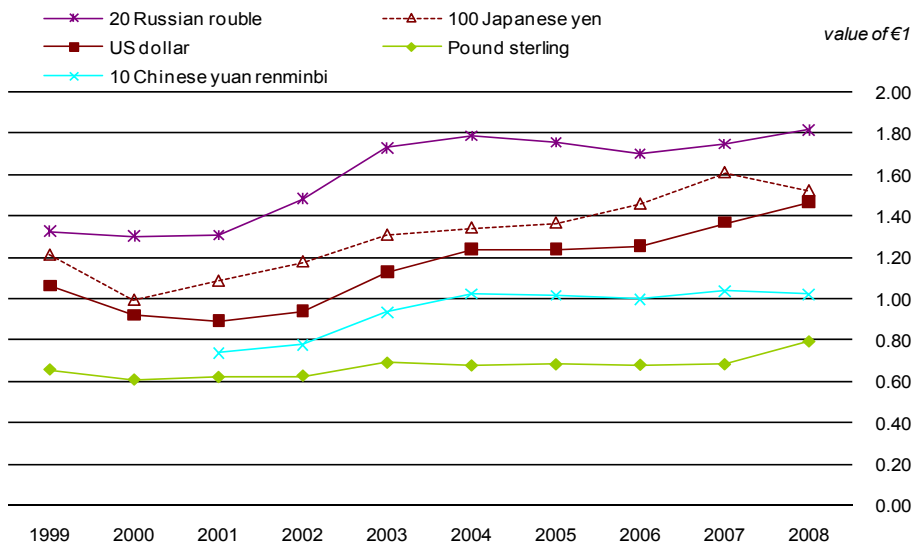
1.15 International: Bilateral euro[11] exchange rates, 1999–2008

value of €1

Year	US dollar	Pound sterling	Japanese yen	Chinese yuan renminbi	Russian rouble
1999	1.066	0.659	121.3	:	26.52
2000	0.924	0.609	99.5	:	26.02
2001	0.896	0.622	108.7	7.41	26.15
2002	0.946	0.629	118.1	7.83	29.70
2003	1.131	0.692	131.0	9.36	34.67
2004	1.244	0.679	134.4	10.30	35.82
2005	1.244	0.684	136.9	10.20	35.19
2006	1.256	0.682	146.0	10.01	34.11
2007	1.371	0.684	161.3	10.42	35.02
2008	1.471	0.796	152.5	10.22	36.42

Source: European Central Bank

Bilateral euro exchange rates, 1999-2008



[11] On 1st January 1999, the euro became the national currency of the 11 participating EU countries. Greece joined the euro currency on 1st January 2001. Slovenia joined the euro currency on 1st January 2007. Malta and Cyprus joined the euro currency on 1st January 2008 and Slovakia joined on 1st January 2009.

1.16 Ireland: Harmonised competitiveness indicator[12], 1999–2008

1999Q1=100

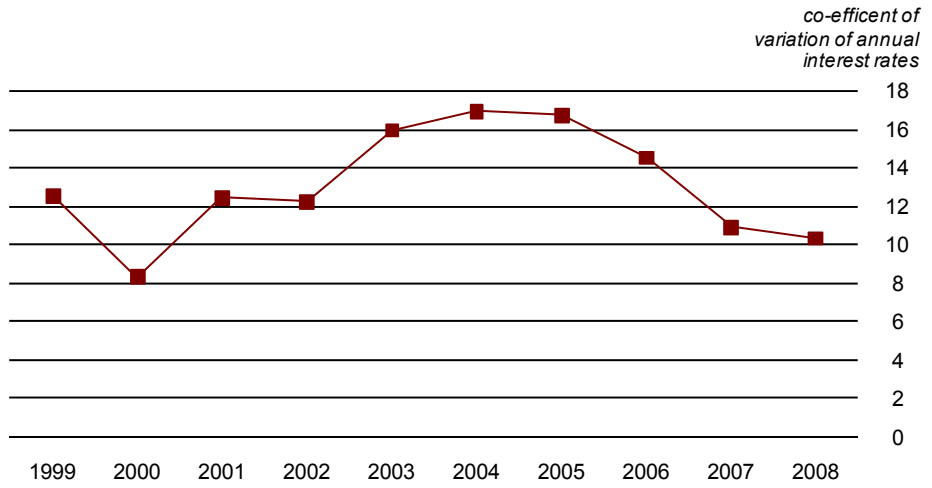
Year	Nominal HCI	Real HCI (Deflated by consumer prices)	Real HCI (Deflated by producer prices)
1999	96.9	97.5	97.8
2000	90.0	93.2	89.8
2001	91.0	95.8	92.5
2002	93.6	101.3	98.3
2003	101.9	112.6	109.8
2004	104.5	115.8	110.5
2005	104.1	115.4	107.9
2006	104.4	116.0	106.8
2007	107.4	120.1	109.7
2008	113.0	125.5	115.7

Source: Central Bank, Financial Services Authority of Ireland

- The euro initially decreased in value against the US dollar between its introduction in 1999 and 2001 but then appreciated significantly over the following three years to stand at 1.244 dollars in 2004. Between 2004 and 2006 the value of the euro against the US dollar was more stable. In 2007 and 2008 the euro increased significantly against the dollar once again (see Table 1.15 and graph).
- The relationship between the euro and the pound sterling was stable between 1999 and 2007 followed by a sharp rise in the euro against sterling in 2008 (see Table 1.15 and graph).
- Ireland's harmonised competitiveness, based on consumer prices, has gradually disimproved over the period 1999-2008, from 97.5 in 1999 to 125.5 in 2008, mainly due to higher inflation and an appreciating euro (see Tables 1.15, 1.16 and graph 1.19).

[12] See Appendix 1 and also Box B in the 'Domestic Prices, Costs and Competitiveness' chapter of the Central Bank's Quarterly Bulletin No. 2 of 2007 for further details.

1.17 Eurozone: Convergence of interest rates for loans to non–financial corporations up to one year[13], 1999–2008



Source: Eurostat

- Interest rates for loans of up to one year converged among the Eurozone countries between 1999 and 2000, diverged again between 2000 and 2004, and have converged again since 2005 (see Graph 1.17).

1.18 Eurozone: Interest rates for short–term loans (new business) to non–financial corporations, 2007–2008

interest rate[14,15]

Country	2007		2008	
	Loans of value up to €1m	Loans of value greater than €1m	Loans of value up to €1m	Loans of value greater than €1m
Luxembourg	5.95	5.25	4.54	3.97
Finland	5.73	4.89	4.61	3.99
Belgium	5.89	5.20	4.77	3.97
Netherlands	5.51	5.22	4.82	4.01
Austria	5.54	5.10	4.89	4.51
France	5.82	5.00	5.08	4.30
Germany	6.55	5.47	5.25	4.35
Italy	5.98	5.21	5.31	4.17
Eurozone	**6.08**	**5.35**	**5.38**	**4.29**
Spain	5.96	5.33	5.51	4.30
Malta	:	:	5.81	4.71
Ireland	**6.75**	**6.53**	**5.95**	**4.99**
Greece	6.83	5.79	6.18	5.07
Slovenia	6.40	5.96	6.44	5.98
Portugal	7.25	5.72	7.25	5.79
Cyprus	:	:	7.28	5.86

Source: European Central Bank

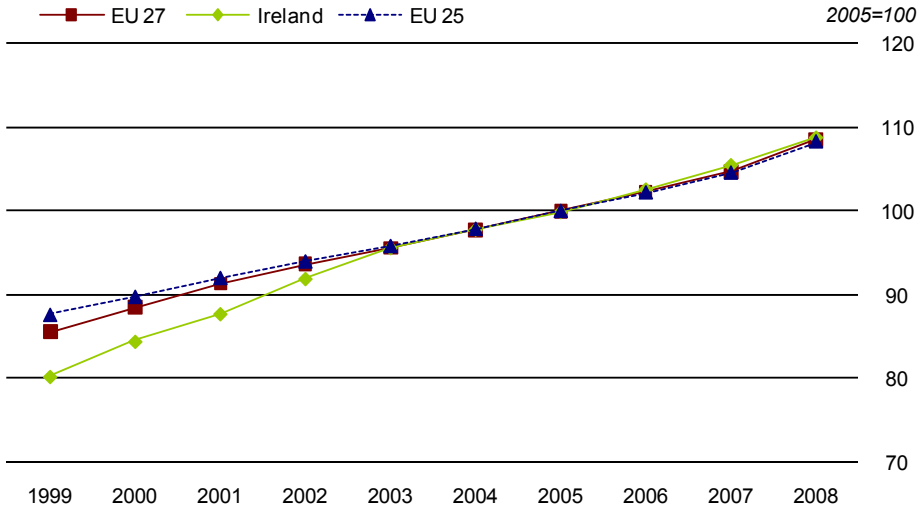
- In Ireland, variable interest rates and rates fixed for up to one year on new loans to non-financial corporations were at 5.95% at the end of 2008 for loan amounts of up to one million euro, which was a decrease on the 6.75% rate at the end of 2007. The rate in Ireland in 2008 was 0.57% above the Eurozone average rate of 5.38% (see Table 1.18).

- Interest rates on loans of amounts greater than one million euro decreased from 6.53% to 4.99% between 2007 and 2008. Ireland was 0.7% higher than the Eurozone average rate of 4.29% in 2008 (see Table 1.18).

[13] All figures are Eurostat estimates.

[14] Rates shown are as at end of period.
[15] 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, 1999–2008



Source: Eurostat HICP

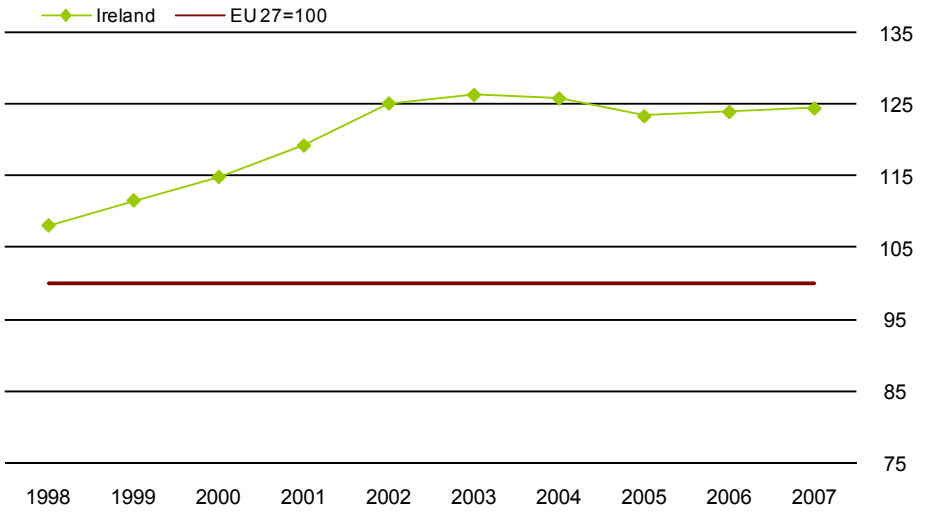
- Inflation in Ireland, as measured by the HICP, was higher than the EU 27 average from 1999 to 2003. Since 2004 inflation in Ireland has been broadly similar to the EU 27 average (see Graph 1.19 and Table 1.20).
- The 8 EU countries with the highest cumulative inflation rate between 2005 and 2008 are all new EU member states (see Table 1.20).

1.20 EU: Harmonised Index of Consumer Prices, 2005–2008

Country	2005	2006	2007	2008
Netherlands	100.0	101.7	103.3	105.5
Sweden	100.0	101.5	103.2	106.7
France	100.0	101.9	103.6	106.8
Finland	100.0	101.3	102.9	106.9
Germany	100.0	101.8	104.1	107.0
Austria	100.0	101.7	103.9	107.3
Denmark	100.0	101.8	103.5	107.3
Italy	100.0	102.2	104.3	108.0
Malta	100.0	102.6	103.3	108.1
EU 25	**100.0**	**102.2**	**104.6**	**108.3**
Poland	100.0	101.3	103.9	108.3
Portugal	100.0	103.0	105.5	108.3
United Kingdom	100.0	102.3	104.7	108.5
EU 27	**100.0**	**102.3**	**104.7**	**108.6**
Belgium	100.0	102.3	104.2	108.9
Ireland	**100.0**	**102.7**	**105.6**	**108.9**
Cyprus	100.0	102.3	104.5	109.0
Luxembourg	100.0	103.0	105.7	110.0
Slovakia	100.0	104.3	106.2	110.4
Greece	100.0	103.3	106.4	110.9
Spain	100.0	103.6	106.5	110.9
Czech Republic	100.0	102.1	105.1	111.7
Slovenia	100.0	102.5	106.4	112.3
Hungary	100.0	104.0	112.3	119.1
Romania	100.0	106.6	111.8	120.7
Lithuania	100.0	103.8	109.8	122.0
Estonia	100.0	104.5	111.5	123.3
Bulgaria	100.0	107.4	115.6	129.4
Latvia	100.0	106.6	117.3	135.2
Switzerland	100.0	101.0	101.8	104.2
Norway	100.0	102.5	103.2	106.7
Iceland	100.0	104.7	108.5	122.3
Turkey	100.0	109.3	118.9	131.3

Source: Eurostat HICP

1.21 Ireland and EU: Comparative price levels of final consumption by private households including indirect taxes, 1998–2007



Source: Eurostat HICP

- Since 1998, Ireland has become considerably more expensive and since 2002 our price levels for final consumption by private households have been about 25% above the EU 27 average (see Graph 1.21 and Table 1.22).
- In 2007, Ireland had the second highest price levels among EU 27 countries after Denmark (see Graph 1.21 and Table 1.22).
- In 2007, Ireland and Finland remained the most expensive countries in the Eurozone 15, with price levels in both countries around 20% higher than the average for the zone (see Table 1.22).

1.22 EU: Comparative price levels of final consumption by private households including indirect taxes, 2003–2007

EU 27=100

Country	2003	2004	2005	2006	2007
Bulgaria	40.7	42.0	43.2	44.6	46.5
Lithuania	52.3	53.5	54.8	57.1	59.6
Romania	43.4	43.3	54.4	57.1	61.5
Czech Republic	54.5	55.4	58.1	61.4	62.4
Slovakia	50.7	54.9	55.4	57.4	63.5
Poland	54.4	53.2	61.1	62.1	63.7
Latvia	54.4	56.1	57.0	60.5	65.8
Hungary	58.3	62.0	63.3	60.3	66.1
Estonia	62.0	63.0	64.7	67.4	71.5
Malta	72.0	73.2	73.0	74.6	73.3
Slovenia	76.2	75.5	76.0	76.8	77.8
Portugal	86.0	87.3	85.1	84.9	84.6
Cyprus	90.9	91.2	90.3	90.5	88.8
Greece	85.9	87.6	88.2	88.8	89.4
Spain	88.4	90.9	91.1	91.8	92.4
EU 27	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Austria	103.3	103.3	102.5	102.0	101.4
Eurozone 15	**103.4**	**103.5**	**102.5**	**102.5**	**102.4**
Germany	106.1	104.7	103.3	103.0	103.1
Netherlands	107.8	106.1	104.7	104.1	103.4
Italy	103.6	104.9	104.7	104.3	103.9
Belgium	106.5	106.7	106.4	106.7	106.3
France	110.0	109.9	108.2	108.8	108.3
United Kingdom	107.8	108.5	109.7	110.3	110.3
Luxembourg	103.2	103.0	111.6	111.8	112.4
Sweden	123.5	121.4	119.0	118.5	117.3
Finland	126.6	123.8	123.6	122.6	122.5
Ireland	**126.4**	**125.9**	**123.4**	**124.0**	**124.5**
Denmark	141.1	139.5	140.4	138.4	137.7
Macedonia, TFYR	43.9	44.4	43.2	43.3	43.3
Croatia	64.8	66.5	68.7	69.8	70.1
Turkey	57.2	59.1	66.7	66.3	71.5
Switzerland	143.8	140.8	137.6	134.0	126.1
Norway	142.1	135.2	140.7	139.7	139.0
Iceland	138.5	137.8	153.3	144.2	148.1

Source: Eurostat HICP

1.23 Ireland: Gross Value Added[16] per capita by region[17], 2002–2006

Ireland=100

Region	2002	2003	2004	2005	2006
Border, Midland and Western	**67.6**	**68.7**	**71.3**	**70.6**	**72.2**
Border	68.8	70.5	71.5	70.5	72.5
Midland	61.7	65.0	66.4	67.6	67.0
Western	69.6	68.8	74.0	72.6	75.0
Southern and Eastern	**111.7**	**111.4**	**110.4**	**110.7**	**110.2**
Dublin	130.4	134.2	138.0	141.3	140.9
Mid East	81.9	76.0	76.4	79.2	77.5
Dublin plus Mid East[2]	*117.3*	*118.3*	*120.9*	*123.8*	*122.8*
Mid West	81.3	88.1	91.0	89.6	87.0
South East	88.1	84.9	80.4	74.7	73.1
South West	131.8	125.9	116.1	114.8	117.3
State	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: CSO National Accounts

1.24 Ireland: Disposable income per capita by region[17], 2002–2006

Ireland=100

Region	2002	2003	2004	2005	2006
Border, Midland and Western	**89.9**	**90.6**	**91.8**	**91.6**	**91.7**
Border	87.6	88.4	90.1	90.3	91.1
Midland	90.2	91.5	91.5	91.8	90.6
Western	92.4	92.5	93.9	92.9	93.0
Southern and Eastern	**103.6**	**103.4**	**103.0**	**103.1**	**103.0**
Dublin	115.5	115.2	112.9	112.3	112.3
Mid East	102.0	101.5	101.9	102.3	102.6
Mid West	96.9	96.5	97.9	98.3	97.0
South East	90.9	91.1	91.8	92.1	93.2
South West	95.1	95.1	95.9	97.0	96.4
State	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: CSO National Accounts

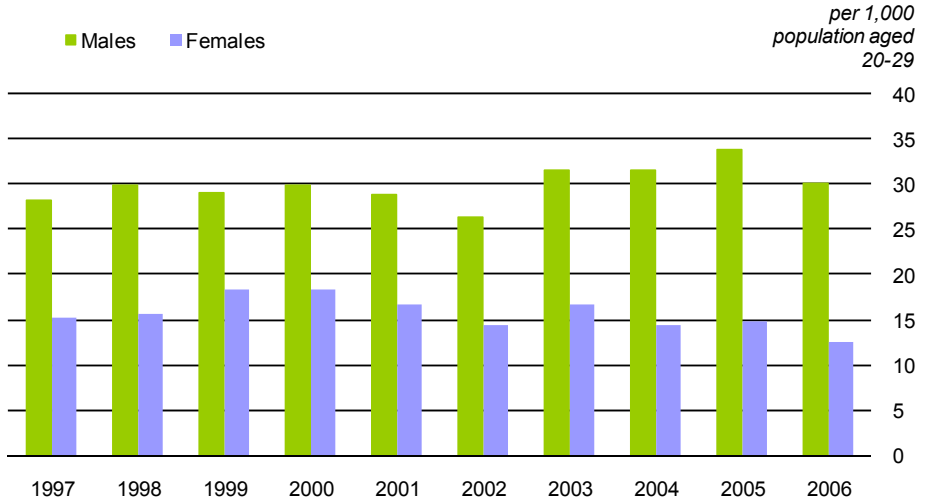
[16] At basic prices.

[17] The regional classifications used are based on the Nomenclature of Territorial Units classification used by Eurostat. The composition of these regions is detailed in Appendix 1.

- The average output level per person in the Southern and Eastern region, as measured by Gross Value Added (GVA)[18], was 10.2% above the State average in 2006. The GVA per person in the Border, Midland and Western region was 72.2% of the State average in 2006, up from 67.6% in 2002 (see Table 1.23).
- The combined Dublin plus Mid East region in 2006 was 22.8% above the State average, while the Midland region has the lowest GVA per person in 2006 at 67% of the State average (see Table 1.23).
- In 2006 the disposable income per person in the Southern and Eastern region was 3% above the State average while the corresponding figure in the Border, Midland and Western region was 8.3% below the State average. The gap of 11.3 points between the two regions is smaller than the gap of 13.7 points which existed in 2002 (see Table 1.24).
- At the level of the eight Regional Authority areas, the Dublin region had the highest disposable income per person, being 12.3% above the State average in 2006. The disposable income per person of the Midland region was 9.4% below the State average in 2006 and was the lowest of the eight Regional Authority areas (see Table 1.24).

[18] GDP and GVA are the same concept, i.e. they measure the value of the goods and services (or part thereof) which are produced within a region or country. GDP is valued at market prices and hence includes taxes charged and excludes the value of subsidies provided. GVA at basic prices on the other hand excludes product taxes and includes product subsidies. See Appendix 1 for further details.

2.1 Ireland: Mathematics, science and technology graduates, 1997–2006



Source: Eurostat

- Over the period 1997 to 2006, the proportion of male mathematics, science and technology graduates, at close to or above 30 per 1,000 males aged 20-29, has been around double the corresponding female rate (see Graph 2.1).
- In 2006 the proportion of mathematics, science and technology PhDs awarded in Ireland, at 0.7 per 1,000 population aged 25-34, was higher than the EU 27 average of 0.6 in 2005. Ireland had the eighth highest rate in the EU, behind Sweden which had the highest rate at 1.7, in 2006 (see Table 2.2).

2.2 EU: Mathematics, science and technology PhDs awarded, 2002–2006

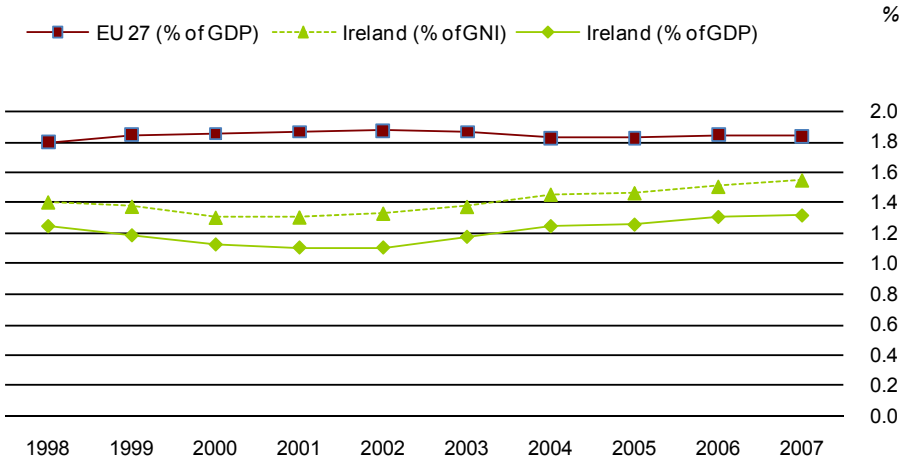
per 1,000 population aged 25-34

Country	2002	2003	2004	2005	2006
Sweden	1.5	1.8	1.0	1.7	1.7
Finland	1.0	1.3	1.2	1.3	1.4
Portugal	0.7	1.0	1.1	1.3	1.4
United Kingdom	0.9	0.9	0.9	1.0	1.0
Germany	0.8	0.8	0.9	0.9	0.9
Austria	0.7	0.7	0.8	0.8	0.8
France	0.6	:	0.6	0.7	0.8
Ireland	**0.6**	**0.6**	**0.7**	**0.8**	**0.7**
Belgium	0.5	0.5	0.6	0.6	0.6
Czech Republic	0.5	0.5	0.6	0.6	0.6
Denmark	0.6	0.6	0.6	0.6	0.6
Slovenia	0.6	0.6	0.6	0.6	0.6
EU 27[19]	**0.5**	**0.6**	**0.6**	**0.6**	**:**
Slovakia	0.6	0.4	0.5	0.5	0.6
Netherlands	0.4	0.4	0.5	0.5	0.5
Estonia	0.3	0.4	0.3	0.3	0.4
Spain	0.4	0.4	0.4	0.4	0.4
Greece	:	0.5	0.4	:	0.3
Lithuania	0.2	0.3	0.2	0.3	0.3
Poland	0.3	0.3	0.3	0.5	0.3
Bulgaria	0.1	0.1	0.2	0.2	0.2
Hungary	0.2	0.1	0.1	0.1	0.2
Latvia	0.1	0.1	0.2	0.1	0.2
Romania	0.2	0.2	0.2	0.2	0.2
Cyprus	0.0	0.1	0.0	0.1	0.1
Malta	:	:	:	0.0	0.1
Italy	0.4	0.4	0.5	0.6	:
Switzerland	1.0	1.1	1.3	1.5	1.5
Norway	0.5	:	0.6	0.5	0.7
Croatia	0.2	0.3	0.3	0.3	0.3
Turkey	0.1	0.1	0.1	0.1	0.1
Iceland	0.0	0.1	0.0	0.2	0.1
Macedonia, TFYR	0.1	0.1	0.1	0.1	0.1

Source: Eurostat

[19] EU 27 data for 2002-2004 is an estimate.

2.3 Ireland and EU: Gross domestic expenditure on R&D[20,21], 1998–2007



Source: Eurostat, Forfás

- Ireland spent less on research and development[22] as a percentage of GDP/GNI than the EU 27 average in the period 1998-2007. However, the gap has been narrowing since 2002 (see Graph 2.3 and Table 2.4).
- Sweden and Finland invested considerably more in R&D relative to GDP in 1997, 2002 and 2007 than any other EU 27 country (see Table 2.4).

[20] All EU 27 figures are Eurostat estimates.
[21] Irish data for 1999 is an estimate and data for 2006 and 2007 are provisional.
[22] 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.

2.4 EU: Gross domestic expenditure on R&D, 1997–2007[23]

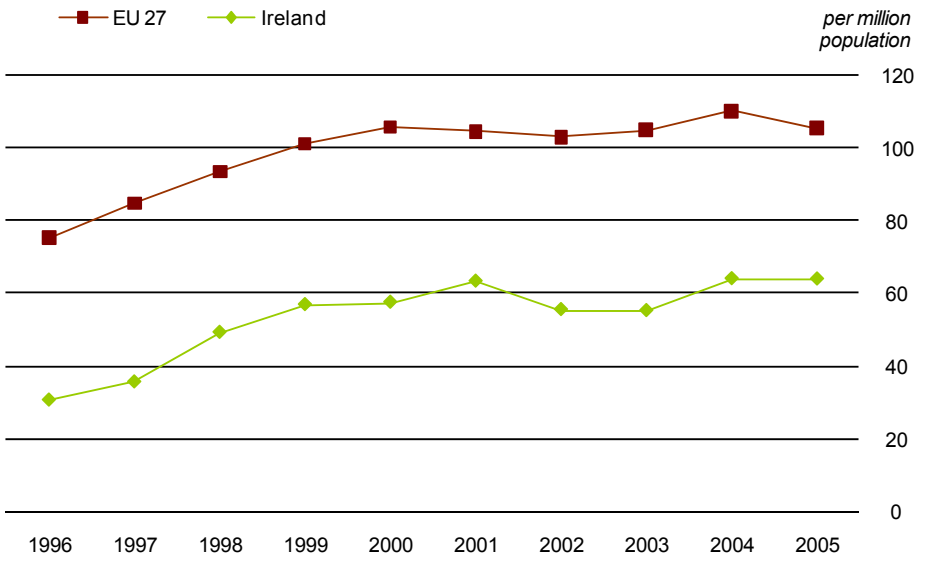
% of GDP

Country	1997	2002	2007
Sweden	3.48	3.85	3.64
Finland	2.70	3.36	3.47
Austria	1.70	2.14	2.56
Denmark	1.92	2.51	2.55
Germany	2.24	2.49	2.53
France	2.19	2.23	2.08
Belgium	1.83	1.94	1.87
EU 27	**1.78**	**1.87**	**1.83**
United Kingdom	1.77	1.79	1.76
Netherlands	1.99	1.72	1.70
Luxembourg	:	1.65	1.63
Ireland (% of GNI)	**1.42**	**1.33**	**1.54**
Czech Republic	1.08	1.20	1.54
Slovenia	1.28	1.47	1.53
Ireland (% of GDP)	**1.27**	**1.10**	**1.31**
Spain	0.80	0.99	1.27
Portugal	0.59	0.76	1.18
Italy	1.03	1.13	1.14
Estonia	0.57	0.72	1.14
Hungary	0.72	1.00	0.97
Lithuania	0.54	0.66	0.82
Latvia	0.38	0.42	0.63
Malta	:	0.26	0.60
Greece	0.45	0.57	0.57
Poland	0.65	0.56	0.56
Romania	0.49	0.38	0.53
Bulgaria	0.51	0.49	0.48
Slovakia	1.08	0.57	0.46
Cyprus	0.22	0.30	0.45
Iceland	1.83	2.95	2.77
Norway	1.63	1.66	1.65
Croatia	:	1.04	0.86
Turkey	0.49	0.53	0.58

Source: Eurostat

[23] 2007 data are provisional for Belgium, Ireland, France, Cyprus, Luxembourg, Malta, Netherlands, Portugal, Slovenia, Sweden. EU 27 data are Eurostat estimates. 2007 data are national estimates for Denmark, Germany, Greece and Austria. Data for 2002 for Portugal and Iceland and for 1997 for Austria are national estimates. 2006 data used for 2007 for United Kingdom, Poland, Italy and Turkey. 2005 data used for 2007 for Iceland. 2003 data used for 2002 for Sweden, Luxembourg and Greece. 1998 data used for 1997 for Estonia, Romania and Cyprus.

2.5 Ireland and EU: European Patent Office applications, 1996–2005[24]



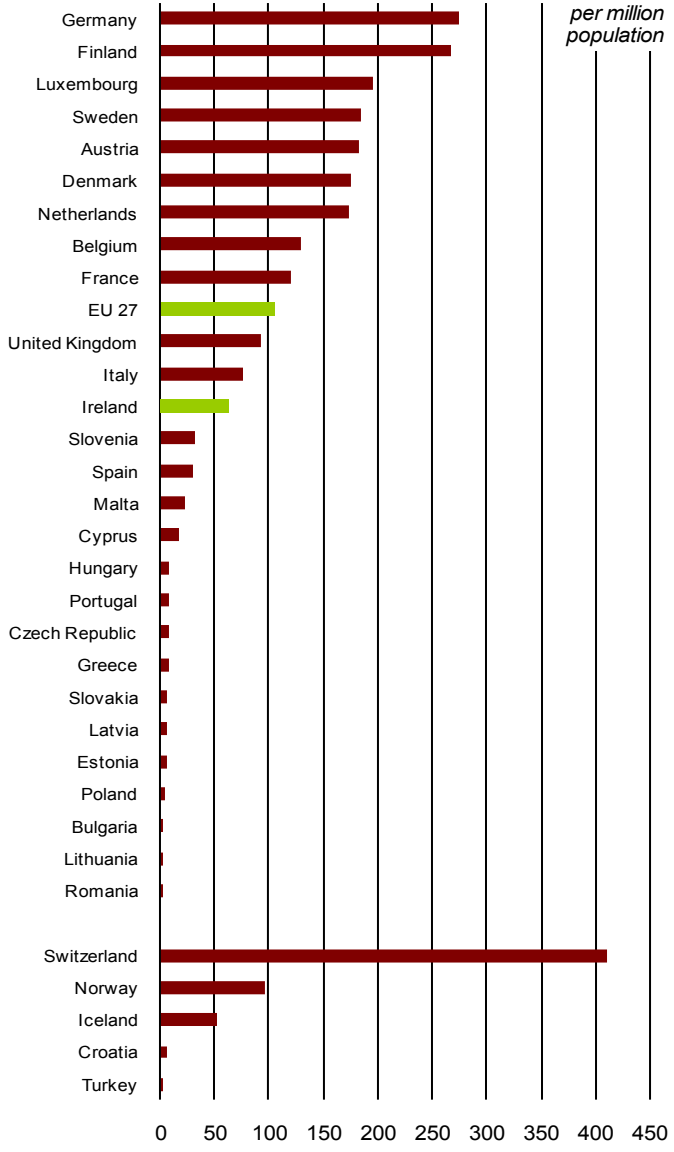
Source: Eurostat, EPO

- There was a significant increase in the number of applications made to the European Patent Office from Ireland during the 1996-1999 period. Since then, however, the number of applications has remained quite steady at around 60 applications per million population. The overall trend for the EU 27 was broadly similar, albeit at a rate per million close to double that recorded in Ireland (see Graph 2.5).

- Germany, with over 275 applications per million population, had the highest rate in the EU 27 in 2005. Switzerland, with 411 applications per million population, had the highest rate putting it at more than six times the Irish rate (see Graph 2.6).

[24] 2005 data estimated.

2.6 EU: European Patent Office applications, 2005[25]



Source: Eurostat, EPO

[25] 2005 data are estimates except for the following which are provisional: Bulgaria, Cyprus, Greece, Iceland, Lithuania, Portugal, Romania and Turkey.

2.7 Ireland: Private households[26] with a computer connected to the Internet, 1998–2008

Year	000 Households with a computer connected to the Internet	% % of all households with a computer connected to the Internet	% % of all households with broadband Internet connection
1998	61.2	5	:
2000	266.0	20	:
2005	611.7	45	7
2006	673.2	49	13
2007	806.7	57	31
2008	914.2	62	43

Source: CSO Information Society and Telecommunications

- 62% of all private households in Ireland had a computer connected to the Internet in 2008 compared with only 5% in 1998 and 57% in 2007 (see Table 2.7).
- The Netherlands, at 86%, had the highest reported rate of household Internet access in the EU 27 in 2008. Ireland, at 62%, was ranked tenth in the EU in 2008. The EU 27 average was 60% of households (see Table 2.8).

[26] Table 2.7 measures the number of households (with at least one member aged between 15 and 74) that have a computer connected to the Internet. Table 2.8 measures all means a household may have of accessing the Internet.

2.8 EU: Private households with Internet access, 2004–2008

% of households

Country	2004	2005	2006	2007	2008
Netherlands	65	78	80	83	86
Sweden	:	73	77	79	84
Denmark	69	75	79	78	82
Luxembourg	59	65	70	75	80
Germany	60	62	67	71	75
Finland	51	54	65	69	72
United Kingdom	56	60	63	67	71
Austria	45	47	52	60	69
Belgium	:	50	54	60	64
Ireland	**40**	**45**	**49**	**57**	**62**
France	34	:	41	49	62
EU 27	**41**	**48**	**49**	**54**	**60**
Malta	:	41	53	54	59
Slovenia	47	48	54	58	59
Estonia	31	39	46	53	58
Slovakia	23	23	27	46	58
Latvia	15	31	42	51	53
Spain	34	36	39	45	51
Lithuania	12	16	35	44	51
Hungary	14	22	32	38	48
Poland	26	30	36	41	48
Italy	34	39	40	43	47
Czech Republic	19	19	29	35	46
Portugal	26	31	35	40	46
Cyprus	53	32	37	39	43
Greece	17	22	23	25	31
Romania	6	:	14	22	30
Bulgaria	10	:	17	19	25
Iceland	81	84	83	84	88
Norway	60	64	69	78	84
Macedonia, TFYR	11	:	14	:	:
Turkey	7	8	:	:	:

Source: Eurostat, CSO QNHS

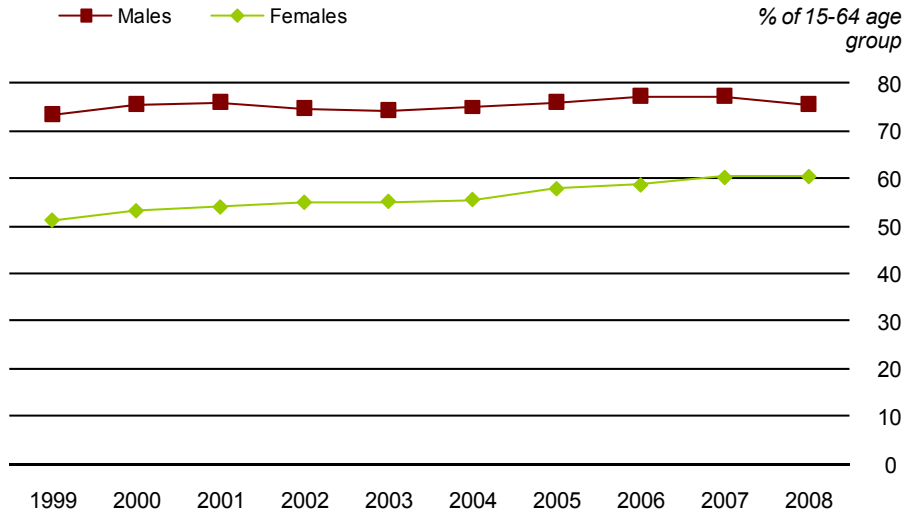
3.1 Ireland: Employment rates, 1999–2008

% of population aged 15-64

Year	Persons	Males	Females
1999	62.5	73.6	51.2
2000	64.5	75.7	53.2
2001	65.2	76.2	54.0
2002	65.0	74.9	55.0
2003	64.9	74.6	55.2
2004	65.4	75.1	55.6
2005	67.1	76.2	57.9
2006	68.2	77.4	58.7
2007	69.0	77.4	60.3
2008	68.1	75.6	60.5

Source: CSO QNHS[27]

Ireland: Employment rates, 1999-2008



- The employment rate for women in Ireland rose by over 9 percentage points to 60.5% over the period 1999-2008, compared with an increase of just 2 percentage points for men. The men's rate had risen to 77.4% in 2007 before falling to 75.6% in 2008 (see Table 3.1).

[27] QNHS (March-May, 1999-2008).

3.2 EU: Employment rates by sex, 2007

% of population aged 15-64

Country	Persons	Males	Females	Sex difference
Denmark	77.1	81.0	73.2	7.8
Netherlands	76.0	82.2	69.6	12.6
Sweden	74.2	76.5	71.8	4.7
United Kingdom	71.5	77.5	65.5	12.0
Austria	71.4	78.4	64.4	14.0
Cyprus	71.0	80.0	62.4	17.6
Finland	70.3	72.1	68.5	3.6
Germany	69.4	74.7	64.0	10.7
Estonia	69.4	73.2	65.9	7.3
Ireland	**69.0**	**77.4**	**60.3**	**17.1**
Latvia	68.3	72.5	64.4	8.1
Portugal	67.8	73.8	61.9	11.9
Slovenia	67.8	72.7	62.6	10.1
Czech Republic	66.1	74.8	57.3	17.5
Spain	65.6	76.2	54.7	21.5
EU 27	**65.4**	**72.5**	**58.3**	**14.2**
Lithuania	64.9	67.9	62.2	5.7
France	64.6	69.3	60.0	9.3
Luxembourg	64.2	72.3	56.1	16.2
Belgium	62.0	68.7	55.3	13.4
Bulgaria	61.7	66.0	57.6	8.4
Greece	61.4	74.9	47.9	27.0
Slovakia	60.7	68.4	53.0	15.4
Romania	58.8	64.8	52.8	12.0
Italy	58.7	70.7	46.6	24.1
Hungary	57.3	64.0	50.9	13.1
Poland	57.0	63.6	50.6	13.0
Malta	54.6	72.9	35.7	37.2
Iceland	85.1	89.1	80.8	8.3
Switzerland	78.6	85.6	71.6	14.0
Norway	76.8	79.5	74.0	5.5
Croatia	57.1	64.4	50.0	14.4
Turkey	45.8	68.0	23.8	44.2

Source: Eurostat LFS, CSO QNHS

- Ireland's overall employment rate, at 69%, was above the average EU 27 rate of 65.4% in 2007. 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[28] and per person employed, 1998–2008

	EU 15=100	*EU 27=100*
Year	**per hour worked**	**per person employed**
1998	95.2	125.1
1999	96.0	124.9
2000	97.8	127.2
2001	98.8	127.8
2002	103.5	133.1
2003	105.9	135.1
2004	106.6	135.0
2005	106.1	134.4
2006	108.1	136.7
2007	111.2	139.8
2008	:	134.2

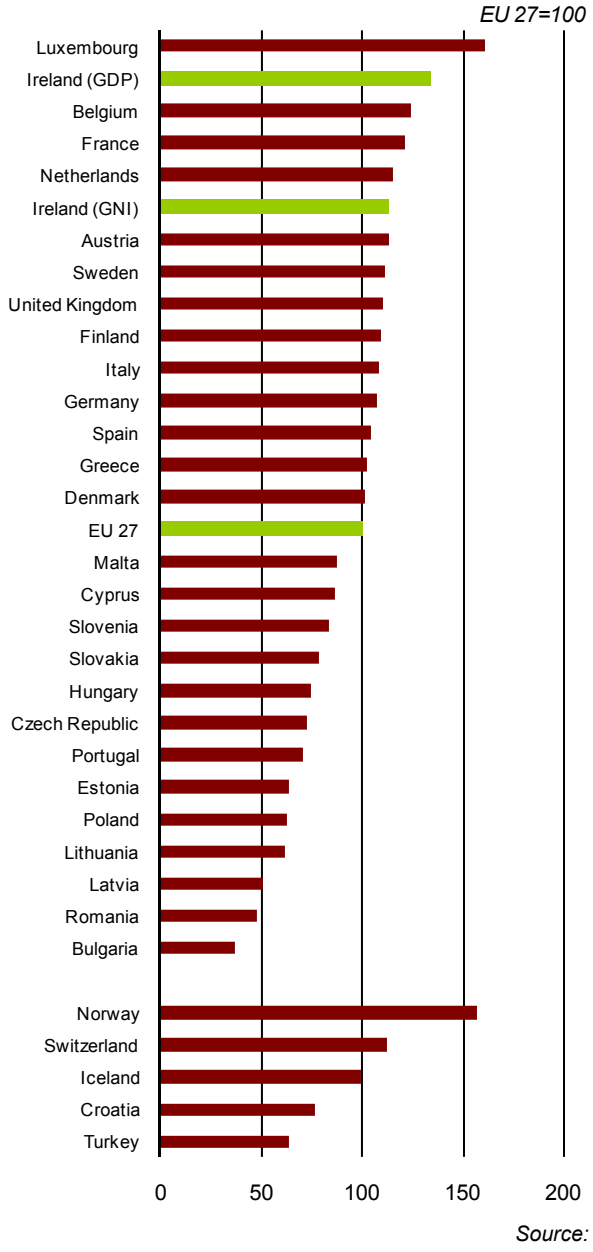
Source: Eurostat

- The productivity of the Irish workforce as measured by GDP in Purchasing Power Standards (PPS) per person employed was 39.8% higher than the EU 27 average in 2007, but fell to 34.2% higher in 2008. Ireland had the second highest productivity rate among EU 27 states in 2008, after Luxembourg (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 2002 and was 11.2% above the EU 15 average in 2007 (see Table 3.3).

[28] See Appendix 1 for details of PPS.

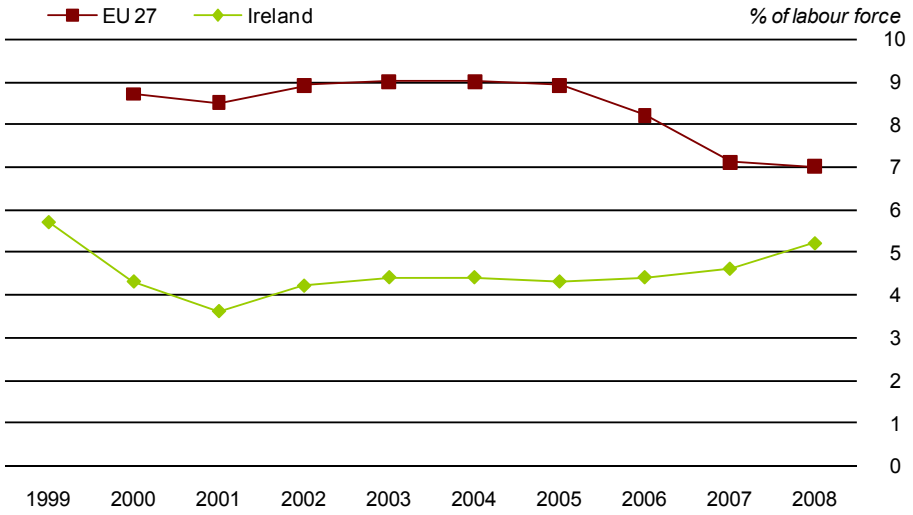
3.4 EU: GDP in PPS per person employed[29], 2008



Source: Eurostat

[29] Forecasted values for Poland, Romania, Croatia, Iceland, Switzerland and Turkey. Value for Slovakia is an estimate.

3.5 Ireland and EU: Unemployment rates, 1999-2008



Source: Eurostat, CSO

- The unemployment rate in Ireland has been consistently lower than the rate for the EU 27. Unemployment rates in Ireland declined from 5.7% in 1999 to a low point of 3.6% in 2001. Over the following five years the rate remained fairly stable at just over 4%, but has increased to 5.2% in 2008. However, the higher Irish rate in 2008 was less than the EU 27 average and was the eighth lowest of all EU 27 countries (see Graph 3.5 and Table 3.6).

- Seven EU 27 countries, including Ireland, had higher male than female unemployment rates, as did Norway (see Table 3.6).

3.6 EU: Unemployment rates by sex, 2008[30]

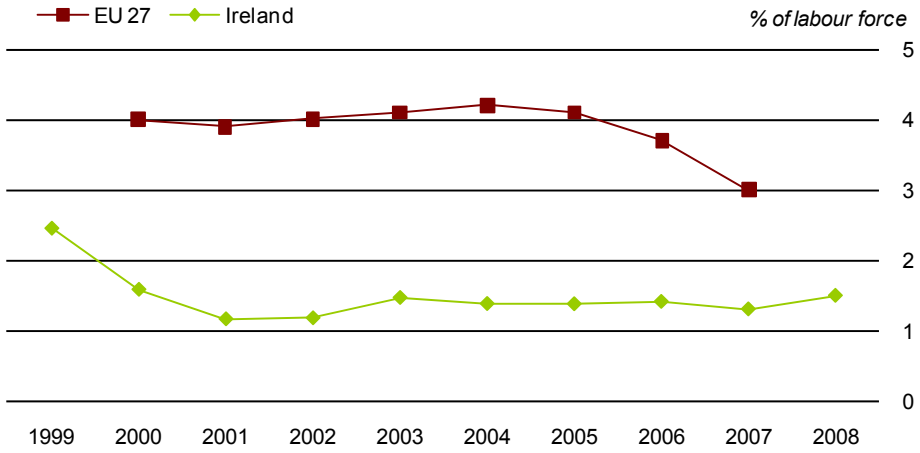
% of labour force

Country	Persons	Males	Females	Sex difference
Netherlands	2.8	2.6	3.0	-0.4
Denmark	3.3	3.0	3.7	-0.7
Cyprus	3.8	3.3	4.4	-1.1
Austria	3.8	3.6	4.1	-0.5
Czech Republic	4.4	3.5	5.7	-2.2
Luxembourg	4.4	3.3	5.7	-2.4
Slovenia	4.5	4.2	4.9	-0.7
Ireland	**5.2**	**6.2**	**3.9**	**2.3**
United Kingdom	5.3	5.6	5.0	0.6
Estonia	5.5	5.8	5.3	0.5
Bulgaria	5.6	5.5	5.8	-0.3
Lithuania	5.7	6.0	5.4	0.6
Malta	5.8	5.6	6.2	-0.6
Italy	6.1	4.9	7.9	-3.0
Sweden	6.2	5.9	6.5	-0.6
Romania	6.4	7.2	5.4	1.8
Finland	6.4	6.1	6.7	-0.6
EU 27	**7.0**	**6.6**	**7.5**	**-0.9**
Belgium	7.1	6.7	7.6	-0.9
Poland	7.1	6.4	8.0	-1.6
Germany	7.3	7.4	7.2	0.2
Latvia	7.3	7.6	6.9	0.7
France	7.7	7.3	8.2	-0.9
Portugal	7.7	6.6	9.0	-2.4
Hungary	7.9	7.7	8.1	-0.4
Greece	8.3	5.2	12.8	-7.6
Slovakia	9.6	8.5	11.0	-2.5
Spain	11.3	10.1	13.0	-2.9
Norway	2.6	2.7	2.4	0.3
Croatia	8.4	7.1	10.0	-2.9
Turkey	8.5	8.5	8.5	0.0

Source: Eurostat LFS

[30] 2007 data for Greece, Italy, Romania and United Kingdom.

3.7 Ireland and EU: Long–term unemployment rates, 1999–2008



Source: Eurostat, CSO

- The long-term unemployment rate in Ireland fell sharply between 1999 and 2001, and since then it has remained fairly stable at around 1.4% with a small increase to 1.5% in 2008 (see Graph 3.7).

- The long-term unemployment rate for Ireland was 1.3% in 2007 compared with an EU 27 average of 3.0%. The rate for men in Ireland and the UK was nearly twice that for women in 2007. However, at EU 27 level, the rate for women was higher at 3.3% compared with 2.8% for men. Iceland had a lower long-term unemployment rate than any EU 27 country at 0.2% (see Table 3.8).

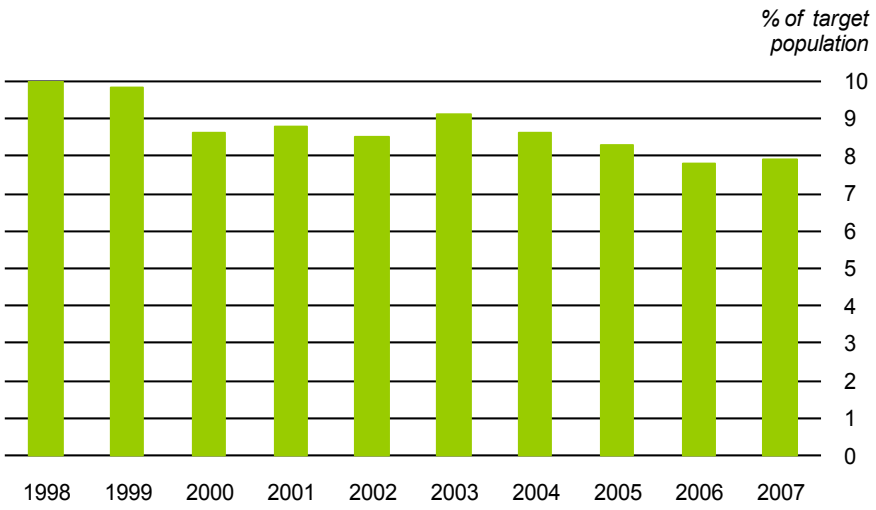
3.8 EU: Long–term unemployment rates by sex, 2007

% of labour force

Country	Persons	Males	Females
Denmark	0.6	0.5	0.7
Cyprus	0.7	0.8	0.7
Sweden	0.8	0.9	0.8
Luxembourg	1.2	1.3	1.1
Austria	1.2	1.0	1.4
Netherlands	1.3	1.2	1.4
United Kingdom	1.3	1.6	0.9
Ireland	**1.3**	**1.6**	**0.9**
Lithuania	1.4	1.4	1.3
Latvia	1.6	1.9	1.2
Finland	1.6	1.7	1.4
Spain	1.7	1.1	2.5
Slovenia	2.2	1.8	2.7
Estonia	2.3	2.8	1.7
Malta	2.7	2.8	2.4
Czech Republic	2.8	2.1	3.6
Italy	2.9	2.2	3.9
EU 27	**3.0**	**2.8**	**3.3**
Romania	3.2	3.6	2.7
France	3.3	3.1	3.6
Hungary	3.4	3.3	3.6
Belgium	3.8	3.3	4.3
Portugal	3.8	3.2	4.5
Bulgaria	4.1	3.7	4.5
Greece	4.1	2.2	7.0
Germany	4.7	4.8	4.7
Poland	4.9	4.6	5.4
Slovakia	8.3	7.5	9.3
Iceland	0.2	0.2	0.3
Norway	0.5	0.5	0.4
Turkey	2.2	2.0	3.0
Croatia	5.9	4.8	7.3

Source: Eurostat LFS

3.9 Ireland: Population aged 18–59 living in jobless households[31], 1998–2007



Source: Eurostat

- The proportion of the population aged 18-59 living in jobless households in Ireland decreased in the period 1998-2007, falling from 10.1% in 1998 to 7.9% in 2007 (see Graph 3.9).
- Twelve EU 27 countries reported a lower proportion of 18-59 year olds living in jobless households than Ireland in 2007, with Cyprus having the lowest reported rate at 4.7% in 2007 (see Table 3.10 and footnote).

3.10 EU: Population aged 18–59 living in jobless households, 2003–2007[32]

% of target population[34]

Country	2003	2004	2005	2006	2007
Cyprus	5.1	5.1	5.3	5.2	4.7
Portugal	5.3	5.3	5.7	5.8	5.7
Estonia	10.2	9.7	8.6	6.6	6.0
Spain	7.3	7.2	6.6	6.3	6.2
Czech Republic	7.7	8.0	7.4	7.2	6.5
Netherlands	7.8	7.9	7.9	7.4	6.5
Slovenia	8.8	7.7	7.1	7.4	6.5
Latvia	8.8	8.1	8.5	6.7	6.6
Lithuania	8.2	7.8	6.8	6.9	7.0
Luxembourg	7.5	7.1	6.7	7.1	7.0
Austria	6.8	8.2	8.4	7.6	7.1
Malta	8.5	8.8	8.2	7.9	7.7
Ireland	**9.1**	**8.6**	**8.3**	**7.8**	**7.9**
Greece	9.0	9.1	8.9	8.1	8.0
Slovakia	10.3	10.5	10.3	9.5	8.9
Finland	11.0	11.1	10.5	9.5	9.1
Italy	9.6	9.4	9.8	9.5	9.2
EU 27	**10.4**	**10.4**	**10.3**	**9.8**	**9.3**
Germany	10.9	11.1	11.0	10.5	9.5
France	10.1	10.1	10.3	10.5	10.0
Bulgaria	15.9	14.4	13.7	12.1	10.2
Romania	11.5	11.8	11.3	10.3	10.4
United Kingdom	11.0	10.8	10.9	10.8	10.7
Poland	15.0	15.5	14.8	13.2	11.6
Hungary	11.7	12.0	12.3	11.8	11.9
Belgium	14.4	13.8	13.7	13.6	12.3
Denmark	9.4	9.4	8.6	7.7	:
Croatia	13.5	11.8	12.2	12.4	11.3
Turkey	:	:	:	15.2	15.4

Source: Eurostat LFS

[31] The target population are persons aged 18-59, excluding persons living in households where everyone is aged 18-24 and either in education or inactive (see Appendix 1).

[32] EU 27 data are Eurostat estimates, break in series in 2005 for Germany and Spain and break in series in 2004 for Italy and Austria.

3.11 EU: Employment rate of workers aged 55–64 by sex, 2007

% of 55-64 age group

Country	Persons	Males	Females
Sweden	70.0	72.9	67.0
Estonia	60.0	59.4	60.5
Denmark	58.6	64.9	52.4
Latvia	57.7	64.6	52.4
United Kingdom	57.4	66.3	48.9
Cyprus	55.9	72.5	40.3
Finland	55.0	55.1	55.0
Ireland	**54.1**	**68.1**	**39.8**
Lithuania	53.4	60.8	47.9
Germany	51.5	59.7	43.6
Netherlands	50.9	61.5	40.1
Portugal	50.9	58.6	44.0
Czech Republic	46.0	59.6	33.5
EU 27	**44.7**	**53.9**	**36.0**
Spain	44.6	60.0	30.0
Bulgaria	42.6	51.8	34.5
Greece	42.4	59.1	26.9
Romania	41.4	50.3	33.6
Austria	38.6	49.8	28.0
France	38.3	40.5	36.2
Slovakia	35.6	52.5	21.2
Belgium	34.4	42.9	26.0
Italy	33.8	45.1	23.0
Slovenia	33.5	45.3	22.2
Hungary	33.1	41.7	26.2
Luxembourg	32.0	35.6	28.6
Poland	29.7	41.4	19.4
Malta	28.5	45.9	11.6
Iceland	84.7	89.3	79.8
Norway	69.0	73.8	64.0
Switzerland	67.2	76.4	58.1
Croatia	35.8	48.4	24.2
Turkey	29.5	43.0	16.5

Source: Eurostat LFS

- In Ireland, 68.1% of men aged 55-64 were employed in 2007 compared with 39.8% of women. Finland had the smallest difference between the employment rates of men and women in this age group in 2007. There is wide variation across the EU 27 in the employment rate of persons aged 55-64 (see Table 3.11).
- Ireland had the eighth highest employment rate for people aged 55-64 in the EU in 2007 at 54.1%. Sweden, at 70%, had the highest EU rate.

3.12 EU: Average exit age from the labour force by sex, 2007[33]

years

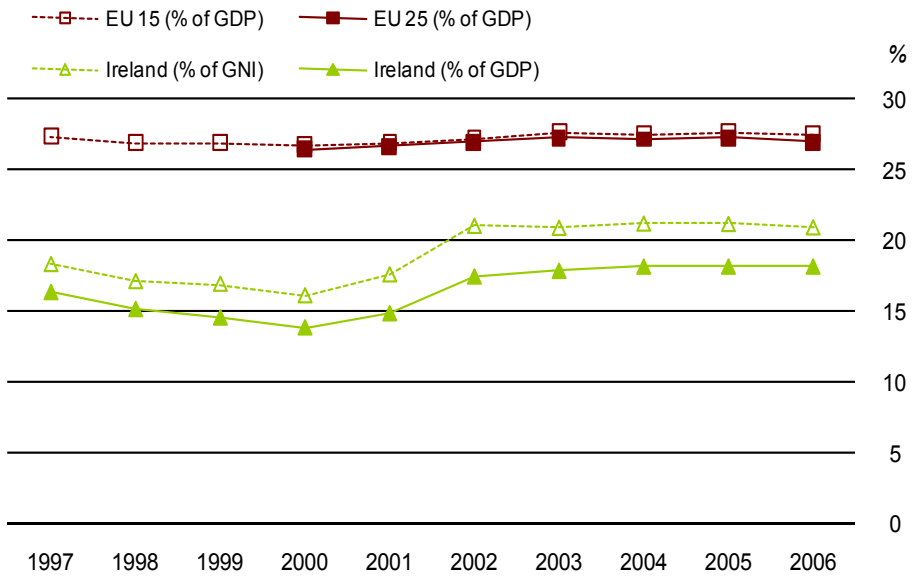
Country	Persons	Males	Females
Romania	64.3	65.5	63.2
Bulgaria	64.1	64.1	64.1
Ireland	**64.1**	**63.5**	**64.7**
Netherlands	63.9	64.2	63.6
Sweden	63.9	64.2	63.6
Cyprus	63.5	:	:
Latvia	63.3	:	:
Portugal	62.6	62.9	62.3
United Kingdom	62.6	63.6	61.7
Estonia	62.5	:	:
Spain	62.1	61.8	62.4
Germany	62.0	62.6	61.5
Belgium	61.6	61.2	61.9
Finland	61.6	62.0	61.3
EU 27	**61.2**	**61.9**	**60.5**
Greece	61.0	61.6	60.5
Austria	60.9	62.6	59.4
Czech Republic	60.7	62.0	59.4
Denmark	60.6	61.4	59.7
Italy	60.4	61.0	59.8
Lithuania	59.9	:	:
Hungary	59.8	61.2	58.7
Slovenia	59.8	:	:
France	59.4	59.5	59.4
Luxembourg	59.4	:	:
Poland	59.3	61.4	57.5
Slovakia	58.7	59.7	57.8
Malta	58.5	:	:
Iceland	66.3	:	:
Norway	64.4	64.1	64.7
Switzerland	63.5	64.6	62.5
Croatia	58.6	61.4	56.1

Source: Eurostat LFS

- The average exit age from the labour force was 64.1 years in Ireland, the joint second highest age among EU 27 member states. The average exit age in Ireland for women was 64.7 years compared with 63.5 years for men.
- In 2007, the average exit age from the labour force in the EU 27 was 61.2 years (see Table 3.12).

[33] EU 27 value estimated. 2006 data for Bulgaria, Ireland, Lithuania, Malta, Romania and Slovenia and 2005 data for Luxembourg, Hungary and Iceland.

4.1 Ireland and EU: Social protection expenditure[34], 1997–2006



Source: Eurostat, CSO National Accounts

- Social protection expenditure[35] as a proportion of GDP was lower in Ireland over the period 1997-2006 than in the EU 15 and EU 25 Member States. Expenditure in Ireland decreased from 16.4% of GDP in 1997 to 13.9% in 2000, but subsequently increased over the following years to stand at 18.2% in 2006 (see Graph 4.1).

- Social protection expenditure on a per capita basis in Ireland increased from 4,929 PPPs in 2002 to 6,321 PPPs in 2006. This placed Ireland twelfth among EU 27 countries in 2006 and below the EU 25 average (see Table 4.2).

4.2 EU: Social protection expenditure in Purchasing Power Parities[36] per capita, 2002-2006

PPP per capita

Country	2002	2003	2004	2005	2006
Luxembourg	10,611	11,361	12,197	12,950	13,458
Netherlands	7,525	7,575	7,924	8,253	9,099
Sweden	7,820	8,270	8,639	8,738	8,998
Denmark	7,805	7,946	8,354	8,563	8,601
Austria	7,543	7,791	8,050	8,290	8,524
Belgium	7,171	7,420	7,665	8,053	8,520
France	7,206	7,162	7,457	7,905	8,200
Germany	7,085	7,347	7,493	7,648	7,706
United Kingdom	6,345	6,494	6,923	7,131	7,410
Finland	6,045	6,212	6,704	6,885	7,215
EU 25	**5,772**	**5,917**	**6,143**	**6,381**	**6,630**
Italy	5,797	5,923	6,001	6,206	6,476
EU 27	**:**	**:**	**:**	**6,104**	**6,349**
Ireland	**4,929**	**5,217**	**5,568**	**5,854**	**6,321**
Greece	4,428	4,506	4,791	5,204	5,525
Spain	4,187	4,317	4,521	4,859	5,163
Slovenia	4,110	4,104	4,367	4,557	4,793
Portugal	3,730	3,822	3,988	4,292	4,451
Cyprus	2,976	3,387	3,537	3,827	3,994
Czech Republic	2,909	3,073	3,139	3,280	3,439
Hungary	2,561	2,768	2,834	3,147	3,401
Malta	2,903	2,958	3,102	3,202	3,298
Slovakia	2,112	2,088	2,129	2,263	2,387
Poland	2,089	2,130	2,202	2,263	2,373
Estonia	1,297	1,420	1,617	1,767	1,976
Lithuania	1,269	1,376	1,450	1,578	1,770
Latvia	1,173	1,236	1,276	1,382	1,547
Bulgaria	:	:	:	1,266	1,294
Romania	805	818	1,109	1,128	1,277
Norway	8,239	8,816	9,215	9,597	9,901
Switzerland	8,192	8,265	8,591	8,852	9,127
Iceland	5,643	5,973	6,439	6,528	6,535

Source: Eurostat

[34] Data for 2004 and 2005 for EU 25 and EU 15 are provisional.
[35] It should be noted that in 2008 Ireland has the lowest proportion of persons aged 65 and over in the population in the EU which has an effect on social protection expenditure (see Table 7.8).

[36] 2006 data are provisional for Germany, Spain, France, Italy, Latvia, Lithuania, Netherlands, Slovenia, Slovakia, Sweden and the United Kingdom. 2005 and 2006 data are provisional for EU 25. See Appendix 1 for details of PPPs.

4.3 EU: Social protection expenditure by type, 2006[37]

% of GDP

Country	Family/ Children	Unemployment	Sickness and disability	Old age and survivors	Housing & social exclusion	Total
France	2.5	2.0	10.5	12.9	1.2	31.1
Sweden	2.9	1.6	12.3	12.1	1.1	30.7
Belgium	2.0	3.4	9.2	13.5	0.6	30.1
Netherlands	1.6	1.4	11.1	11.4	2.0	29.3
Denmark	3.7	2.0	10.3	10.7	1.5	29.1
Germany	3.1	1.7	9.7	12.2	0.8	28.7
Austria	2.9	1.6	9.3	13.4	0.4	28.5
EU 27	**2.1**	**1.4**	**9.5**	**11.9**	**0.9**	**26.9**
Italy	1.2	0.5	8.4	15.5	0.1	26.6
United Kingdom	1.6	0.6	10.5	11.6	1.6	26.4
Finland	2.9	2.2	9.9	9.6	0.8	26.2
Portugal	1.2	1.3	9.3	11.7	0.3	25.4
Greece	1.5	1.1	7.9	12.1	1.1	24.2
Slovenia	1.9	0.7	9.0	10.1	0.6	22.8
Hungary	2.8	0.7	8.4	9.2	0.7	22.3
Ireland (% of GNI)	**2.9**	**1.5**	**9.1**	**5.3**	**0.7**	**21.0**
Spain	1.2	2.6	7.9	8.4	0.4	20.9
Luxembourg	3.4	1.0	7.7	7.3	0.6	20.4
Poland	0.8	0.6	5.6	11.5	0.3	19.2
Czech Republic	1.4	0.6	7.8	7.8	0.6	18.7
Cyprus	1.9	1.1	5.3	8.3	1.3	18.4
Ireland (% of GDP)	**2.5**	**1.3**	**7.9**	**4.6**	**0.6**	**18.2**
Malta	1.1	0.6	6.2	9.5	0.5	18.1
Slovakia	1.2	0.5	6.1	6.9	0.6	15.9
Bulgaria	1.1	0.3	5.1	7.7	0.4	15.0
Romania	1.2	0.4	5.8	6.2	0.2	14.0
Lithuania	1.1	0.2	5.5	5.7	0.2	13.2
Estonia	1.5	0.1	5.0	5.5	0.1	12.4
Latvia	1.2	0.4	4.3	5.7	0.2	12.2
Switzerland	1.3	1.0	10.2	12.8	0.9	28.4
Norway	2.7	0.4	11.4	6.9	0.7	22.6
Iceland	3.1	0.3	10.6	6.4	0.6	21.2

Source: Eurostat

- Ireland's expenditure on social protection[38] in 2006, at 18.2% of GDP was the eight lowest reported of the EU 27 Member States. The EU 27 average was 26.9%, with France the highest at 31.1% of GDP (see Table 4.3).
- Social protection expenditure on old age and survivors was 4.6% of GDP and 5.3% of GNI in Ireland in 2006, compared with 11.9% in the EU 27, partly reflecting the fact that in 2008 Ireland had the lowest proportion of persons aged 65 and over in the EU (see Tables 4.3 and 7.8).

[37] Data are provisional for EU 27, Germany, Spain, France, Italy, Latvia, Lithuania, Netherlands, Slovakia, Slovenia, Sweden and United Kingdom.

[38] Ireland has the lowest proportion of persons aged 65 and over in the population in the EU in 2008 which has an effect on social protection expenditure.

4.4 EU: At risk of poverty rates, 2007[39,40]

% of population

Country	Before pensions and social transfers	After pensions only	After pensions and social transfers	Risk reduction
Czech Republic	38	20	10	28
Netherlands	35	21	10	25
Slovakia	38	18	11	27
Sweden	42	28	11	31
Denmark	37	27	12	25
Hungary	49	29	12	37
Austria	43	25	12	31
Slovenia	40	23	12	28
France	46	26	13	33
Finland	41	29	13	28
Bulgaria	41	17	14	27
Luxembourg	39	23	14	25
Malta	34	22	14	20
Belgium	42	28	15	27
Germany	43	25	15	28
EU 27	**43**	**25**	**16**	**27**
Cyprus	28	21	16	12
Poland	47	27	17	30
Ireland	**40**	**33**	**18**	**22**
Portugal	40	24	18	22
Estonia	37	25	19	18
Lithuania	38	26	19	19
Romania	42	24	19	23
United Kingdom	42	30	19	23
Greece	42	24	20	22
Spain	39	24	20	19
Italy	43	24	20	23
Latvia	39	27	21	18
Iceland	26	18	10	16
Norway	28	28	12	16

Source: Eurostat, EU SILC

[39] Data in Table 4.4 are obtained from the EU Survey on Income and Living Conditions (EU SILC). Rates in Table 4.4 are calculated using a Eurostat definition of income and modified OECD equivalence scale (see Appendix 1).

[40] EU 27 data is an estimate. Data for Germany and Romania are provisional. 2006 data used for Bulgaria.

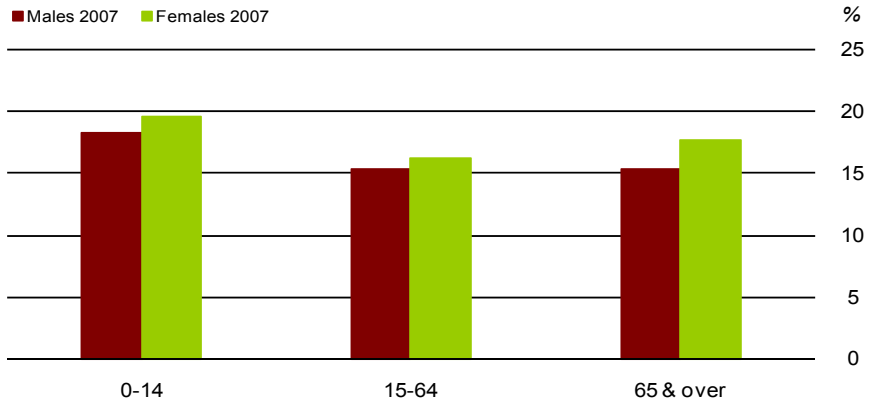
4.5 Ireland: At risk of poverty rates[41] by age and sex, 2006-2007

% of age group

Age group	2006			2007		
	Males	Females	Persons	Males	Females	Persons
0-14	19.4	21.1	20.2	18.3	19.5	18.9
15-64	16.2	17.0	16.6	15.4	16.2	15.8
65 & over	13.6	13.7	13.6	15.4	17.6	16.6
Total	**16.6**	**17.4**	**17.0**	**16.0**	**17.0**	**16.5**

Source: CSO, EU SILC

Ireland: At risk of poverty rates[42] by age and sex, 2007



- In 2007, the percentage of the population at risk of poverty in Ireland, before pensions and social transfers, was 40% compared with 43% in the EU 27. The effect ("risk reduction") of pensions and social transfers was less in Ireland than in most other EU countries. As a result, the at risk of poverty rate in Ireland after pensions and social transfers, at 18%, was above the EU 27 figure of 16%, and was the joint ninth highest at risk of poverty rate in the EU (see Table 4.4).
- The Czech Republic and the Netherlands had the lowest at risk of poverty rate (after pensions and social transfers) in the EU at 10% while Latvia had the highest at 21% (see Table 4.4).
- In 2007, 16% of males and 17% of females were at risk of poverty in Ireland. Across all age groups the rates for women were higher than the rates for men (see Table 4.5 and graph).

[41] Equivalised total disposable income including all social transfers (60% threshold). Data in Table 4.5, Table 4.6 and Graph 4.7 are calculated using the national definition of income and national equivalence scale. See Appendix 1.

4.6 Ireland: Persons in consistent poverty[42,43] by age and sex, 2006-2007

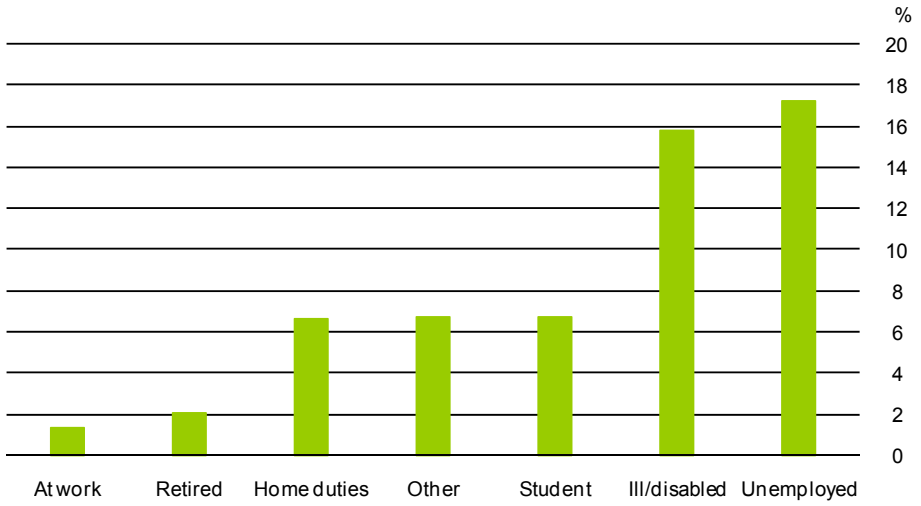
% of age group

	2006			2007		
Age group	**Males**	**Females**	**Persons**	**Males**	**Females**	**Persons**
0-14	11.2	11.1	11.1	6.9	8.1	7.5
15-64	6.2	6.7	6.5	4.9	5.0	4.9
65+	2.4	1.9	2.1	2.1	2.0	2.0
Total	**6.9**	**7.0**	**6.9**	**5.0**	**5.2**	**5.1**

Source: CSO, EU SILC

- In 2007, 5.1% of the population were living in consistent poverty with little difference between women (5.2%) and men (5.0%). This was a reduction on the level recorded in 2006, when 6.9% of the population was living in consistent poverty (see Table 4.6).
- 7.5% of children under the age of fifteen were in consistent poverty in 2007. This was a large decrease on the figure of 11.1% recorded in 2006 (see Table 4.6).
- In 2007, 17.2% of unemployed persons were in consistent poverty, compared with 1.3% of people at work. One in six (15.8%) of ill or disabled people were experiencing consistent poverty (see Graph 4.7).

4.7 Ireland: Persons in consistent poverty[44] by principal economic status, 2007



Source: CSO, EU SILC

[42] Equivalised total disposable income including all social transfers (60% threshold).

[43] 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 for further details).

[44] Percentage of persons aged 16 and over in 'consistent poverty' at 60% level using basic life-style deprivation indicators. Data for the category 'Other' is unreliable due to the small sample size.

4.8 EU: Gender pay gap[45], 2002–2007

Difference between male and female average gross hourly earnings as % of average gross hourly male earnings

Country	2002	2006	2007
Italy	:	4	4
Malta	:	5	5
Poland	8	8	8
Portugal	:	8	8
Slovenia	6	8	8
Belgium	:	10	9
Luxembourg	:	11	10
Bulgaria	19	12	13
Romania	16	8	13
Latvia	:	15	15
France	:	16	16
Hungary	19	14	16
Ireland	**15**	**17**	**17**
EU 27	**:**	**18**	**17**
Spain	20	18	18
Denmark	:	18	18
Sweden	:	17	18
Lithuania	13	17	20
Finland	:	21	20
Greece	26	21	21
United Kingdom	27	24	21
Germany	:	23	23
Cyprus	23	22	23
Czech Republic	22	23	24
Netherlands	19	24	24
Slovakia	28	26	24
Austria	:	26	26
Estonia	:	30	30
Norway	:	16	16

Source: Eurostat, EU SES

[45] The gender pay gap indicator is now calculated as part of the Structure of Earnings Survey (SES) and replaces data which was based on non-harmonised sources (see Appendix 1). Data for 2007 for EU 27, Belgium, Bulgaria, Estonia, Greece, Spain, France, Italy, Malta, Finland and the United Kingdom are provisional.

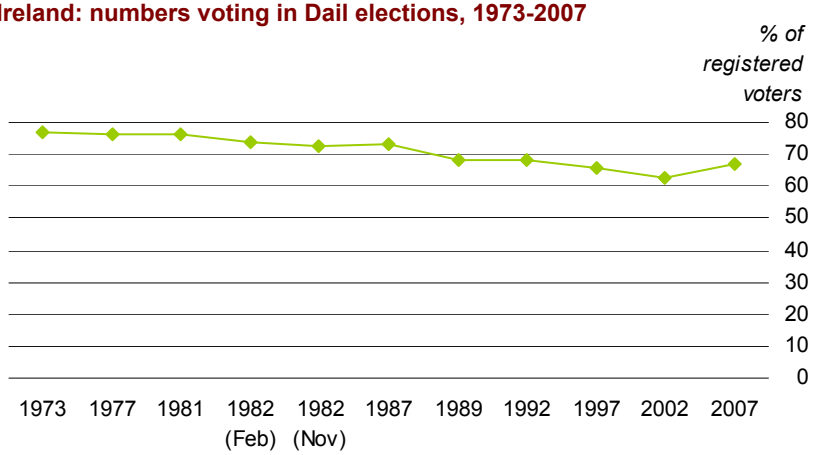
- The difference between average gross hourly earnings of male paid employees and of female paid employees as a percentage of average gross hourly earnings of male paid employees was 17% in both Ireland and the EU 27 in 2007 (see Table 4.8).
- Italy had the lowest gender pay gap in the EU in 2007 with a gap of 4% while Estonia had the highest at 30% (see Table 4.8).

4.9 Ireland: Numbers voting in Dáil elections, 1973–2007

Year of election	Registered voters (000's)	Votes recorded (000's)	% turnout
1973	1,783.6	1,366.5	76.6
1977	2,118.6	1,616.8	76.3
1981	2,275.5	1,734.4	76.2
1982 (Feb)	2,275.5	1,679.5	73.8
1982 (Nov)	2,335.2	1,701.4	72.9
1987	2,445.5	1,793.5	73.3
1989	2,448.8	1,677.6	68.5
1992	2,557.0	1,751.4	69.0
1997	2,741.3	1,806.9	65.9
2002	3,002.2	1,878.6	62.6
2007	3,110.9	2,085.2	67.0

Source: Department of the Environment, Heritage and Local Government

Ireland: numbers voting in Dail elections, 1973-2007



- Voter turnout at Dáil elections gradually declined from over 76% in the 1970s to less than 63% in 2002 before increasing to 67% in 2007. This general decline was mirrored across Europe where most EU 27 countries showed a decrease in voter turnout over the period 1983-2008 (see Tables 4.9 and 4.10).

- Ireland had a lower rate of turnout in the election of 2007 compared with many other national parliamentary elections across the EU in the period 2003-2008. The average turnout for EU 27 countries in that period was 69.7% (see Table 4.10). 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).

4.10 EU: Votes recorded at national parliamentary elections, 1983–2008

Country	1983-1988 (% of registered voters)	1993-1998	2003-2008
Malta	96.1	95.4	93.3
Luxembourg	88.8	88.3	91.7
Belgium	93.4	91.1	91.1
Cyprus	94.6	90.1	89.0
Denmark	85.7	85.9	86.6
Sweden	86.0	81.4	82.0
Austria	90.5	86.0	81.7
Italy	88.9	82.9	80.5
Netherlands	85.8	73.2	80.4
Germany	84.3	82.2	77.7
Spain	70.4	78.1	75.3
Greece	83.8	76.3	74.1
EU 27	**:**	**71.9**	**69.7**
Ireland	**73.3**	**65.9**	**67.0**
Finland	72.1	68.6	65.0
Czech Republic	:	74.0	64.5
Hungary	:	56.7	64.4
Portugal	72.6	66.3	64.3
Slovenia	:	73.7	63.1
Estonia	:	68.9	61.9
United Kingdom	75.4	71.5	61.4
Latvia	:	71.9	61.0
France	66.2	68.0	60.0
Romania	:	76.0	58.5
Bulgaria	:	58.9	55.8
Slovakia	:	84.2	54.7
Poland	:	47.9	53.9
Lithuania	:	52.9	48.6
Turkey	93.3	85.2	84.2
Iceland	90.1	87.4	83.6
Norway	84.0	78.3	77.4
Croatia	:	68.8	59.6
Macedonia, TFYR	:	50.5	58.0
Switzerland	47.5	42.2	48.3

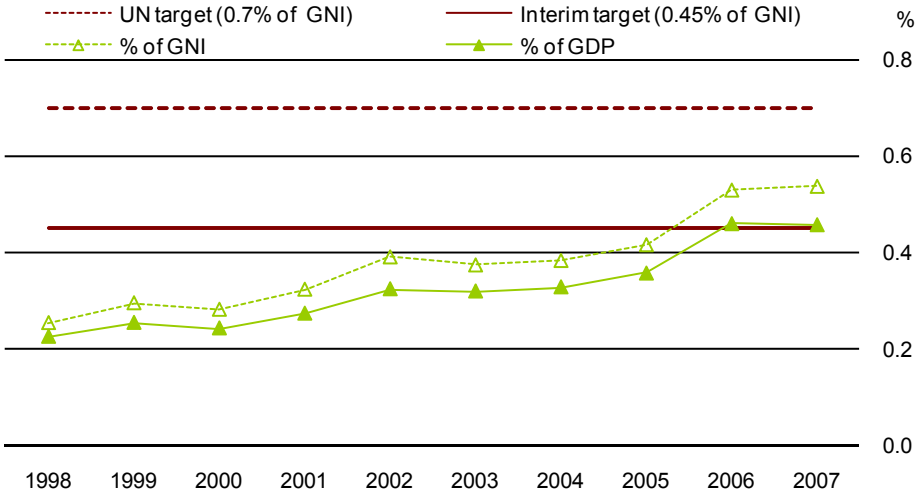
Source: International Institute for Democracy and Electoral Assistance

4.11 Ireland: Net official development assistance, 1998–2007

Year	€m Net ODA	% % of GNI at current market prices
1998	177.3	0.25
1999	230.3	0.30
2000	254.9	0.28
2001	320.1	0.32
2002	422.1	0.39
2003	445.7	0.37
2004	488.9	0.38
2005	578.5	0.42
2006	814.0	0.53
2007	870.9	0.54

Source: Irish Aid, Department of Foreign Affairs

Ireland: Net official development assistance, 1998-2007



4.12 EU: Net official development assistance, 2003–2007

% of GNI

Country	2003	2004	2005	2006	2007
Sweden	0.79	0.78	0.94	1.02	0.93
Luxembourg	0.86	0.79	0.79	0.90	0.91
Netherlands	0.80	0.73	0.82	0.81	0.81
Denmark	0.84	0.85	0.81	0.80	0.81
Ireland	**0.37**	**0.38**	**0.42**	**0.53**	**0.54**
Austria	0.20	0.23	0.52	0.47	0.50
Belgium	0.60	0.41	0.53	0.50	0.43
Finland	0.35	0.37	0.46	0.40	0.39
France	0.40	0.41	0.47	0.47	0.38
Spain	0.23	0.24	0.27	0.32	0.37
Germany	0.28	0.28	0.36	0.36	0.37
United Kingdom	0.34	0.36	0.47	0.51	0.36
Portugal	0.22	0.63	0.21	0.21	0.22
Italy	0.17	0.15	0.29	0.20	0.19
Greece	0.21	0.16	0.17	0.17	0.16
Norway	0.92	0.87	0.94	0.89	0.95
Switzerland	0.37	0.40	0.44	0.39	0.37

Source: OECD Development Co-operation Report

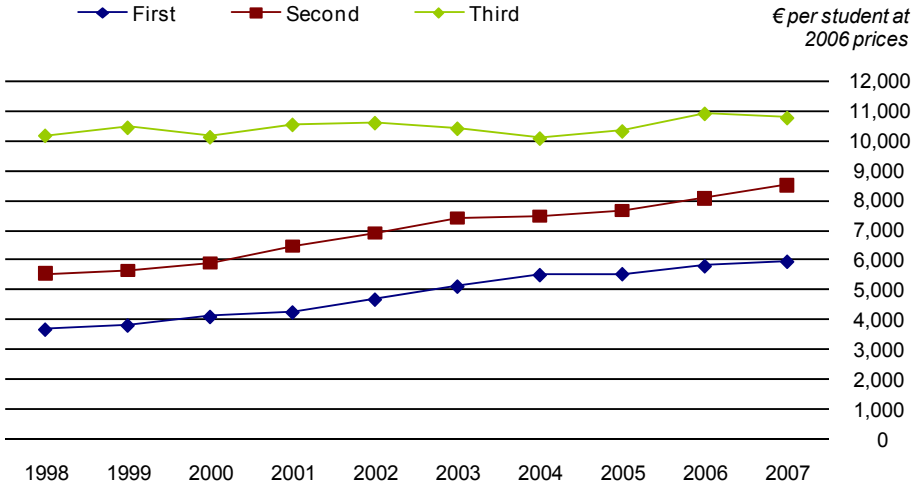
- The proportion of Irish GNI represented by net official development assistance increased from 0.25% in 1998 to 0.54% in 2007 (see Table 4.11).
- In 2007, the Irish contribution was above the 2002 interim Irish Government target of 0.45% of GNI but below the UN 2007 target of 0.7% (see Table 4.11 and Graph).
- Four EU countries (Sweden, Luxembourg, Netherlands and Denmark) and Norway exceeded the UN target in 2007 (see Table 4.12).

5.1 Ireland: Real non-capital public expenditure on education, 1998–2007

	€ per student at 2006 prices			*€m at 2006 prices*
	Level			
Year	First	Second[46]	Third[47]	Real non-capital public expenditure
1998	3,684	5,505	10,162	4,934
1999	3,820	5,605	10,425	5,055
2000	4,104	5,878	10,115	5,256
2001	4,253	6,440	10,522	5,551
2002	4,677	6,882	10,579	5,933
2003	5,108	7,387	10,394	6,323
2004	5,488	7,450	10,071	6,509
2005	5,519	7,647	10,305	6,624
2006	5,780	8,085	10,883	7,018
2007	5,930	8,531	10,745	7,333

Source: Department of Education and Science, CSO

Ireland: Real non-capital public expenditure on education, 1998-2007



- Real expenditure per student in Ireland increased by 61% and 55% for first and second level students respectively over the period 1998-2007. There was a small increase of 5.7% at third level over the same time period (see Table 5.1 and Appendix 1).

[46] Second level includes further education (e.g. post-Leaving Certificate programmes).
[47] Full-time equivalents. Incomplete data available in 2006/2007 for part-time third level students so average of 2005/2006 and 2007/2008 used as an estimate.

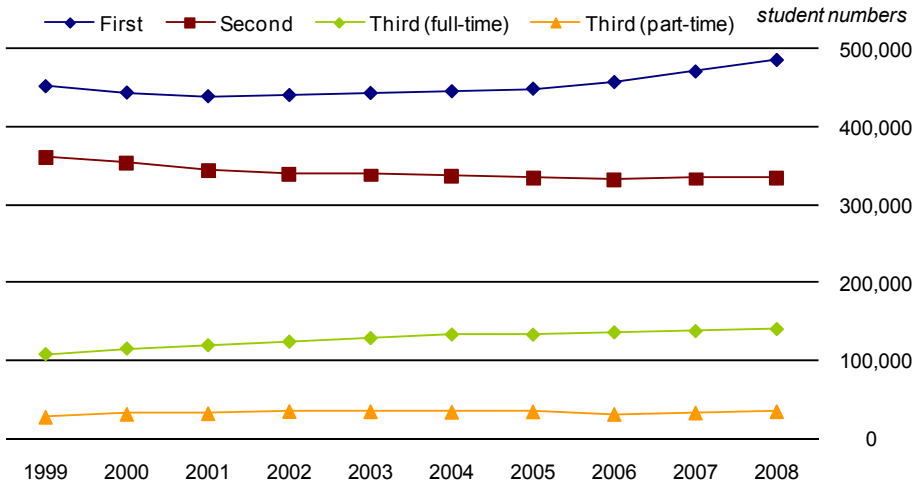
5.2 Ireland: Student numbers[48] by level, 1998–2008

number

	Level			
Year	First	Second[49]	Third (full-time)	Third (part-time)
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	31,354
2006/2007	471,519	333,718	138,362	33,044
2007/2008	486,444	335,123	140,964	34,733

Source: Department of Education and Science

Ireland: Student numbers[49] by level, 1998-2008



- The contrasting trends in real expenditure per student are partly explained by the trend in student numbers. Numbers increased by 7.5% at first level and decreased by 7.4% at second level between 1998/1999 and 2007/2008. However, over the same period, the number of full-time third level students increased by nearly 30% (see Table 5.2).

[48] 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[49], 2004–2006

		% of GDP		per pupil/student in €PPS
Country	**2004**	**2005**	**2006**	**2006**
Denmark	8.4	8.3	8.0	8,330
Cyprus	6.7	6.9	7.0	7,101
Sweden	7.2	7.0	6.9	7,411
Finland	6.4	6.3	6.1	6,389
Belgium	6.0	6.0	6.0	7,013
Slovenia	5.8	5.7	5.7	6,323
Ireland (GNI)	**5.5**	**5.5**	**5.6**	**6,740**
France	5.8	5.7	5.6	6,510
United Kingdom	5.2	5.4	5.5	7,937
Netherlands	5.5	5.5	5.5	7,477
Austria	5.5	5.5	5.4	8,583
Hungary	5.4	5.5	5.4	4,008
Poland	5.4	5.5	5.3	3,062
Portugal	5.3	5.4	5.3	5,007
Latvia	5.1	5.1	5.1	3,126
EU 27	**5.1**	**5.0**	**5.1**	**5,970**
Ireland (GDP)	**4.7**	**4.8**	**4.9**	**6,740**
Lithuania	5.2	4.9	4.8	2,761
Estonia	4.9	4.9	4.8	3,217
Italy	4.6	4.4	4.7	6,465
Czech Republic	4.4	4.3	4.6	4,442
Germany	4.6	4.5	4.4	6,481
Spain	4.3	4.2	4.3	6,141
Bulgaria	4.5	4.5	4.2	2,139
Slovakia	4.2	3.9	3.8	2,940
Luxembourg	3.9	3.8	3.4	:
Greece	3.8	4.0	:	4,485
Malta	4.8	6.8	:	5,914
Romania	3.3	3.5	:	1,438
Iceland	7.5	7.6	7.6	7,966
Norway	7.5	7.0	6.6	9,290
Croatia	3.9	4.0	4.1	:
Turkey	3.1	:	2.9	:

Source: Eurostat

- Public expenditure on education in Ireland as a percentage of both GNI and GDP increased between 2004 and 2006. In terms of GNI, Ireland was above the EU 27 level over this time period.
- When expenditure is examined per pupil/student in Purchasing Power Standards (PPS), Ireland was also above the EU 27 average in 2006, with the eighth highest expenditure in the EU (see Table 5.3).

[49] For all levels of education combined, based on full-time equivalents. EU 27 figures are Eurostat estimates. 2005 data used for Greece, Malta and Romania for public expenditure on education per pupil/student in €PPS. See Appendix 1 for details of PPS.

5.4 EU: Ratio of students to teachers, 2005/2006[50]

ratio

Country	ISCED 1-3	ISCED 1	ISCED 2	ISCED 3
Hungary	10.9	10.4	10.2	12.3
Greece	9.2	10.6	8.0	8.3
Portugal	9.1	10.6	8.3	7.5
Italy	10.7	10.7	10.3	11.0
Lithuania	9.0	10.7	8.5	:
Luxembourg	9.8	10.7	:	9.0
Poland	12.1	11.4	12.6	12.7
Latvia	11.2	11.8	10.5	11.7
Sweden	12.4	12.1	11.4	13.8
Belgium	10.9	12.6	9.4	10.2
Malta	11.5	13.7	9.3	14.3
Austria	11.7	13.9	10.4	11.3
Estonia	13.3	14.1	12.3	13.3
Spain	12.0	14.2	12.5	7.8
Slovenia	12.9	14.9	10.2	14.0
Finland	13.7	15.0	9.7	15.8
Netherlands	15.5	15.3	:	15.8
Bulgaria	12.9	15.8	12.3	11.7
Cyprus	14.0	16.8	11.6	12.7
Romania	14.7	17.1	12.2	15.7
Czech Republic	13.4	17.3	12.3	11.9
Slovakia	14.9	18.6	13.7	14.2
Germany	17.2	18.7	15.5	19.5
Ireland	**16.9**	**19.4**	**:**	**14.6**
France	14.3	19.4	14.2	10.3
United Kingdom	15.6	19.8	16.7	11.4
Denmark	11.4	:	11.4	:
Norway	10.4	10.9	10.2	9.7
Croatia	13.7	17.7	12.8	11.8
Turkey	23.2	26.7	-	15.8
Macedonia, TFYR	16.5	:	:	17.3
Iceland	10.7	:	10.6	10.8

Source: Eurostat, Department of Education and Science

- Ireland had a student to teacher ratio of 19.4 at primary education level (ISCED 1) in 2005/2006. This was the joint second highest reported ratio in the EU, after the United Kingdom. The overall student to teacher ratio for first and second level education for Ireland in 2005/2006 was 16.9, which was the second highest ratio in the EU (see Table 5.4).

[50] ISCED 3 data for Ireland includes ISCED 2. 2005 data used for France, 2004 data used for Luxembourg.

5.5 EU: Average class size at ISCED levels 1 and 2, 2005/2006

number

Country	ISCED 1	ISCED 2
Latvia	14.8	18.0
Lithuania	14.8	21.7
Luxembourg	15.8	19.8
Romania	18.1	20.2
Slovenia	18.1	20.5
Italy	18.4	21.0
Greece	18.9	21.8
Portugal	19.0	22.7
Estonia	19.3	23.1
Denmark	19.5	20.1
Austria	19.7	23.9
Slovakia	19.7	22.8
Hungary	20.0	21.4
Bulgaria	20.1	21.6
Poland	20.1	24.7
Czech Republic	20.2	23.3
Cyprus	20.3	23.1
Spain	20.7	24.7
Malta	21.7	22.6
Germany	22.1	24.7
Netherlands	22.4	:
France	22.5	24.3
Ireland	**24.5**	**20.1**
United Kingdom	24.5	22.4
Iceland	18.2	19.7
Switzerland	19.4	19.1
Croatia	19.8	22.4
Macedonia, TFYR	20.4	22.9
Turkey	27.2	:

Source: Eurostat, Department of Education and Science

- In 2005/2006, the average class size in Ireland for primary education was 24.5 which was the joint highest among reporting EU 27 countries. However, at ISCED 2 level (lower secondary) Ireland had the joint third lowest ratio (see Table 5.5).

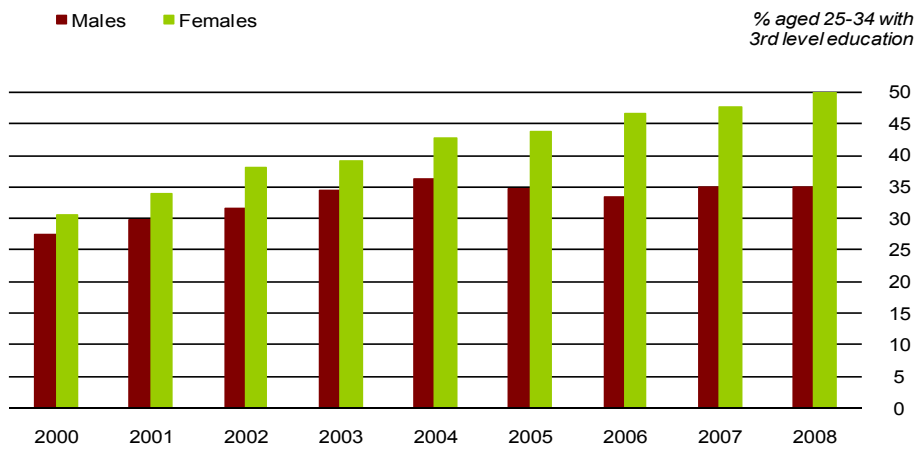
5.6 Ireland: Persons aged 25–34 with 3rd level[51] education, 2000–2008

% of population aged 25-34

Year	Persons	Males	Females
2000	29.0	27.5	30.5
2001	31.9	29.8	34.0
2002	34.8	31.5	38.0
2003	36.8	34.4	39.2
2004	39.5	36.2	42.8
2005	39.2	34.8	43.7
2006	40.0	33.4	46.8
2007	41.3	35.1	47.7
2008	42.3	34.9	49.9

Source: CSO QNHS

Ireland: Persons aged 25-34 with 3rd level[50] education, 2000-2008



- Over the period 2000-2008, the proportion of females aged 25-34 in Ireland with 3rd level education rose from 30.5% in 2000 to 49.9% in 2008. Over the same period, the rate for males increased from 27.5% to 36.2% in 2004 before falling back to 33.4% in 2006 and then increasing to 34.9% in 2008 (see Table 5.6). The widening gap reflects the increasing tendency for females to remain in education for longer than males.

- In 2008, 42.3% of the population aged 25-34 in Ireland had 3rd level education, which was the joint second highest in the EU 27 compared with 30.3% across the EU 27 as a whole (see Table 5.7).

[51] ISCED 97 levels 5-6.

5.7 EU: Persons aged 25–34 with 3rd level education by sex, 2008[52]

% of population aged 25-34

Country	Persons	Males	Females	Sex difference
Cyprus	47.5	40.5	54.5	-13.9
Ireland	**42.3**	**34.9**	**49.9**	**-15.0**
Belgium	42.3	36.2	48.6	-12.4
Lithuania	41.6	33.8	49.5	-15.8
Denmark	41.4	37.2	45.8	-8.6
Sweden	40.3	35.0	45.9	-10.9
France	38.7	34.3	43.1	-8.8
Finland	38.7	29.1	48.8	-19.7
Netherlands	38.6	35.8	41.4	-5.6
Spain	38.6	34.0	43.5	-9.5
United Kingdom	38.0	36.2	39.9	-3.6
Luxembourg	37.8	34.2	41.4	-7.2
Estonia	35.7	29.7	41.8	-12.1
Poland	31.2	24.6	38.1	-13.4
EU 27	**30.3**	**26.5**	**34.2**	**-7.7**
Slovenia	29.3	21.7	37.7	-16.0
Latvia	28.7	20.9	36.8	-15.9
Greece	26.3	22.4	30.4	-8.0
Germany	23.7	22.6	24.7	-2.2
Hungary	23.2	18.8	27.7	-8.8
Portugal	23.2	16.8	29.7	-12.9
Malta	23.1	21.8	24.4	-2.6
Bulgaria	21.5	16.4	26.8	-10.5
Italy	19.8	15.3	24.4	-9.0
Austria	19.2	18.3	20.1	-1.7
Romania	18.7	17.1	20.4	-3.2
Slovakia	18.3	15.8	21.0	-5.3
Czech Republic	17.6	15.7	19.6	-3.9
Norway	43.6	35.7	51.8	-16.0
Switzerland	35.0	39.7	30.3	9.4
Turkey	14.3	16.0	12.5	3.6
Croatia	12.8	9.0	16.8	-7.8

Source: Eurostat LFS

[52] Data refers to Quarter 2 2008. 2007 population data used for UK and 2007 data used for Croatia and Switzerland.

5.8 Ireland: Student performance on the combined reading, mathematical and scientific literacy scales by sex, 2006

Mean score of 15 year old students

	Ireland		All OECD countries	
Literacy type	**Males**	**Females**	**Males**	**Females**
Combined reading	500	534	473	511
Mathematical	507	496	503	492
Scientific	508	509	501	499

Source: OECD, Educational Research Centre

- Girls in Ireland performed much better than boys in reading literacy tests in 2006 with an average score of 534 for females compared with 500 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 2006 (see Table 5.9).
- Boys in Ireland performed better than girls in mathematical literacy, reflecting a similar trend across OECD countries (see Table 5.8 and Appendix 1).
- There was no significant difference in the overall science measure but gender differences were observed in some sub domains, with an average score for males of 508 and 509 for females. Ireland was 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, 2006

Country	Reading literacy	Mathematical literacy	Scientific literacy
Finland	547	548	563
Ireland	**517**	**501**	**508**
Poland	508	495	498
Sweden	507	502	503
Netherlands	507	531	525
Belgium	501	520	510
Estonia	501	515	531
United Kingdom	495	495	515
Germany	495	504	516
Denmark	494	513	496
Slovenia	494	504	519
OECD average	**492**	**498**	**500**
Austria	490	505	511
France	488	496	495
Czech Republic	483	510	513
Hungary	482	491	504
Latvia	479	486	490
Luxembourg	479	490	486
Portugal	472	466	474
Lithuania	470	486	488
Italy	469	462	475
Slovak Republic	466	492	488
Spain	461	480	488
Greece	460	459	473
Bulgaria	402	413	434
Romania	396	415	418
Switzerland	499	530	512
Iceland	484	506	491
Norway	484	490	487
Croatia	477	467	493
Turkey	447	424	424

Source: OECD, Educational Research Centre

5.10 Ireland: Early school leavers[53] by labour force status and sex, 2008

000s

Labour force status	Persons	Males	Females
In employment	30.7	21.9	8.9
Unemployed	10.4	8.3	2.1
Unemployment rate of persons aged 18-24 (%)	10.3	12.7	7.5
Unemployment rate of early school leavers (%)	25.3	27.5	19.1

Source: CSO QNHS

5.11 Ireland: Proportion of the population aged 20–64 with at least upper secondary education, 2008

% of age group

Age group	Persons	Males	Females
20-24	88.6	85.1	92.0
25-34	85.4	82.3	88.6
35-44	75.4	71.5	79.3
45-54	62.7	58.8	66.6
55-64	45.2	43.1	47.3

Source: CSO QNHS

- The unemployment rate for persons in Ireland aged 18-24 with, at most, lower secondary education was 25.3% in 2008, compared with 10.3% for that age group overall (see Table 5.10).
- More than 88% of persons aged 20-24 in 2008 had completed second level education or higher. This figure decreased for older age groups down to 45.2% 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 11.5% in 2007. The EU 27 average rate was 15.2% (see Table 5.12).

[53] Persons aged 18-24 with, at most, lower secondary education and not in further education or training. Data refer to Quarter 2 2008.

5.12 EU: Early school leavers[53,54], 2007

% of population aged 18-24

Country	Persons	Males	Females
Slovenia	4.3	5.7	2.7
Poland	5.0	6.4	3.6
Czech Republic	5.5	5.7	5.4
Slovakia	7.2	8.1	6.3
Finland	7.9	9.7	6.3
Sweden	8.6	10.2	7.0
Lithuania	8.7	11.4	5.9
Hungary	10.9	12.5	9.3
Austria	10.9	11.6	10.2
Ireland	**11.5**	**14.2**	**8.7**
Netherlands	12.0	14.4	9.6
Belgium	12.3	13.9	10.7
Denmark	12.4	15.7	8.9
Cyprus	12.6	19.5	6.8
Germany	12.7	13.4	11.9
France	12.7	14.6	10.9
Estonia	14.3	21.0	:
Greece	14.7	18.6	10.7
Luxembourg	15.1	19.2	11.1
EU 27	**15.2**	**17.2**	**13.2**
Latvia	16.0	19.7	12.3
Bulgaria	16.6	16.3	16.9
United Kingdom	17.0	18.2	15.8
Romania	19.2	19.2	19.1
Italy	19.3	22.6	15.9
Spain	31.0	36.1	25.6
Portugal	36.3	42.0	30.4
Malta	37.3	41.1	32.9
Croatia	3.9	5.2	:
Switzerland	7.6	8.5	6.7
Norway	21.4	24.3	18.6
Iceland	24.5	27.3	21.5
Turkey	47.6	39.4	55.0

Source: Eurostat LFS

[54] Data for Slovenia and Croatia and data for females in Estonia, Lithuania and Luxembourg are unreliable. Data for Latvia and Portugal are provisional. 2006 data used for Czech Republic.

6.1 Ireland: Non–capital public expenditure on health care, 1997–2006

Year	Non-capital public expenditure			
	Total (€m)	% of GNI	% of GDP	Per capita at constant 2005 prices (€)
1997	3,504	5.8	5.1	1,551
1998	3,886	5.6	4.9	1,638
1999	4,647	6.0	5.1	1,831
2000	5,423	6.0	5.2	1,988
2001	6,802	6.9	5.8	2,293
2002	7,933	7.3	6.1	2,458
2003	8,853	7.4	6.4	2,539
2004	9,653	7.6	6.5	2,512
2005	10,578	7.7	6.5	2,561
2006	11,742	7.8	6.7	2,673

Source: Department of Health and Children, CSO

- Non-capital public expenditure on health care in Ireland as a proportion of GNI rose from 5.8% in 1997 to 7.8% in 2006 (see Table 6.1).
- An average of €2,673 (at constant 2005 prices) per person was spent on non-capital public expenditure on health care in Ireland in 2006. This represented an increase of over 72% on the 1997 level (see Table 6.1 and Appendix 1).
- Ireland's expenditure on public and private health was 7.5% of GDP and 8.6% of GNI in 2006. The EU 27 average was 8.9% of GDP in 2006 while three countries had expenditures in excess of 10% of GDP (see Table 6.2).

6.2 EU: Total expenditure[55] on health as percentage of GDP, 2004–2006

	% of GDP			*PPS $ per capita*
Country	**2004**	**2005**	**2006**	**2005**
France	11.0	11.2	11.1	3,406
Germany	10.6	10.7	10.4	3,250
Portugal	10.0	10.2	10.0	2,034
Austria	10.3	10.2	9.9	3,485
Greece	9.6	10.1	9.9	2,949
Belgium	9.7	9.6	9.5	3,071
Denmark	9.4	9.4	9.5	3,169
Netherlands	9.0	9.2	9.3	3,187
Italy	8.7	8.9	9.0	2,494
EU 27	**8.7**	**8.8**	**8.9**	**2,468**
Sweden	9.2	9.2	8.9	3,012
Ireland (% of GNI)	**8.8**	**9.6**	**8.6**	**3,125**
Slovenia	8.5	8.5	8.4	1,959
United Kingdom	8.0	8.2	8.4	2,598
Malta	8.2	8.4	8.3	1,733
Spain	8.1	8.2	8.1	2,242
Finland	7.4	7.5	7.6	2,299
Hungary	8.1	7.8	7.6	1,329
Ireland (% of GDP)	**7.5**	**8.2**	**7.5**	**3,125**
Luxembourg	8.1	7.7	7.2	5,521
Slovakia	7.2	7.1	7.0	1,130
Bulgaria	7.5	7.7	6.9	734
Czech Republic	7.2	7.1	6.8	1,447
Cyprus	6.3	6.1	6.3	1,550
Lithuania	5.7	5.9	6.2	862
Poland	6.2	6.2	6.2	844
Latvia	6.8	6.4	6.0	860
Romania	4.9	5.5	5.7	507
Estonia	5.2	5	5	846
Switzerland	11.4	11.4	11.3	4,088
Iceland	9.9	9.4	9.3	3,354
Norway	9.7	9.1	8.7	4,331
Macedonia, TFYR	8.0	7.8	8.2	569
Croatia	7.7	7.4	7.5	1,001
Turkey	5.9	5.7	5.6	592

Source: WHO Health for All Databases

[55] Public and private. See Appendix 1 for details of PPS.

6.3 Ireland: Life expectancy at birth and at age 65 by sex, 1925–2007

years

	At birth		At 65 years	
Period	**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
2005-2007	76.8	81.6	16.6	19.8

Source: CSO Vital Statistics

- Life expectancy at birth in Ireland increased from under 58 years in 1925-1927 to 76.8 years for males and 81.6 years for females in 2005-2007. Over the same period, there was an increase of 3.8 years in the life expectancy of men aged 65 compared with an increase of 6.4 years in the life expectancy of older women (see Table 6.3).
- In 2007, life expectancy at birth for males in Ireland was 1 year higher than the 2006 EU 27 average of 75.8 years, while that of females was 0.4 years lower than the 2006 EU 27 average of 82 years (see Table 6.4 and footnote).
- Life expectancy at birth in 2007 for females was highest in France at 84.4 years, and for males was highest in Sweden at 78.9 years (see Table 6.4).
- The difference between life expectancy at birth for men and women was lowest in Sweden and the United Kingdom at 4.1 years and highest in Lithuania at 12.3 years. The corresponding difference for Ireland was 4.8 years (see Table 6.4).

6.4 EU: Life expectancy at birth by sex, 2007[56]

years

Country	**Males**	**Females**	**Sex difference**
France	77.5	84.4	6.9
Spain	77.7	84.1	6.4
Italy	78.4	83.8	5.4
Belgium	77.3	83.3	6.1
Sweden	78.9	83.0	4.1
Austria	77.3	82.9	5.5
Finland	75.8	82.9	7.0
Luxembourg	77.6	82.7	5.1
Netherlands	78.0	82.3	4.3
Slovenia	75.0	82.3	7.3
Germany	76.9	82.3	5.4
EU 27	**75.8**	**82.0**	**6.2**
Greece	77.0	82.0	5.0
Malta	77.2	81.8	4.5
Cyprus	77.0	81.7	4.7
United Kingdom	77.6	81.7	4.1
Ireland	**76.8**	**81.6**	**4.8**
Portugal	75.2	81.6	6.4
Denmark	76.0	80.5	4.5
Czech Republic	73.7	79.9	6.2
Poland	71.0	79.7	8.8
Estonia	67.4	78.5	11.1
Slovakia	70.5	78.1	7.6
Hungary	69.2	77.3	8.2
Lithuania	64.9	77.2	12.3
Latvia	65.8	76.5	10.7
Bulgaria	69.2	76.3	7.1
Romania	69.2	76.1	7.0
Switzerland	79.4	84.2	4.8
Iceland	79.4	82.9	3.5
Norway	78.2	82.7	4.4
Croatia	72.3	79.2	6.9
Macedonia, TFYR	71.1	75.9	4.8

Source: Eurostat

[56] 2004 data for Cyprus. EU 27 data is for life expectancy at age less than 1 year and is for year 2006.

7.1 Ireland: Population distribution by age group, 1999–2008

					%	000 persons
Year	0-14	15-24	25-44	45-64	65 and over	Total
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	16.0	30.4	21.5	11.1	3,979.9
2004	20.9	15.7	30.7	21.7	11.1	4,045.2
2005	20.6	15.3	31.1	21.8	11.1	4,133.8
2006	20.4	15.1	31.7	21.8	10.9	4,239.8
2007	20.4	14.6	32.3	21.9	10.8	4,339.0
2008	20.6	14.0	32.5	22.0	10.9	4,422.1

Source: CSO Population and Migration Estimates[57]

7.2 Ireland: Household composition, 1999–2008

				000 households	Persons
Year	Total households	1 person households	2 person households	3 or more person households	Average household size
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	1,345.6	297.4	348.2	700.1	2.91
2003	1,387.9	305.8	372.0	710.0	2.87
2004	1,411.0	298.3	387.2	725.5	2.87
2005	1,459.4	315.6	400.5	743.2	2.83
2006	1,489.0	321.6	412.1	755.4	2.84
2007	1,534.3	327.0	432.1	775.3	2.83
2008	1,586.0	338.3	463.9	783.8	2.79

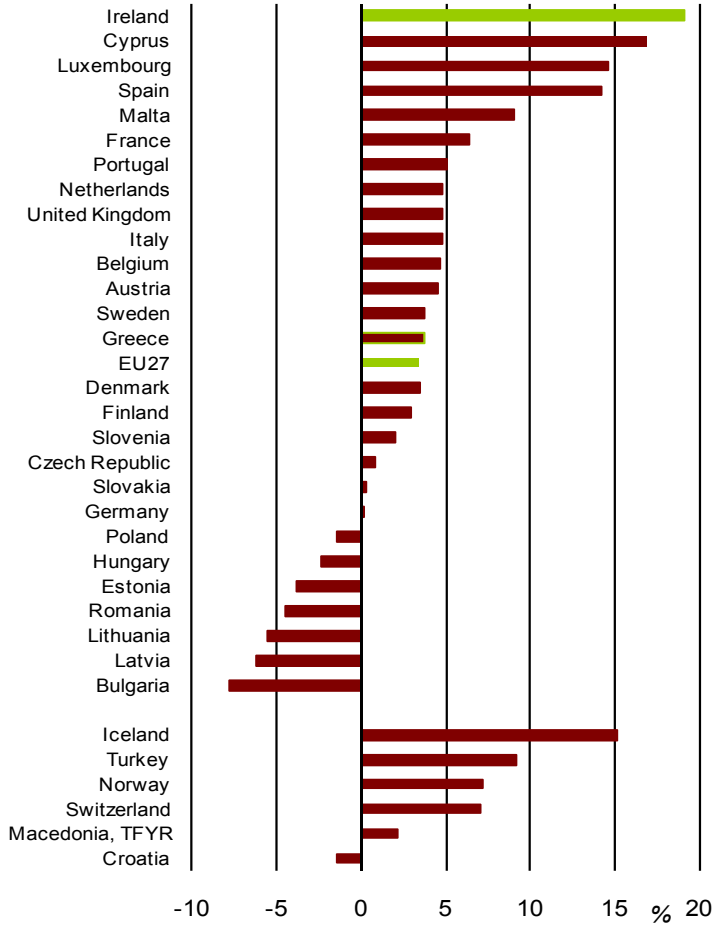
Source: CSO QNHS[58]

- The population increased by 18.2% to over 4.42 million persons over the period 1999-2008. The proportion of the population aged 25-64 increased from 49.4% in 1999 to 54.5% in 2008. Conversely, there was a decrease in the 0-24 age group from 39.4% in 1999 to 34.6% of the population in 2008 (see Table 7.1).

[57] Persons in April of each year. Population figures are on a de-facto basis prior to 2006. Figures from 2006 onwards are on a usual residence basis. The difference between the two concepts is very small. Figures for 2007 and 2008 are preliminary.

[58] QNHS Quarter 2 (March-May, 1999-2008).

7.3 EU: Population change, 1998–2008[59]



Source: Eurostat

- In Ireland, average household size decreased from 2.98 persons in 1999 to 2.79 persons in 2008. The growth in 2 person households at 52.5% over the same period was almost double the growth in the total number of households at 26.5%. (see Table 7.2).

- Ireland had the highest percentage increase in population between 1998 and 2008 in the EU 27 while seven EU countries (all recent member states) experienced population decline over the same period (see graph 7.3).

[59] Population on the 1st January of specific year.

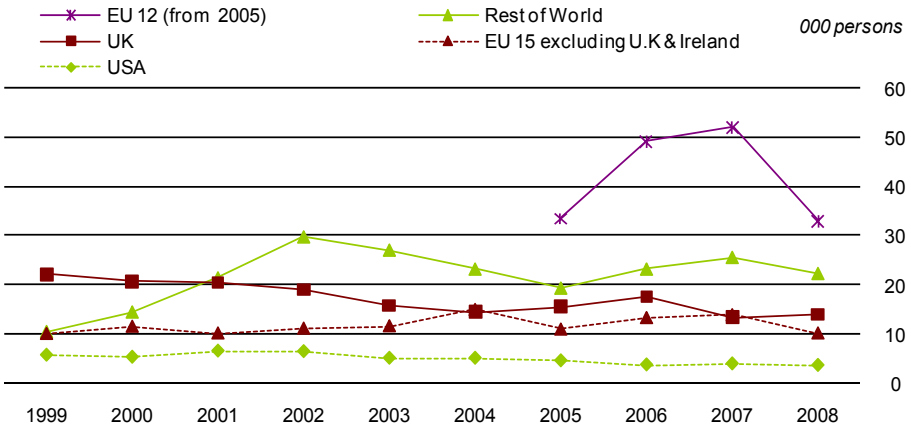
7.4 Ireland: Migration and natural increase, 1999–2008

000 persons

Year	Inward migration	Outward migration	Net migration	Natural increase	Population change
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	60.0	29.3	30.7	31.9	62.6
2004	58.5	26.5	32.0	33.3	65.3
2005	84.6	29.4	55.1	33.5	88.6
2006	107.8	36.0	71.8	34.2	106.0
2007	109.5	42.2	67.3	38.8	106.1
2008	83.8	45.3	38.5	44.6	83.1

Source: CSO Population and Migration Estimates

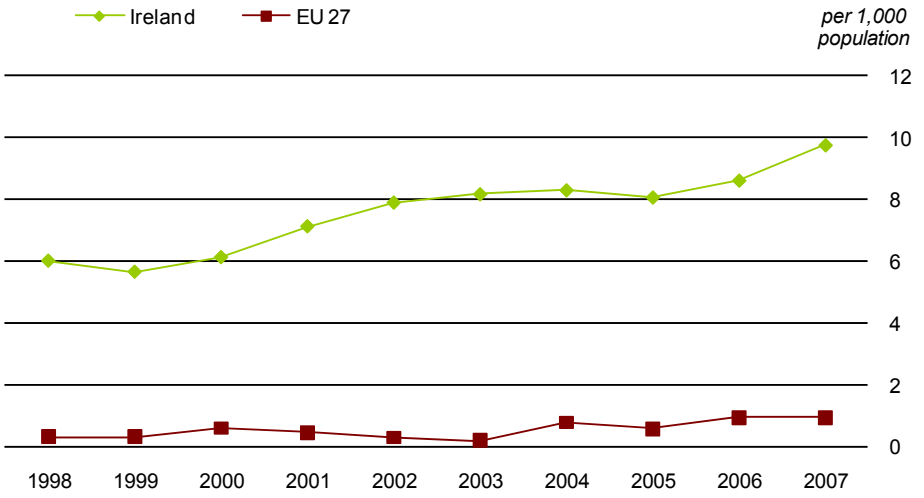
7.5 Ireland: Immigration by country of origin[60], 1999–2008



Source: CSO Population and Migration Estimates

[60] Immigration in the 12 months up to April of each year. 2007 and 2008 data are preliminary. Rest of EU 15 are those countries who were EU member states before enlargement on 1st May 2004; Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Luxembourg, Netherlands, Spain, Sweden, Portugal. EU 12 are the 10 accession countries who joined the EU on the 1st May 2004; Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia, and includes the 2 new accession states who joined the EU on the 1st January 2007, Bulgaria and Romania. For the years to 2004 inclusive the data relating to the EU 12 countries are included with the Rest of the World.

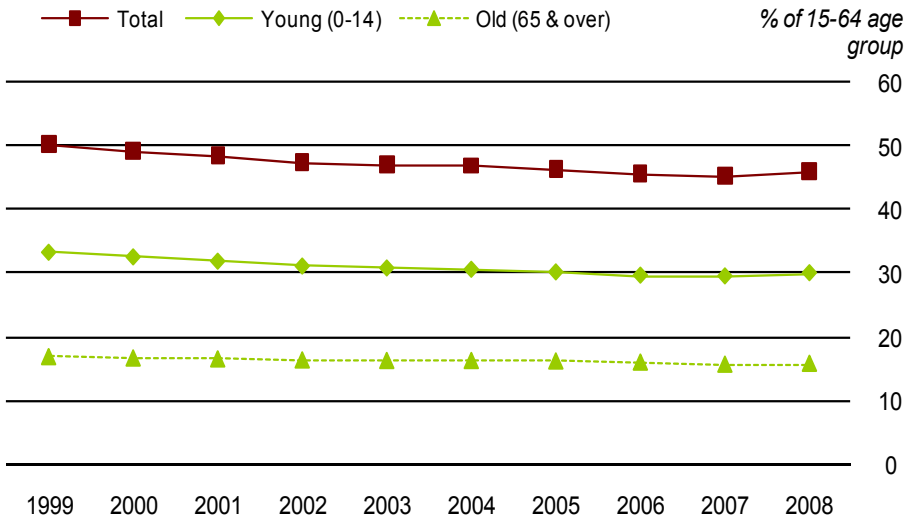
7.6 Ireland and EU: Rate of natural increase of population, 1998–2007



Source: Eurostat

- There was net migration into Ireland in each year in the period 1999-2008. The level of net inward migration increased from 17,300 in 1999 to 71,800 in 2006 before decreasing to 38,500 in 2008 (see Table 7.4).
- Annual inward migration (or immigration) rose sharply from 48,900 persons in 1999 to peak at 109,500 in 2007 before falling back to 83,800 persons in 2008 (see Table 7.4).
- The level of annual outward migration (or emigration) from Ireland increased from 31,500 persons in 1999 to 45,300 persons in 2008 (see Table 7.4).
- In 2005 about 33,700 persons moved to Ireland from the 12 new EU countries, rising to 52,100 in 2007 and then falling back to 33,100 in 2008. Around 14,100 persons moved to Ireland from the UK in 2008 (see Graph 7.5).
- The rate of natural increase of the population in Ireland was 9.8 per 1,000 population in 2007 compared with an average of 1.0 per 1,000 in the EU 27. The EU 27 rate was consistently below 1.0 over the 1998-2005 period before rising to 1.0 in 2006, whereas the rate for Ireland increased from 6.0 per 1,000 in 1998 (see Table 7.4 and Graph 7.6).

7.7 Ireland: Age dependency ratio, 1999–2008[61]



Source: CSO Population and Migration Estimates

- Expressed as a percentage of those aged 15-64, Ireland had the highest proportion of persons aged under 15 in the EU 27 (30%) and the lowest proportion of persons aged 65 and over (15.9%) in 2008 (see Table 7.8).
- This resulted in a combined age dependency ratio of 45.9% in Ireland in 2008 which was similar to the average for other EU 27 member states although markedly different in composition (see Table 7.8).
- Italy and Germany had far higher proportions of their population in the 65 and over category (around 30%) in comparison with the 0-14 age group (around 21%). For the EU 27 as a whole, these categories were broadly in balance (see Table 7.8).
- In 2008 France had the highest combined age dependency ratio in the EU at 53.4 while Slovakia had the lowest at 38.4.

[61] Intercensal years data describe estimated persons in April of each year. Data for 1998 to 2005 refer to the de facto population, figures for 2006 to 2008 describe the usually resident population. See Appendix 1 - Domain 7.

7.8 EU: Young and old as proportion of population aged 15–64, 2008[62]

% of population aged 15-64

Country	Young and old	Young (0-14)	Old (65 & over)
Ireland	**45.9**	**30.0**	**15.9**
France	53.4	28.4	25.0
Denmark	51.6	28.0	23.6
Luxembourg	47.4	26.8	20.6
Netherlands	48.4	26.6	21.8
United Kingdom	50.6	26.5	24.1
Belgium	51.4	25.6	25.8
Sweden	52.3	25.6	26.7
Finland	50.1	25.3	24.8
Cyprus	42.7	24.9	17.8
EU 27	**48.7**	**23.5**	**25.2**
Malta	43.0	23.2	19.8
Portugal	48.7	22.8	25.9
Austria	48.1	22.7	25.4
Lithuania	45.3	22.3	23.0
Estonia	47.1	21.8	25.3
Hungary	45.3	21.8	23.5
Poland	40.7	21.8	18.9
Romania	43.1	21.8	21.3
Slovakia	38.4	21.8	16.6
Greece	49.1	21.3	27.8
Spain	45.4	21.3	24.1
Italy	51.7	21.3	30.4
Germany	51.1	20.7	30.4
Czech Republic	40.5	20.0	20.5
Latvia	44.8	19.9	24.9
Slovenia	42.9	19.8	23.1
Bulgaria	44.3	19.3	25.0
Turkey	52.3	42.2	10.1
Norway	51.0	28.9	22.1
Macedonia, TFYR	42.5	26.3	16.2
Croatia	48.6	23.0	25.6
Switzerland	46.9	22.8	24.1

Source: Eurostat

[62] Data refers to estimated situation as of 1st January. 2007 data used for EU 27, United Kingdom and Turkey.

7.9 Ireland and EU: Total fertility rate[63], 1998–2007

Projected number of children a woman will have

Year	EU 27	Ireland
1998	1.43	1.95
1999	1.42	1.91
2000	1.48	1.90
2001	1.46	1.96
2002	1.45	1.98
2003	1.47	1.98
2004	1.49	1.95
2005	1.50	1.88
2006	1.53	1.90
2007	:	2.03

Source: Eurostat, CSO Vital Statistics

- The total fertility rate in Ireland fell from 1.95 in 1998 to 1.9 by 2000 and rose over the next few years to reach 1.98 by 2003. In recent years the rate decreased again to 1.88 in 2005. It increased in 2007 to stand at 2.03 which is very close to the replacement level of 2.1 (see Table 7.9).
- For the EU 27 as a whole, the total fertility rate was significantly lower in the range 1.42 to 1.53 (see Table 7.9).
- Ireland had the highest reported fertility rate in the EU 27 in 2007, while Slovakia had the lowest rate. Iceland had the highest rate of all the countries with a fertility rate of 2.08 (see Table 7.10).
- The new member states, together with the Mediterranean countries, tended to have the lowest fertility rates (see Table 7.10).

[63] EU 25 data for years 1998 to 2001. EU 25 data for 2000 and 2001 are provisional. EU 27 data for 2002 to 2006 are estimates. Data for Ireland for 2006 and 2007 are provisional.

7.10 EU: Total fertility rate[64], 1997–2007

Projected number of children a woman will have

Country	1997	2002	2007
Ireland	**1.94**	**1.98**	**2.03**
France	1.78	1.88	1.98
Sweden	1.52	1.65	1.88
Denmark	1.76	1.72	1.84
United Kingdom	1.72	1.64	1.84
Finland	1.75	1.72	1.83
Netherlands	1.56	1.73	1.72
Estonia	1.32	1.37	1.63
Luxembourg	1.72	1.63	1.61
EU 27	**1.44**	**1.45**	**1.53**
Czech Republic	1.17	1.17	1.44
Bulgaria	1.09	1.21	1.42
Greece	1.28	1.27	1.41
Latvia	1.14	1.23	1.41
Spain	1.17	1.26	1.40
Austria	1.39	1.39	1.38
Cyprus	1.86	1.49	1.38
Slovenia	1.25	1.21	1.38
Germany	1.37	1.34	1.37
Malta	:	1.45	1.37
Italy	1.21	1.27	1.35
Lithuania	1.47	1.24	1.35
Portugal	1.47	1.47	1.33
Hungary	1.37	1.30	1.32
Poland	1.52	1.25	1.31
Romania	1.40	1.25	1.30
Slovakia	1.43	1.19	1.25
Belgium	1.60	:	:
Iceland	2.04	1.93	2.08
Norway	1.86	1.75	1.90
Macedonia, TFYR	1.93	1.80	1.46
Switzerland	1.48	1.39	1.43
Croatia	:	1.32	1.38

Source: Eurostat

[64] 2006 data used for 2007 for EU 27, Italy, United Kingdom, Norway, Macedonia, TFYR, Switzerland, Croatia and Iceland. 1998 data used for 1997 for France and 2003 data used for 2002 for Croatia.

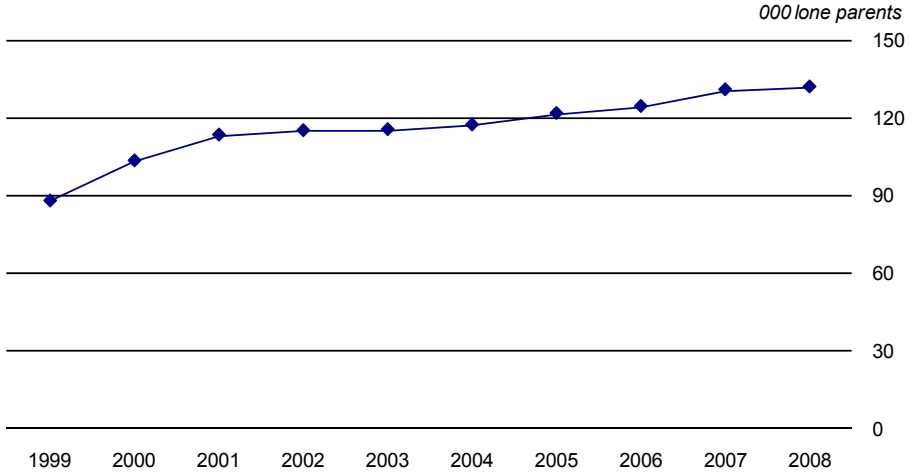
7.11 Ireland: Lone parent families with children aged under 20 by sex of parent[65], 1999–2008

000 families

Year	Male	Female	Total
1999	9.9	78.1	88.0
2000	10.3	93.0	103.4
2001	10.5	102.9	113.3
2002	11.7	103.3	115.0
2003	10.1	105.3	115.4
2004	10.7	106.5	117.2
2005	10.1	111.4	121.6
2006	10.6	113.7	124.3
2007	9.7	121.0	130.7
2008	11.4	120.5	131.8

Source: CSO QNHS[66]

Ireland: Lone parent families with children aged under 20, 1999-2008



- The number of lone parent families whose youngest child was less than 20 increased by nearly 50% between 1999 and 2008. The ratio of female to male heads of household for lone parent families with children aged under 20, increased from nearly 8:1 in 1999 to over 10:1 in 2008 (see Table 7.11).

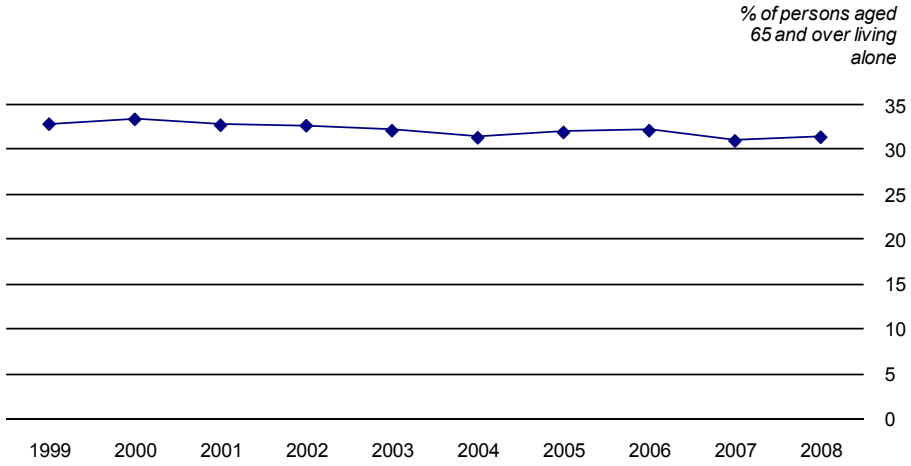
[65] Refers to persons living as lone parents whose youngest child was less than 20 years of age.
[66] QNHS (March-May, 1999-2008). As for all other QNHS time series, based on the de facto population to 2005 and the usually resident population for years 2006 to 2008.

7.12 Ireland: Persons aged 65 and over living alone by sex, 1999–2008

	000 persons aged 65 and over living alone			*%*	
Year	**Persons**	**Males**	**Females**	**% of all households**	**% of persons aged 65 and over**
1999	138.9	42.4	96.5	11.1	32.9
2000	142.1	45.4	96.8	11.1	33.5
2001	141.0	45.2	95.7	10.9	32.8
2002	142.8	45.8	97.0	10.6	32.8
2003	142.3	45.0	97.3	10.3	32.2
2004	141.3	45.0	96.3	10.1	31.4
2005	146.9	46.0	100.9	10.1	32.0
2006	148.9	46.5	102.4	9.9	32.2
2007	146.2	45.8	100.4	9.5	31.1
2008	151.6	50.2	101.4	9.6	31.5

Source: CSO QNHS[67]

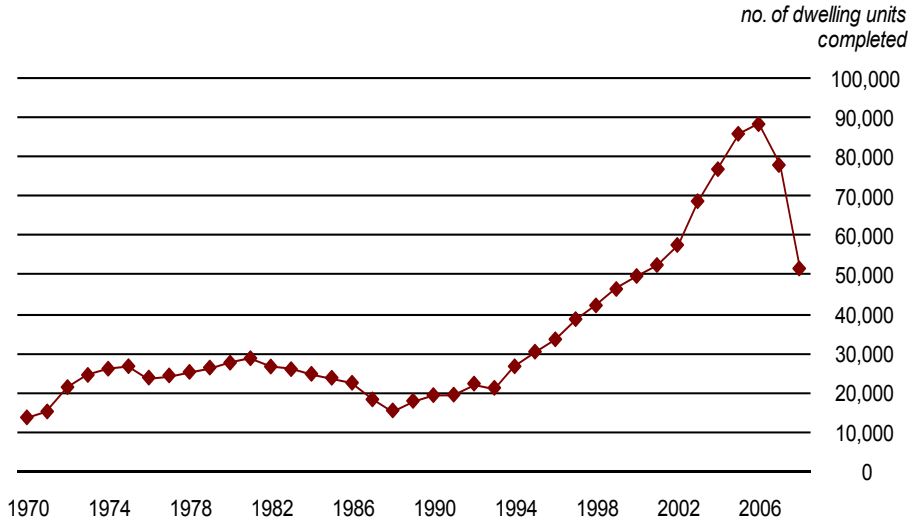
Ireland: Persons aged 65 and over living alone, 1999-2008



- There were 151,600 persons aged 65 and over were living alone in 2008 compared with just under 139,000 in 1999 (see Table 7.12).
- There were over twice as many women aged 65 and over living alone in 2008 as there were men (see Tables 7.12 and 6.3).
- Almost one-third of persons aged 65 and over were living alone in 2008 (see Table 7.12).

[67] QNHS (March-May, 1999-2008). As for all other QNHS time series, based on the de facto population to 2005 and the usually resident population for years 2006 to 2008.

8.1 Ireland: Dwelling unit completions, 1970–2008[68]



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

8.2 Ireland: Nature of occupancy[69] of private households, 1961–2006

% of private households

Year	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 then it has increased sharply to peak at almost 90,000 in 2006. The number of completions however has nearly halved since then to stand at 51,724 in 2008 (see Graph 8.1 and footnote).

- The proportion of households in Ireland that were owner-occupied increased from 59.8% in 1961 to 80% in 1991. In the 2002 census the proportion was similar and stood at 79.8%, however it has fallen back in the most recent census, to stand at 77.2% in 2006 (see Table 8.2).

[68] 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 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 Q1 2006 and 3,000 houses in Q2 2006. CSO amended the 2005 and 2006 completion figures accordingly.

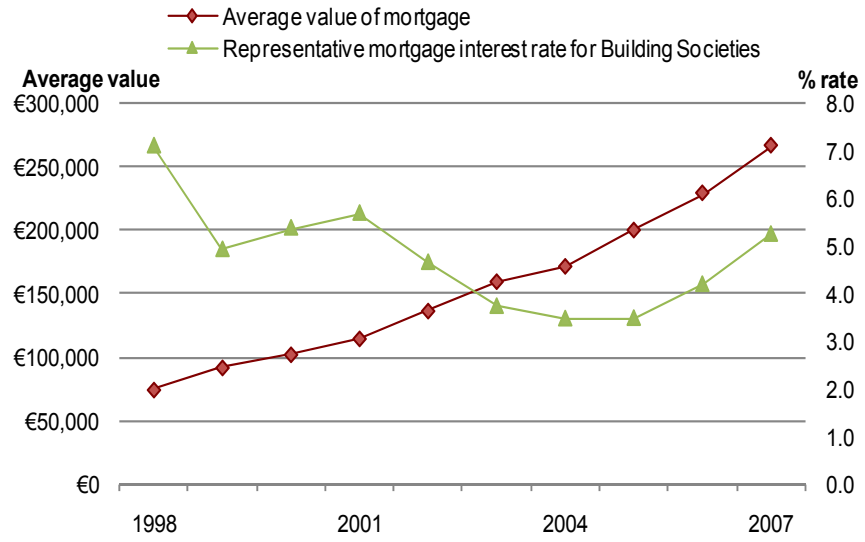
[69] 'Not stated' replies excluded.

8.3 Ireland: Housing loans paid[70], 1998–2007

Year	New Houses	Other houses	Total	Value (€m)	Average value of mortgage (€000)	Representative mortgage interest rate for building societies (%)
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
2006	55,737	55,516	111,253	25,495	229.2	4.20
2007	46,588	37,698	84,286	22,457	266.4	5.25

Source: Department of the Environment, Heritage and Local Government

Ireland: Housing loans paid 1998-2007



8.4 Eurozone: Interest rates for household mortgages (new business), 2004–2008

interest rate[71,72]

Country	2004	2005	2006	2007	2008
Malta	:	:	:	:	3.81
Finland	3.10	3.22	4.15	4.92	4.07
Luxembourg	3.38	3.62	4.51	4.83	4.22
Ireland	**3.39**	**3.48**	**4.55**	**5.07**	**4.33**
Belgium	3.36	3.18	4.47	5.26	4.87
Italy	3.54	3.60	4.71	5.48	4.91
Greece	4.21	3.86	4.36	4.76	4.92
Portugal	3.39	3.50	4.40	5.18	4.96
Eurozone	**3.43**	**3.49**	**4.56**	**5.32**	**5.09**
Netherlands	3.10	3.44	4.51	5.41	5.32
Germany	4.37	4.44	5.23	5.97	5.38
France	3.61	3.37	4.22	5.01	5.52
Spain	3.19	3.29	4.53	5.35	5.63
Austria	4.17	3.99	4.79	5.73	5.63
Slovenia	4.90	4.98	5.93	6.45	6.28
Cyprus	:	:	:	:	6.57

Source: European Central Bank

- The average value of a new housing loan in Ireland rose from €74,700 in 1998 to €266,400 in 2007. Between 1998 and 2004 mortgage interest rates fell (from 7.1% to 3.48%) but have since risen, reaching 5.25% in 2007. The number of loans taken out for housing rose from 61,407 in 1998 to a peak of 111,253 in 2006 before falling back to 84,286 in 2007 (see Table 8.3).
- Interest rates for new mortgages in Ireland were the fourth lowest rate in the Eurozone at the end of 2008 (see Table 8.4).

[70] 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).

[71] Rates shown are as at end of period.
[72] Rates shown in this table cover both floating (variable) rates and rates fixed for up to one year.

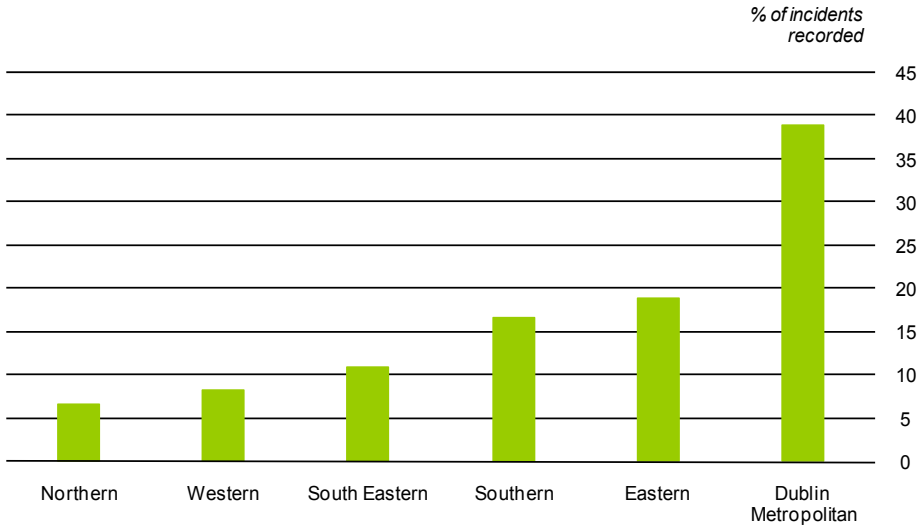
9.1 Ireland: Incident detection rates by Garda Division[73], 2003–2007

% incident detection rate

Garda Division	2003	2004	2005	2006	2007
Eastern	78.4	80.2	78.6	81.3	86.0
Dublin Metropolitan	75.6	77.8	75.4	82.5	84.1
Northern	79.8	79.5	77.5	86.7	86.4
South Eastern	87.7	86.2	83.2	84.5	86.5
Southern	87.4	84.3	82.2	85.4	86.6
Western	79.9	80.6	80.4	83.7	85.3
State	**80.8**	**80.5**	**78.5**	**83.5**	**85.4**

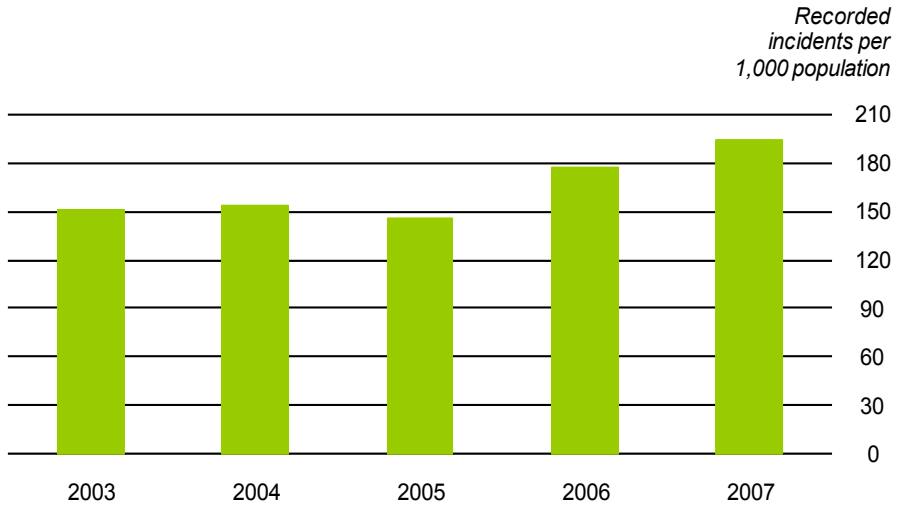
Source: CSO Crime statistics

9.2 Ireland: Recorded incidents by Garda Division, 2007



Source: CSO Crime Statistics

9.3 Ireland: Recorded incidents per 1,000 population[74], 2003–2007



Source: CSO Crime statistics

- The incident detection rate was 85.4% in 2007, which was higher than the rate in 2003 of 80.8%. Detection rates were highest in the Southern region (86.6%) and lowest in the Dublin Metropolitan region at 84.1% (see Table 9.1).
- The Dublin Metropolitan region accounted for 38.9% of recorded incidents in 2007 (see Graph 9.2).
- The number of recorded incidents increased from 151.1 per 1,000 population in 2003 to 194.1 in 2007 (see Graph 9.3).

[73] The CSO commenced a new crime classification system in April 2008. The indicators in this domain are now based on these data. See Appendix 1 for further details.

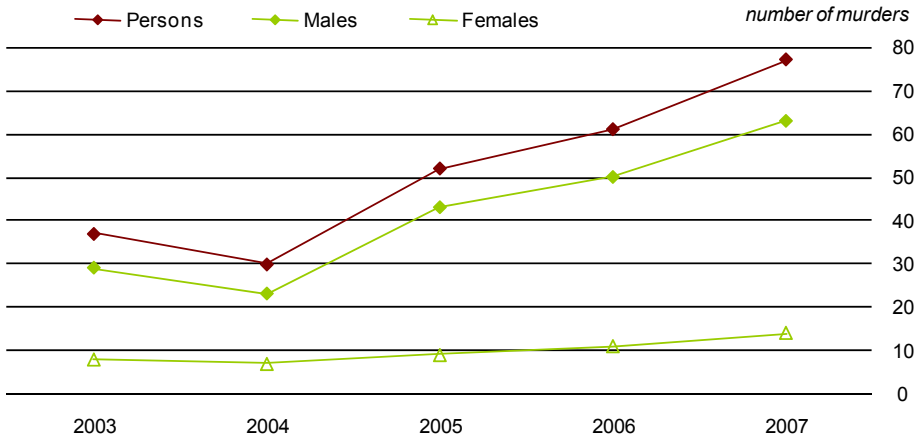
[74] 2003-2005 figures based on the de facto population as described in the annual population estimates for April of each year. The 2006 and 2007 figures are based on the usual resident population. The differences between the two figures are quite small. See footnote for indicator 7.1 and Appendix 1 for further details.

9.4 Ireland: Murders recorded, 2003–2007

				number of murders / %
Year	**Persons**	**Males**	**Females**	**% male**
2003	37	29	8	78
2004	30	23	7	77
2005	52	43	9	83
2006	61	50	11	82
2007	77	63	14	82

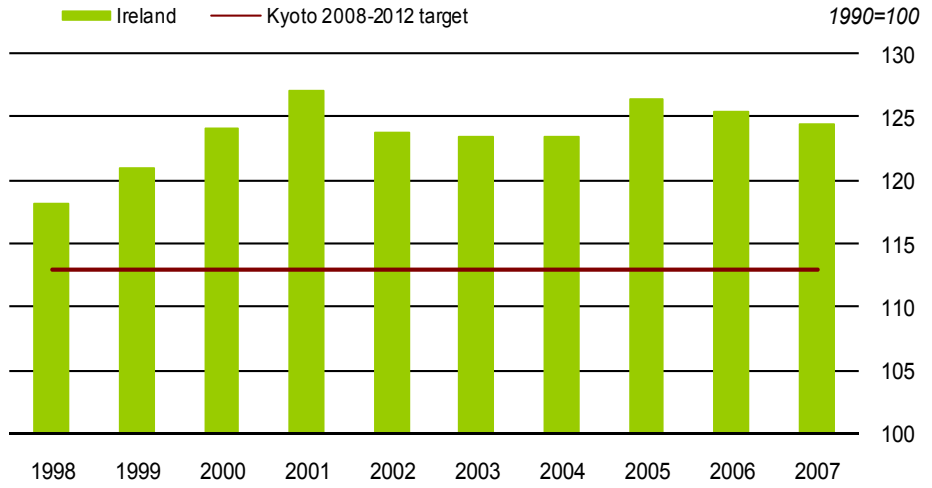
Source: CSO Crime statistics

Ireland: Murders recorded, 2003-2007



- The number of murders recorded in Ireland was 77 in 2007. Men were the victims in over 80% of these murders. The number of male victims of murder has risen steadily since 2004, when 23 males were murdered, to 63 murders in 2007. The female figure has remained more stable over the period (see Table and Graph 9.4).

10.1 Ireland: Total net greenhouse gas emissions, 1998–2007[75]



Source: Eurostat, Environmental Protection Agency

- 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 1998 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 126.4% of the 1990 level before falling slightly again to 124.5% of the 1990 level in 2007 (see Graph 10.1).
- Ireland's levels of emissions of 125.3% were considerably higher than the EU 27 average of 92.3% of 1990 levels in 2006 and were the fifth highest in the EU (see Table 10.2).
- With the exception of Slovenia, the new EU member states had lower than average levels of emissions in 2006 (see Table 10.2).

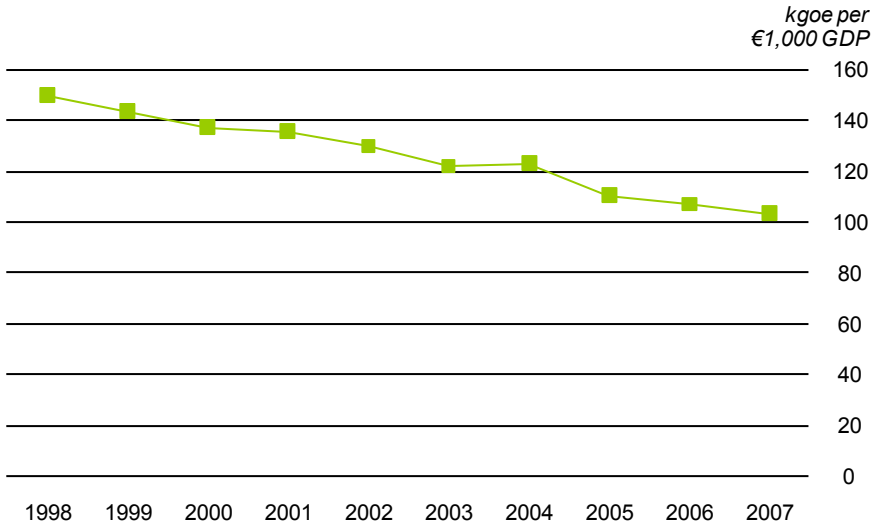
10.2 EU: Net greenhouse gas emissions, 2006, and Kyoto 2008–2012 target

		1990=100	*%*
Country	**2006**	**2008-2012 Kyoto target**	**2006 level as % of target**
Estonia	44.3	92.0	48.2
Latvia	44.9	92.0	48.8
Lithuania	47.0	92.0	51.1
Bulgaria	53.8	92.0	58.5
Romania	56.3	92.0	61.2
Slovakia	67.9	92.0	73.8
Hungary	68.1	94.0	72.4
Poland	71.1	94.0	75.6
Czech Republic	76.3	92.0	82.9
Germany	81.5	79.0	103.2
United Kingdom	84.0	87.5	96.0
Sweden	91.1	104.0	87.6
EU 27	**92.3**	**:**	**:**
Belgium	94.0	92.5	101.6
France	96.0	100.0	96.0
EU 15	**97.3**	**92.0**	**105.8**
Netherlands	97.4	94.0	103.6
Luxembourg	101.2	72.0	140.6
Slovenia	101.2	92.0	110.0
Denmark	101.7	79.0	128.7
Italy	109.9	93.5	117.5
Finland	113.1	100.0	113.1
Austria	115.2	87.0	132.4
Greece	124.4	125.0	99.5
Ireland	**125.3**	**113.0**	**110.9**
Portugal	138.3	127.0	108.9
Malta	145.0	:	:
Spain	149.5	115.0	130.0
Cyprus	166.0	:	:
Croatia	94.8	95.0	99.8
Norway	107.7	101.0	106.6
Iceland	124.2	110.0	112.9
Turkey	195.1	:	:

Source: Eurostat, Environmental Protection Agency

[75] See Appendix 1 for note on revision to series.

10.3 Ireland: Gross inland consumption of energy divided by GDP[76], 1998–2007

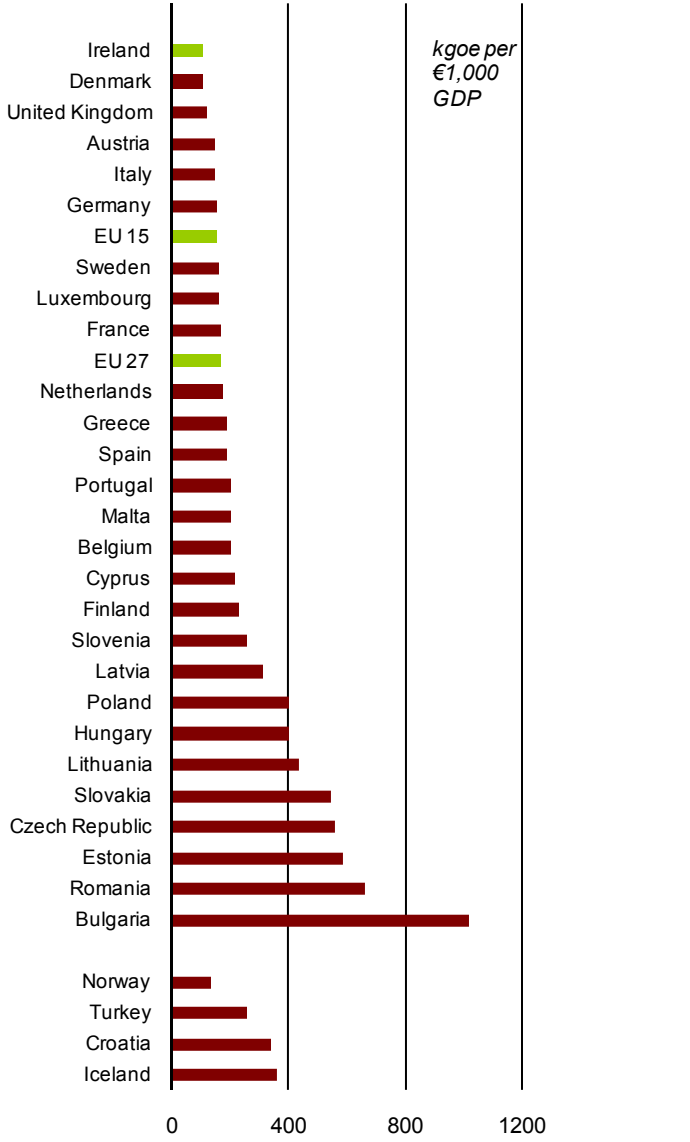


Source: Eurostat

- Ireland's energy intensity ratio improved from 149.6 in 1998 to 103.1 in 2007 (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).
- Ireland had the lowest ratio of the EU 27 countries in 2007, while the 10 countries with the highest ratios were all new member states (see Graph 10.4).

[76] Energy intensity of the economy is the gross inland consumption of energy divided by GDP (at constant prices, 2000=100) - kgoe (kilogram of oil equivalent) per 1000 Euro.

10.4 EU: Gross inland consumption of energy divided by GDP, 2007[77]



Source:Eurostat

[77] 2006 data used for Iceland.

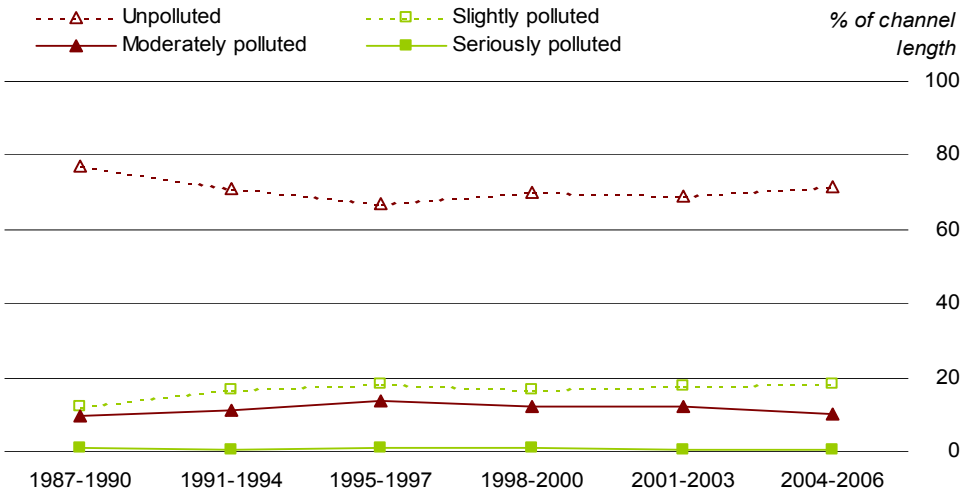
10.5 Ireland: River water quality, 1987–2006

% of channel length

Quality	Unpolluted	Slightly polluted	Moderately polluted	Seriously polluted	Total
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**
2004-2006	71.4	18.1	10.0	0.6	**100**

Source: Environmental Protection Agency

Ireland: River water quality, 1987-2006



- 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 71.4% by 2004-2006 (see Table 10.5).
- The percentage of seriously polluted water has remained below 1% throughout the entire 1987-2006 period (see Table 10.5).

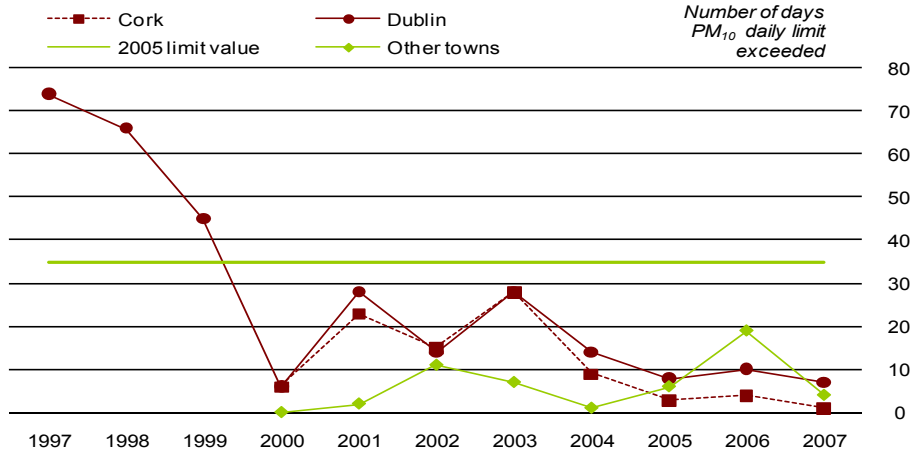
10.6 Ireland: Particulate matter[78] in urban areas, 1997–2007

µg per m³

Year	Dublin		Cork		Other Towns[79]	
	Average PM_{10}	Number of days PM_{10} daily limit exceeded	Average PM_{10}	Number of days PM_{10} daily limit exceeded	Average PM_{10}	Number of days PM_{10} daily limit exceeded
1997	41	74	:	:	:	:
1998	38	66	:	:	:	:
1999	35	45	:	:	:	:
2000	19	6	23	6	24	0
2001	28	28	26	23	6	2
2002	23	14	23	15	32	11
2003	26	28	26	28	27	7
2004	20	14	22	9	20	1
2005	19	8	19	3	23	6
2006	20	10	16	4	26	19
2007	18	7	15	1	25	4

Source: Environmental Protection Agency

Ireland: Particulate matter[78] in urban areas, 1997-2007



[78] The nature, source, health and environmental effects of Particulate matter (PM_{10}) are described in Appendix 1.

[79] 'Other Towns' are: Athlone, Balbriggan, Bray, Carlow, Celbridge, Clonmel, Drogheda, Dundalk, Ennis, Galway, Kilkenny, Letterkenny, Limerick, Mullingar, Naas, Navan, Newbridge, Sligo, Tralee, Waterford and Wexford. A sub-sample of these towns is measured each year, as in general, towns with similiar population and with similiar source effects from transport, industry and domestic heating tend to show similiar air quality profiles.

- The average readings for Particulate Matter (PM_{10}) in Dublin have fallen from 41 µg/m³ in 1997 to 18 µg/m³ in 2007. There has been a decrease in average readings for PM_{10} in Cork also, falling from 23 µg/m³ to 15 µg/m³ between 2000 and 2007. Average readings for PM_{10} in other towns in Ireland have been more variable, falling from 24 µg/m³ in 2000 to a value of 6 µg/m³ in 2001 before rising to values in the range 20 to 32 µg/m³ between 2002 and 2007 (see Table 10.6).

- European legislation contains limit values which permit PM_{10} to exceed 50 µg/m³ on not more than 35 days per annum from 2005. This limit was broken in Dublin in the years 1997 to 1999 but has not been broken since (see (Table 10.6).

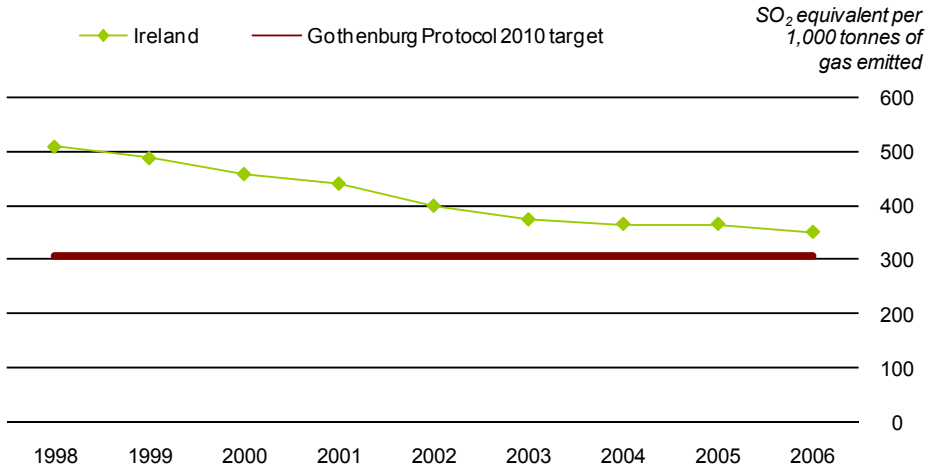
10.7 Ireland: Acid rain precursor emissions, 1998–2006

SO_2 equivalent per 1,000 tonnes of gas emitted

Year	Sulphur dioxide (SO_2)	Nitrogen oxides (NO_x)	Ammonia (NH_3)	Total
1998	176.1	95.3	238.1	**509.5**
1999	157.4	94.9	236.1	**488.3**
2000	131.5	96.8	230.6	**458.9**
2001	126.1	97.9	217.2	**441.2**
2002	96.3	91.2	212.7	**400.1**
2003	76.7	87.8	210.3	**374.8**
2004	70.9	87.5	208.1	**366.5**
2005	70.4	88.5	207.6	**366.6**
2006	59.8	85.2	206.7	**351.7**

Source: Environmental Protection Agency, CSO

Ireland: Acid rain precursor emissions, 1998-2006



Source: Environmental Protection Agency, CSO

- The level of acid rain precursor emissions in Ireland has been decreasing since 1998, from 509.5 SO_2 equivalent per 1,000 tonnes of gas emitted to 351.7 in 2006. The decrease is mainly due to lower levels of sulphur dioxide emissions (see Table 10.7 and Graph).
- The Gothenburg Protocol 2010 target emissions level is 306. In 1998, Ireland's emissions were 66% above this target, but by 2006 the levels had reduced to 15% above the target (see Graph).

10.8 Ireland: Total waste collected and percentage landfilled by type, 2005–2007

	000 tonnes			*% of category collected*		
	Waste collected			**Waste landfilled**		
Material	**2005**	**2006**	**2007**	**2005**	**2006**	**2007**
Paper	881.9	1,063.8	914.1	51.0	44.7	42.0
Glass	150.2	164.2	182.6	35.6	36.5	26.3
Plastic	300.1	327.1	288.8	80.4	80.6	77.5
Ferrous, aluminium & other metals	123.3	116.7	133.5	46.2	53.4	37.5
Textiles	158.0	176.5	244.9	92.9	94.4	95.6
Organic waste	929.2	998.3	1,159.1	73.3	74.0	73.9
Others[80]	236.4	253.7	251.7	86.0	84.3	86.6
Total	**2,779.1**	**3,100.3**	**3,174.6**	**66.0**	**63.9**	**63.5**

Source: Environmental Protection Agency

- There was a 14.2% increase in Ireland's total waste collected between 2005 and 2007. In the same period, the proportion of total waste landfilled decreased by 2.5 percentage points from 66% in 2005 to 63.5% in 2007 (see Table 10.8).
- The proportion of municipal waste landfilled in Ireland in 2007 was 59.4%, which was above the EU 27 average of 41.0%. Germany had the lowest proportion of landfilled waste at 0.5% in 2007 (see Table 10.9).

10.9 EU: Municipal waste collected and landfilled, 2007[81,82]

	kg per person		*% of municipal waste*
Country	**Generated**	**Landfilled**	**% Landfilled**
Germany	564	3	0.5
Netherlands	630	14	2.2
Sweden	518	21	4.1
Belgium	492	21	4.3
Denmark	801	41	5.1
Austria	597	86	14.4
Luxembourg	694	130	18.7
France	541	185	34.2
EU 27	**522**	**214**	**41.0**
Italy	550	286	52.0
Finland	507	267	52.7
Estonia	536	291	54.3
United Kingdom	572	324	56.6
Ireland	**786**	**467**	**59.4**
Spain	588	350	59.5
Portugal	472	297	62.9
Poland	322	239	74.2
Hungary	456	341	74.8
Romania	379	284	74.9
Slovenia	441	342	77.6
Slovakia	309	240	77.7
Czech Republic	294	243	82.7
Bulgaria	468	388	82.9
Greece	448	377	84.2
Latvia	377	322	85.4
Cyprus	754	658	87.3
Lithuania	400	368	92.0
Malta	652	606	92.9
Switzerland	724	0	0.0
Norway	824	262	31.8
Iceland	566	380	67.1
Turkey	430	359	83.5

Source: Eurostat

[80] Small batteries, cooking oil, composites and refused derived fuel. In data for years prior to 2006 the 'Others' category included tyres and lead acid batteries. However, as these cannot be categorised as municipal waste they have been excluded from the 2006 and 2007 figures. Waste electrical and electronic equipment (WEEE) were also previously included in the 'Others' category. WEEE has not been included in the municipal waste tables in 2006 and 2007 due to the changes in its management. If WEEE is excluded from the 2005 figures, a recalculated 924,027 tonnes of municipal waste was recovered.

[81] National estimates for Belgium, Denmark, Germany, Ireland, Spain, France, Luxembourg, Portugal, Romania and Iceland. National estimates for generated waste for Estonia and Poland and for landfilled waste for Austria. Data for Turkey are Eurostat estimates.

[82] The EEA acknowledges that data are in general not comparable and, in many countries, are based for the most part on household waste and often exclude recycled wastes. In Ireland, by way of contrast, 40% of municipal waste generation in 2004 was comprised of commercial waste and 34% was comprised of recycled waste. It is clear therefore that many countries do not define municipal waste generation as broadly as in Ireland.

10.10 Ireland: Private cars under current licence, 1998–2007

000s

Year	Private cars under current licence	Private cars per 1,000 population aged 15 and over[83]
1998	1,196.9	417
1999	1,269.2	436
2000	1,319.3	445
2001	1,384.7	459
2002	1,447.9	469
2003	1,507.1	479
2004	1,582.8	495
2005	1,662.2	507
2006	1,778.9	527
2007	1,882.9	545

Source: Department of Transport

- The number of private cars per 1,000 population aged 15 and over in Ireland has risen from 417 in 1998 to 545 in 2007 (see Table 10.10).
- In 2007, the number of cars per 1,000 population aged 15 and over varied from 809 in Luxembourg to 194 in Romania (see Table 10.11).

[83] Number of private cars as at 31st December. Population based on CSO Population estimates for April of each year.

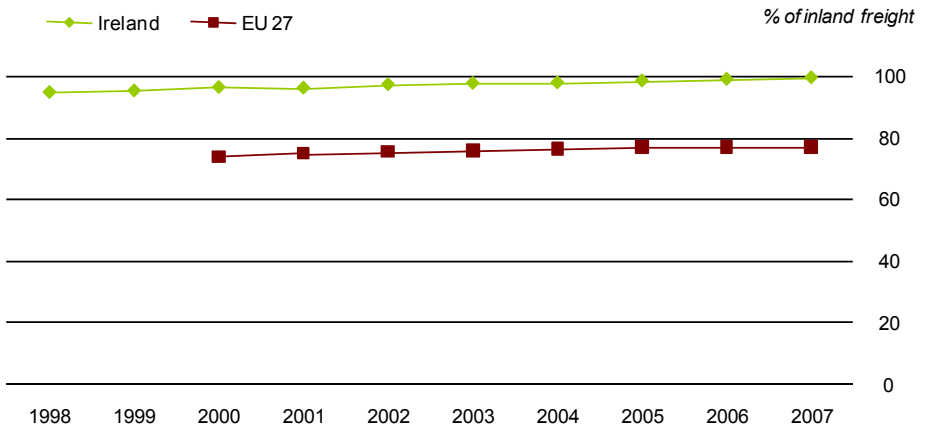
10.11 EU: Passenger cars per 1,000 population aged 15 and over, 2003–2007

cars per 1,000 population aged 15 and over

Country	2003	2004	2005	2006	2007
Luxembourg	789	793	799	803	809
Italy	698	683	690	699	:
Germany	637	640	643	651	657
Malta	647	646	641	651	662
Austria	599	603	604	605	606
France	610	604	599	605	:
Cyprus	534	574	587	596	643
Finland	532	546	562	576	587
Belgium	564	567	569	571	575
Slovenia	537	548	561	570	586
Spain	525	540	550	563	:
Sweden	556	558	559	561	563
Lithuania	444	464	512	560	558
Netherlands	524	528	533	542	552
Ireland	**479**	**495**	**507**	**527**	**545**
Estonia	384	415	433	485	283
Czech Republic	430	441	455	470	486
Denmark	434	437	:	458	467
Poland	358	379	388	419	454
Latvia	331	349	377	418	460
Hungary	326	332	339	347	353
Slovakia	308	270	292	297	317
Bulgaria	:	364	380	265	313
Romania	171	178	185	176	194
Greece	409	431	:	:	:
United Kingdom	556	569	565	:	:
Switzerland	616	620	622	622	:
Norway	:	539	548	558	570
Croatia	349	359	371	384	398
Turkey	95	108	113	118	:

Source: Eurostat

10.12 Ireland and EU: Share of road in total inland freight transport[84], 1998–2007



Source: Eurostat

- Road transport accounted for 94.6% of total inland freight transport in Ireland in 1998. This share has gradually increased to reach 99.3% in 2007, compared with 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 2007 was among the highest in the EU with only Cyprus and Malta having higher proportions of freight transported by road and neither of these islands have a rail network (see Table 10.13).

[84] 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[83], 2003–2007[85]

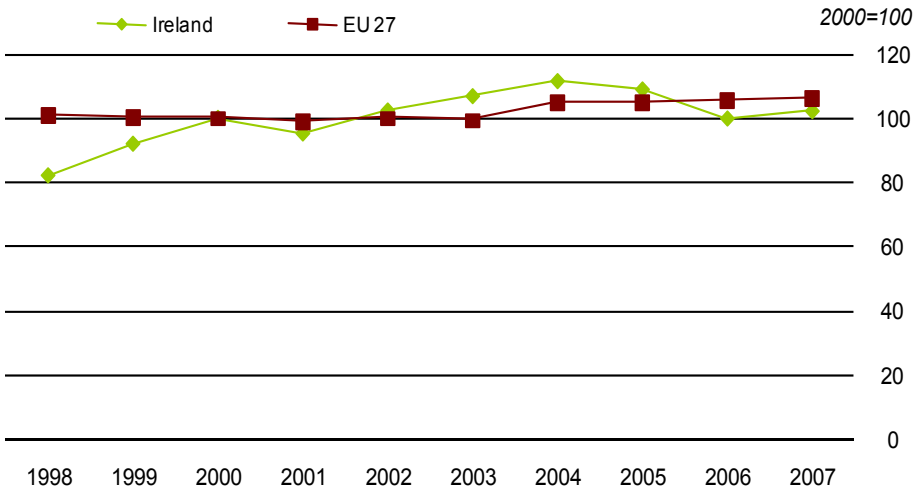
% of inland freight

Country	2003	2004	2005	2006	2007
Latvia	27.5	28.4	29.8	39.0	41.9
Estonia	29.1	32.7	35.4	34.7	43.2
Lithuania	50.0	51.3	56.1	58.4	58.5
Austria	67.4	65.6	64.1	63.2	60.9
Netherlands	64.6	64.7	63.6	63.1	61.4
Sweden	64.5	63.9	64.0	64.2	63.6
Germany	67.0	66.1	66.0	65.9	65.7
Bulgaria	61.7	66.9	70.8	69.0	70.0
Belgium	76.5	74.9	72.4	71.1	71.1
Romania	62.4	60.8	67.3	70.5	71.3
Slovakia	62.1	65.4	70.3	68.8	71.8
Poland	64.0	66.1	69.0	70.4	73.5
Finland	75.3	76.0	76.5	72.8	73.9
Hungary	66.6	65.9	69.2	71.6	74.4
Czech Republic	74.5	75.2	74.4	76.1	74.7
EU 27	**75.7**	**76.0**	**76.4**	**76.3**	**76.5**
Slovenia	70.0	74.1	77.3	78.2	79.2
France	78.8	79.9	80.5	80.9	81.4
United Kingdom	89.8	88.1	88.2	86.2	86.6
Italy	89.5	89.8	90.3	88.8	88.3
Denmark	92.1	91.5	92.2	91.9	92.2
Luxembourg	92.0	91.2	92.3	91.5	92.5
Portugal	93.0	94.7	94.6	94.9	94.7
Spain	94.3	95.1	95.4	95.6	96.1
Greece	97.7	:	97.5	98.1	97.1
Ireland	**97.5**	**97.7**	**98.3**	**98.8**	**99.3**
Cyprus	100.0	100.0	100.0	100.0	100.0
Malta	100.0	100.0	100.0	100.0	100.0
Croatia	76.1	76.7	76.0	74.8	74.0
Norway	86.3	86.2	85.7	85.6	84.9
Macedonia, TFYR	93.6	92.6	91.3	93.1	88.5
Turkey	94.6	94.4	94.8	94.9	94.9
Iceland	100.0	100.0	100.0	100.0	100.0

Source: Eurostat

[85] EU 27 data are Eurostat estimates. Italy data for 2003 are national estimates. Italy data for 2004-2007, France data for 2007 and UK data for 2004-2007 are Eurostat estimates. Break in series in 2003 for Greece and Croatia, 2004 for Austria, Poland, Portugal and Romania.

10.14 Ireland and EU: Index of inland freight transport volume[86], 1998–2007



Source: Eurostat

- The volume increase of freight tonne-kilometres, relative to the volume change in GDP, was 102.1 in Ireland over the 2000-2007 period. The EU 27 figure increased to 106.8 over the same period. This indicates that GDP growth in Ireland was accompanied by a lower increase in freight activity on Irish roads when compared with the average for EU 27 countries. Fifteen EU 27 countries had a lower index in 2007 than in 2000 (see Graph 10.14 and Table 10.15).

[86] Measured in tonne-km/GDP (in constant 2000 Euro), 2000=100. EU 27 figures are Eurostat estimates. Break in series in 2004 for EU 27.

10.15 EU: Index of inland freight transport volume[86] 2003–2007[87]

2000=100

Country	2003	2004	2005	2006	2007
Estonia	84.9	90.2	87.3	76.7	67.1
Cyprus	105.3	80.7	96.6	77.6	76.7
Finland	91.7	91.5	87.2	81.5	77.3
Denmark	94.5	93.2	91.0	80.7	78.0
Belgium	97.0	91.2	84.7	82.3	78.3
Czech Republic	105.2	98.6	88.5	94.0	86.4
France	92.5	92.8	87.4	87.8	88.5
Netherlands	96.2	105.6	98.7	95.2	88.7
Luxembourg	111.6	106.9	92.3	87.5	89.3
United Kingdom	94.0	93.8	91.6	93.6	90.1
Slovakia	88.1	88.0	93.7	86.9	92.1
Sweden	96.7	94.4	95.3	94.4	94.4
Italy	91.6	101.2	107.0	96.4	95.2
Latvia	111.0	107.2	105.0	91.6	95.2
Austria	105.2	104.3	98.1	101.9	97.9
Ireland	**106.8**	**111.5**	**108.9**	**99.8**	**102.1**
EU 27	**99.4**	**105.5**	**105.4**	**106.3**	**106.8**
Germany	100.0	104.5	106.0	109.9	111.9
Bulgaria	109.9	119.7	128.0	118.3	116.6
Lithuania	109.2	106.2	116.8	118.5	121.5
Poland	98.4	108.2	108.9	115.2	121.7
Hungary	86.1	93.9	105.0	118.1	132.2
Spain	116.1	128.1	130.1	129.6	133.1
Slovenia	98.9	114.5	128.9	132.0	138.5
Portugal	99.7	143.5	148.6	153.8	155.8
Romania	127.1	145.1	174.2	171.4	165.8
Norway	101.4	102.8	105.3	109.4	107.0
Macedonia, TFYR	146.0	138.9	141.4	198.4	:
Iceland	108.8	109.7	113.2	119.2	:
Turkey	89.1	84.2	82.2	81.7	:

Source: Eurostat

[87] 2003 to 2007 data are Eurostat estimates for EU 27. 2004 to 2007 data are Eurostat estimates for the UK. 2006 and 2007 data are Eurostat estimates for Belgium and Italy. 2007 data are Eurostat estimates for France, Netherlands and Poland. Data for 2003 to 2006 for Iceland are estimates. Break in series in 2004 for EU 27, Spain, Portugal and Romania.

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 16 EU Member States (from January 1st 2009). These are Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Portugal, The Netherlands, Spain, Slovenia, Malta, Cyprus and Slovakia.

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.

Sign convention and symbols
The BOP presentation follows the standard double entry accounting treatment for a transaction as, in principle, every credit entry is matched by a corresponding debit entry elsewhere in the system.

In the current account, credit items are exports of merchandise and services, income inflows and current transfer receivables while debit items are imports, income outflows and transfer payables. In the capital account, capital transfer receivables are recorded as credits and payables as debits. Both credit and debit items are shown as positive numbers and the net balances are calculated as credit – debit.

The transactions in the financial account are implicitly recorded on a credit/debit basis but are generally presented on an assets/liabilities basis. Increases in foreign assets or reductions in foreign liabilities are shown with a – (minus) sign, i.e. implicitly as a debit amount, while decreases in assets or increases in liabilities are unsigned i.e. shown as positive numbers (i.e. as credits). The net balances are calculated as net change in assets transactions + net change in liabilities transactions. In the case of direct investment, the asset/liability presentation is replaced by the so-called 'directional' one, i.e. direct investment abroad (which approximates to the assets concept) and direct investment in Ireland (which closely equates to liabilities). The difference between the two approaches centres on the treatment of reverse investment by a direct investment enterprise in its parent (direct investor) or its foreign affiliates.

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)

The European Central Bank has recently published a set of Harmonised Competitive Indicators (HCIs) based on consumer prices for all euro-area countries. The new indices were published in the February 2007 ECB Monthly Bulletin, pp. 53-55, in a box entitled ''The introduction of harmonised competitiveness indicators for euro area countries''. The rationale for publishing HCIs based on consumer prices is to provide a comparable measure of price competitiveness across euro-area countries.

The underlying methodology employed in the HCI and Trade Weighted Competitiveness Indicators (TWCI) measures is the same, with trade weights for each country reflecting a combination of double weights for exports (these account for competition in foreign markets from both domestic producers and exporters from third countries) and the simple shares of each country in total imports. A detailed explanation of the weighting scheme is provided in ''Trade-Weighted Competitiveness Indicators for Ireland'', Central Bank of Ireland Quarterly Bulletin, Winter 2001. Differences between the TWCIs published up to now and the new HCIs are small and reflect two factors.

The first difference is that HCIs cover more trading partners. In contrast to the TWCIs which include 10 trading partners, the nominal HCI and the HCI based on consumer prices both include 56 trading partners. The HCI based on producer prices covers 36 trading partners due to more limited timely data.

The second difference is that HCIs use manufacturing trade data for different periods and then chain link these data over time. For example, HCI figures pre-1999 relate to 1995-1997 trade data and post-1999 are based on 1999-2001 trade data. This allows for a longer back-run of data in the HCIs to January 1995, compared with January 1999 for the TWCIs.

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 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. 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 27=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.

The composition of the regions used are:

Border, Midland and Western Region

Border	Cavan, Donegal, Leitrim, Louth, Monaghan and Sligo
Midland	Laois, Longford, Offaly and Westmeath
West	Galway County, Galway City, Mayo and Roscommon

Southern and Eastern Region

Dublin	Dublin City, Dun Laoghaire-Rathdown, Fincal and South Dublin

Mid East	Kildare, Meath and Wicklow
Mid West	Limerick County, Limerick City, Clare and North Tipperary
South East	Waterford County, Waterford City, Carlow, Kilkenny, Wexford and South Tipperary
South West	Cork County, Cork City and Kerry

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 (ICT) that was asked of a sub-sample of the main CSO Quarterly National Household Survey (QNHS) sample. The ICT survey was carried out in June 1998, 2000, 2004 and 2005 and in February 2006, 2007 and 2008. One member of each household was asked several questions two of them being "*Do you or*

anyone in your household have access to a computer at home" and "*Do you or anybody in your household have access to the Internet at home regardless of whether it is used*". Persons that answered *Yes* to this question are than asked "On which of the following devices is the Internet accessed at home".

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.

Revisions to QNHS time series

This report contains revised QNHS figures from 2002 to 2007. The QNHS figures have been revised in line with revisions to the sub-annual population estimates, which are used as a grossing frame for the data. These population estimates are calculated on a quarterly basis using the Census of Population figures as a base. This revision process has involved three separate elements:

• The population as reported for Census 2006 was used as a benchmark to recalculate quarterly population estimates from Quarter 2 2002 onwards.
• From Quarter 2 2006 onwards the concept underlying the population estimates was changed from de facto (all persons present in the state), to usually resident (all persons usually resident in the state) as the usually resident concept more closely aligns to the target population for employment statistics.
• An adjustment has been made to bring nationality estimates within the QNHS into line with Census 2006 nationality figures.

The overall effect of these revisions is that the population estimate of persons aged 15 and over was 2,400 (0.07%) lower on the revised basis than the population estimates previously used for the Q2 2006 QNHS results. Given that the difference between the 2006 Census of Population figures and the population estimates was very minor at the State level, the revisions to the QNHS data series have had very little effect on the trends within the QNHS.

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 at 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 27 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 4.3)

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 in Section 1 for details on PPPs.

Risk of poverty (4.4 to 4.7)

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 4.4 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, 2005, 2006 and 2007 data are based on a 12-month interviewing period. The at risk of poverty rates are broadly comparable in both surveys.

For Table 4.4, 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 4.5 to 4.7 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 (4.8)

Eurostat has introduced new methodology on the unadjusted gender pay gap, which now represents the difference between average gross hourly earnings of male paid employees and of female paid employees as a percentage of average gross hourly earnings of male paid employees. From reference year 2006 onwards the gender pay gap is based on the methodology of the Structure of Earnings Survey (SES) which is carried out with a four-yearly periodicity. The most recent available reference years for the SES are 2002 and 2006 and Eurostat computed the gender pay gap for these years on this basis. For the intermediate years (2007 onwards) countries provide to Eurostat gender pay gap estimates benchmarked on the SES results. The target population consists of all paid employees in enterprises with 10 employees or more.

Voter turnout (4.9 and 4.10)

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 (4.11 and 4.12)

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 2006. For comparison purposes, the all items CPI index rescaled to base mid-December 2001 is also shown in the table below:

Price index bases:	*2006=100*	*Mid-December 2001=100*
Year	**Government current expenditure**	**All items CPI index**
1996	57.0	84.0
1997	60.0	85.2
1998	62.4	87.2
1999	65.9	88.7
2000	70.1	93.6
2001	75.1	98.2
2002	80.3	102.7
2003	85.4	106.3
2004	91.1	108.6
2005	96.1	111.3
2006	100.0	115.7
2007	103.9	121.3

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 in 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 2005 (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.

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. Population estimates for the period 2003-2005 were revised following the results of this Census.

Usual residence and de facto population concepts
Population figures are on a de-facto basis prior to 2006 and are on a usual residence basis for 2006 and 2007. The difference between the two concepts is very small.

Migration (7.4 and to 7.5)

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, i.e., the number of immigrants less emigrants.

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.

The national definition for the Total fertility rate refers to the total period fertility rate (TPFR) which is derived from the age specific fertility rates in the current year. It represents the projected number of children a woman would have if she experienced current age specific fertility rates while progressing from age 15-49 years. A value of 2.1 is generally considered to be the level at which the population would replace itself in the long run, ignoring migration.

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 Section 2 for a definition of private households.

8 Housing

Dwelling completions (8.1 and 8.2)

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.

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 has 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 (8.3 and 8.4)

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

Recorded incidents (9.1 to 9.3)

A new publication from the CSO in April 2008, Garda Recorded Crime Statistics 2003-2006, replaced the Crime Statistics section of Garda Annual Reports. An Garda Síochana ceased including this section in their annual reports from 2006, in recognition that the CSO was to assume this responsibility.

The publication also marked the first time that the new Irish Crime Classification System (ICCS) was used. A condensed version of this classification system (ICCSc) was also used in the report. Full details of the ICCS are available via the CSO homepage at www.cso.ie. The ICCS replaces the Headline/Non-Headline classification, with its various sub-groupings, as previously used for annual statistics.

The data used for most of the publication originate in the Garda PULSE (Police Using Leading Systems Effectively) and the FCPS (Fixed Charge Penalty System) systems. The information supplied refers only to crime incidents known to An Garda Síochana and recorded as such. This is only one part of a picture of criminal behaviour in Ireland. Other aspects (and other sources of information) will be presented in separate CSO releases and publications.

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_2), nitrous oxide (N_2O), methane (CH_4) and three halocarbons, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF_6), weighted by their global warming potentials. The figures are given in CO_2 equivalents.

Under the Kyoto Protocol, industrialised countries have a legally binding commitment to reduce their collective greenhouses gas emissions by at least 5% compared with 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 with 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_2 equivalent.

Global warming potentials can be used to convert the emissions of individual gases into CO_2 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:

CO_2 equivalents per tonne of gas emitted

Emitted gas	Global warming potential over 100 years
Carbon dioxide (CO_2)	1
Methane (CH_4)	21
Nitrous oxide (N_2O)	310

The EPA have continued to revise the data series for Ireland over time.

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 Graphs 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 27 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)

The pollutants of most concern for Urban air quality are particulate matter (PM_{10}) and, to a lesser extant, ozone. Information on measurements of PM_{10} collected by the Environmental Protection agency are presented in this report.

The main sources of PM_{10} are the combustion of solid fuels and road traffic, in particular, emissions from diesel engines. Other particulates include dust from roads, industrial emissions and natural substances such as windblown sea salt.

PM_{10} are very small particles which can penetrate deep into the respiratory tract. Inhalation of these particles can increase the risk, frequency and severity of respiratory and dariopulmonary disorders. PM_{10} in the atmospohere can result from direct emissions (primary PM_{10}) or from emissions of gaseous precursors (oxides of nitrogen, sulphur dioxide and ammonia) which are transformed by chemical reaction in the atmosphere (secondary PM_{10}).

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

- The limit value for PM_{10} is 50 µg /m^3 (24 h average) not to be exceeded on more than 35 days per calendar year, from 2005.

The PM_{10} 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_{10} is 50 µg/m^3 (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_2).

Oxides of nitrogen (NO_x) arise when fossil fuels are burnt under certain conditions. There are three major forms of fossil fuels: coal, oil and natural gas.

Ammonia (NH_3) 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:

SO_2 equivalents per tonne of gas emitted

Emitted gas	Acid rain precursors
Sulphur dioxide (SO_2)	1.0000
Oxides of nitrogen (NO_x)	0.6957
Ammonia (NH_3)	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 1st 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 2000.

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

GDP is measured in euro at constant 2000 prices.

Appendix 2 Data sources

Domain and sub-domain	Indicator		Data source
Economy			
Gross Domestic Product	1.1	Ireland: GDP and GNI, 1999-2008	CSO, National Accounts CSO, Annual Population estimates
	1.2	EU: GDP and GNI at current market prices, 2008	Eurostat Statistics:[88]: Economy and Finance\National accounts (including GDP)\Annual national accounts\Income, saving and net lending/net borrowing – Current prices
	1.3	EU: GDP per capita in Purchasing Power Standards, 2004-2008	Eurostat Statistics: Structural indicators\General economic background
Government debt	1.4	Ireland, EU and Eurozone: General government consolidated gross debt, 1999-2008	Eurostat Statistics: Economy and Finance\Government finance statistics\Government deficit and debt
	1.5	EU: General government consolidated gross debt, 2004-2008	Eurostat Statistics: Economy and Finance\Government finance statistics\Government deficit and debt
Public balance	1.6	Ireland and Eurozone: Public balance, 1999-2008	Eurostat Statistics: Economy and Finance\Government finance statistics\Government deficit and debt
	1.7	EU: Public balance, 2004-2008	Eurostat Statistics: Economy and Finance\Government finance statistics\Government deficit and debt
	1.8	Ireland: Central and Local Government current expenditure, 1998-2007	CSO, National Accounts
Gross fixed capital formation	1.9	Ireland and EU: Gross fixed capital formation, 1999-2008	Eurostat Statistics: Economy and Finance\National accounts (including GDP)\Annual national accounts\GDP and main aggregates\GDP and main components - current prices
	1.10	EU: Gross fixed capital formation, 2004-2008	Eurostat Statistics: Economy and Finance\National accounts (including GDP)\Annual national accounts\GDP and main aggregates\GDP and main components - current prices
International transactions	1.11	EU: Current account balance, 2004-2008	Eurostat Statistics: Economy and Finance\Balance of payments – International transactions\Balance of payments statistics\Balance of payments by country Economy and Finance\National accounts (including GDP)\Annual national accounts\GDP and main aggregates\GDP and main components - current prices
	1.12	EU: Direct investment flows, 2007-2008	Eurostat Statistics: Economy and Finance\Balance of payments – International transactions\Balance of payments statistics\Balance of payments by country Economy and Finance\National accounts (including GDP)\Annual national accounts\GDP and main aggregates\GDP and main components - current prices
International trade	1.13	EU: Exports of goods and services, 2004-2008	Eurostat Statistics: Economy and Finance\Balance of payments – International transactions\Balance of payments statistics\Balance of payments by country Economy and Finance\National accounts (including GDP)\Annual national accounts\GDP and main aggregates\GDP and main components - current prices

[88] http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/themes

Domain and sub-domain	Indicator		Data source
	1.14	EU: Imports of goods and services, 2004-2008	Eurostat Statistics: Economy and Finance\Balance of payments – International transactions\Balance of payments statistics\Balance of payments by country Economy and Finance\National accounts (including GDP)\Annual national accounts\GDP and main aggregates\GDP and main components - current prices
Exchange rates	1.15	International: Bilateral euro exchange rates, 1999-2008	European Central Bank, Monthly Bulletin, Table 8.2 Bilateral exchange rates
	1.16	Ireland: Harmonised competitiveness indicator, 1999-2008	CSO, National Accounts Central Bank, Financial Services Authority of Ireland
Interest rates	1.17	Eurozone: Convergence of interest rates for loans to non-financial corporations up to one year, 1999-2008	Eurostat Statistics: Structural indicators\Economic reform
	1.18	Eurozone: Interest rates for short-term loans (new business) to non-financial corporations, 2007-2008	Central Bank, Financial Services Authority of Ireland European Central Bank
Harmonised Index of Consumer Prices	1.19	Ireland and EU: Harmonised Index of Consumer Prices, 1999-2008	Eurostat Statistics: Economy and Finance\Harmonised indices of consumer prices\Prices\Harmonised indices of consumer prices – Annual data
	1.20	EU: Harmonised Index of Consumer Prices, 2005-2008	Eurostat Statistics: Economy and Finance\Harmonised indices of consumer prices\Prices\Harmonised indices of consumer prices – Annual data
Price levels	1.21	Ireland and EU: Comparative price levels of final consumption by private households including indirect taxes, 1998-2007	Eurostat Statistics: Structural indicators\Economic reform
	1.22	EU: Comparative price levels of final consumption by private households including indirect taxes, 2003-2007	Eurostat Statistics: Structural indicators\Economic reform
Regional income	1.23	Ireland: Gross Value Added per capita by region, 2002-2006	CSO, National Accounts
	1.24	Ireland: Disposable income per capita by region, 2002-2006	CSO, National Accounts
Innovation and technology			
Science and technology graduates	2.1	Ireland: Mathematics, science and technology graduates, 1997-2006	Eurostat Statistics: Population and social conditions\Education and training\Education\Education indicators non-finance\Tertiary education graduates CSO, Annual population estimates
	2.2	EU: Mathematics, science and technology PhDs awarded, 2002-2006	Eurostat Statistics: Population and social conditions\Education and training\Education\Education indicators non-finance\Tertiary education graduates
Research and development expenditure	2.3	Ireland and EU: Gross domestic expenditure on R&D, 1998-2007	Eurostat Statistics: Structural indicators\Innovation and research
	2.4	EU: Gross domestic expenditure on R&D, 1997-2007	Eurostat Statistics: Structural indicators\Innovation and research
Patent applications	2.5	Ireland and EU: European Patent Office applications, 1996-2005	Eurostat Statistics: Structural indicators\Innovation and research
	2.6	EU: European Patent Office applications, 2005	Eurostat Statistics: Structural indicators\Innovation and research
Household Internet access	2.7	Ireland: Private households with a computer connected to the Internet, 1999-2008	CSO, Information Society and Telecommunications

Domain and sub-domain	Indicator		Data source
	2.8	EU: Private households with Internet access, 2004-2008	Eurostat Statistics: Science and technology\Information society statistics\Policy indicators\Citizens access to and use of the Internet
Employment and unemployment			
Employment rate	3.1	Ireland: Employment rates, 1999-2008	CSO, QNHS
	3.2	EU: Employment rates by sex, 2007	Eurostat Statistics: Structural indicators\Employment CSO, QNHS
Labour productivity	3.3	Ireland: GDP in PPS per hour worked and per person employed, 1998-2008	Eurostat Statistics: Structural indicators\General economic background
	3.4	EU: GDP in PPS per person employed, 2008	Eurostat Statistics: Structural indicators\General economic background
Unemployment rate	3.5	Ireland and EU: Unemployment rates, 1999-2008	Eurostat Statistics: Structural indicators\Employment
	3.6	EU: Unemployment rates by sex, 2008	Eurostat Statistics: Structural indicators\Employment
	3.7	Ireland and EU: Long-term unemployment rates, 1999-2008	Eurostat Statistics: Structural indicators\Social cohesion
	3.8	EU: Long-term unemployment rates by sex, 2007	Eurostat Statistics: Structural indicators\Social cohesion
Jobless households	3.9	Ireland: Population aged 18-59 living in jobless households, 1998-2007	Eurostat Statistics: Structural indicators\Social cohesion
	3.10	EU: Population aged 18-59 living in jobless households, 2003-2007	Eurostat Statistics: Structural indicators\Social cohesion
Older workers	3.11	EU: Employment rate of workers aged 55-64 by sex, 2007	Eurostat Statistics: Structural indicators\Employment
	3.12	EU: Average exit age from the labour force by sex, 2007	Eurostat Statistics: Structural indicators\Employment
Social cohesion			
Social protection expenditure	4.1	Ireland and EU: Social protection expenditure, 1997-2006	Eurostat Statistics: Population and social conditions\Living conditions and social protection\Social protection\Social protection expenditure\Expenditure-main results
	4.2	EU: Social protection expenditure in Purchasing Power Parities per capita, 2002-2006	Eurostat Statistics: Population and social conditions\Living conditions and social protection\Social protection\Social protection expenditure\Expenditure-main results
	4.3	EU: Social protection expenditure by type, 2006	Eurostat Statistics: Population and social conditions\Living conditions and social protection\Social protection\Social protection expenditure\Expenditure-main results
Risk of poverty	4.4	EU: At risk of poverty rates, 2007	Eurostat Statistics: Population and social conditions\Living conditions and social protection\Income and living conditions\Monetary (income) poverty\Low income
	4.5	Ireland: At risk of poverty rates by age and sex, 2006-2007	CSO, EU Survey on Income and Living Conditions
	4.6	Ireland: Persons in consistent poverty by age and sex, 2006-2007	CSO, EU Survey on Income and Living Conditions
	4.7	Ireland: Persons in consistent poverty by principal economic status, 2007	CSO, EU Survey on Income and Living Conditions
Gender pay gap	4.8	EU: Gender pay gap, 2002-2007	Eurostat Statistics: Structural indicators\Employment
Voter turnout	4.9	Ireland: Numbers voting in Dáil elections, 1973-2007	Deparment of the Environment, Heritage and Local Government, Franchise Section

Domain and sub-domain	Indicator		Data source
	4.10	EU: Votes recorded at national parliamentary elections, 1983-2008	International Instititute for Democracy and Electoral Assistance, Statistics on voter turnout, http://www.idea.int/vt/index.cfm
Official development assistance	4.11	Ireland: Net official development assistance, 1998-2007	Irish Aid Annual Report, Department of Foreign Affairs, Annex 1, Ireland's Official Development Assistance
	4.12	EU: Net official development assistance, 2003-2007	OECD, Development Co-operation Report, 2007, Statistical Annex, Table 4
Education			
Education expenditure	5.1	Ireland: Real non-capital public expenditure on education, 1998-2007	Department of Education and Science, Key Education Statistics
	5.2	Ireland: Student numbers by level, 1999-2008	Department of Education and Science, Key Education Statistics
	5.3	EU: Public expenditure on education, 2004-2006	Eurostat Statistics: Population and social conditions\Education and training\Education\Indicators on education finance
Pupil-teacher ratio	5.4	EU: Ratio of students to teachers, 2005/2006	Eurostat Statistics: Population and social conditions\Education and training\Education\Education indicators non-finance\Pupil/Student – teacher ratio and average class size
	5.5	EU: Average class size at ISCED levels 1 and 2, 2005/2006	Eurostat Statistics: Population and social conditions\Education and training\Education\Education indicators non-finance\Pupil/Student – teacher ratio and average class size
Third level education	5.6	Ireland: Persons aged 25-34 with 3rd level education, 2000-2008	CSO, QNHS CSO, Annual population estimates
	5.7	EU: Persons aged 25-34 with 3rd level education by sex, 2007	Eurostat data explorer Population and social conditions\Labour market (including LFS – Labour Force Survey)\Employment and unemployment (Labour Force Survey)\LFS series – detaild annual survey results\Total Population
Literacy	5.8	Ireland: Student performance on the combined reading, mathematical and scientific literacy scales by sex, 2006	OECD, PISA 2006
	5.9	EU: Student performance on the combined reading, mathematical and scientific literacy scales, 2006	OECD, PISA 2006
Early school leavers	5.10	Ireland: Early school leavers by labour force status and sex, 2008	CSO, QNHS
	5.11	Ireland: Proportion of the population aged 20-64 with at least upper secondary education, 2008	CSO, QNHS
	5.12	EU: Early school leavers, 2007	Eurostat Statistics: Structural indicators\Social cohesion
Health			
Health care expenditure	6.1	Ireland: Non-capital public expenditure on health care, 1997-2006	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, 2004-2006	World Health Organisation, Health for All Database http://data.euro.who.int/hfadb/

Domain and sub-domain	Indicator		Data source
Life expectancy	6.3	Ireland: Life expectancy at birth and at age 65 by sex, 1925-2007	CSO, Vital Statistics, Irish Life Tables No 14, 2001-2003 CSO, Population and Labour Force projections, 2011-2041, Table A3
	6.4	EU: Life expectancy at birth by sex, 2006	Eurostat Statistics: Population and social conditions\Population\Demography\Demography - National data\National data\Mortality
Population			
Population distribution	7.1	Ireland: Population distribution by age group, 1999-2008	CSO, Annual population estimates
	7.2	Ireland: Household composition, 1999-2008	CSO, QNHS
	7.3	EU: Population change, 1998-2008	Eurostat Statistics: Population and social conditions\Population\Demography\Demography - National data\National data\Population
Migration	7.4	Ireland: Migration and natural increase, 1999-2008	CSO, Annual migration estimates
	7.5	Ireland: Immigration by country of origin, 1999-2008	CSO, Annual migration estimates
	7.6	Ireland and EU: Rate of natural increase of population, 1998-2007	Eurostat Statistics: Population and social conditions\Population\Demography\Demography - National data\National data\Population
Age of population	7.7	Ireland: Age dependency ratio, 1999-2008	CSO, Annual population estimates
	7.8	EU: Young and old as proportion of population aged 15-64, 2008	Eurostat Statistics: Population and social conditions\Population\Demography\Demography - National data\National data\Main demographic indicators
Fertility	7.9	Ireland and EU: Total fertility rate, 1997-2006	CSO, Vital Statistics Eurostat Statistics: Population and social conditions\Population\Demography\Demography - National data\National data\Fertility
	7.10	EU: Total fertility rate, 1996-2006	Eurostat Statistics: Population and social conditions\Population\Demography\Demography - National data\National data\Fertility
Lone parent families	7.11	Ireland: Lone parent families with children aged under 20 by sex of parent, 1999-2008	CSO, QNHS
Living alone	7.12	Ireland: Persons aged 65 and over living alone by sex, 1999-2008	CSO, QNHS
Housing			
Dwelling completions	8.1	Ireland: Dwelling unit completions, 1970-2008	Department of the Environment, Heritage and Local Government, Annual Housing Statistics Bulletin CSO, National Accounts
	8.2	Ireland: Nature of occupancy of private households, 1961-2006	CSO, Census of Population
Mortgages	8.3	Ireland: Housing loans paid, 1998-2007	Department of the Environment, Heritage and Local Government, Annual Housing Statistics Bulletin
	8.4	Eurozone: Interest rates for household mortgages (new business), 2004-2008	Central Bank, Financial Services Authority of Ireland European Central Bank

Domain and sub-domain	Indicator		Data source
Crime			
Recorded incidents	9.1	Ireland: Incident detection rates by Garda Division, 2003-2007	CSO, Garda Recorded Crime Statistics
	9.2	Ireland: Recorded incidents by Garda Division, 2007	CSO, Garda Recorded Crime Statistics
	9.3	Ireland: Recorded incidents per 1,000 population, 2003-2007	CSO, Garda Recorded Crime Statistics
Murders	9.4	Ireland: Murders recorded, 2003-2007	CSO, Garda Recorded Crime Statistics
Environment			
Greenhouse gases	10.1	Ireland: Total net greenhouse gas emissions, 1998-2007	Eurostat Statistics: Structural indicators\Environment Environmental Protection Agency, Ireland's Greenhouse Gas Emissions in 2006
	10.2	EU: Net greenhouse gas emissions, 2006, and Kyoto 2008-2012 target	Eurostat Statistics: Structural indicators\Environment Environmental Protection Agency, Ireland's Greenhouse Gas Emissions in 2006
Energy intensity of economy	10.3	Ireland: Gross inland consumption of energy divided by GDP, 1998-2007	Eurostat Statistics: Structural indicators\Environment
	10.4	EU: Gross inland consumption of energy divided by GDP, 2007	Eurostat Statistics: Structural indicators\Environment
River water quality	10.5	Ireland: River water quality, 1987-2006	Environmental Protection Agency
Urban air quality	10.6	Ireland: Particulate matter in urban areas, 1997-2007	Environmental Protection Agency
Acid rain precursors	10.7	Ireland: Acid rain precursor emissions, 1998-2006	CSO, Environmental Accounts
Waste management	10.8	Ireland: Total waste collected and percentage landfilled by type, 2005-2007	Environmental Protection Agency
	10.9	EU: Municipal waste collected and landfilled, 2007	Eurostat Statistics: Structural indicators\Environment
Transport	10.10	Ireland: Private cars under current licence, 1998-2007	Department of Transport, Irish Bulletin of Vehicle and Driver Statistics, Table 1. CSO, Annual population estimates
	10.11	EU: Passenger cars per 1,000 population aged 15 and over, 2003-2007	Eurostat Statistics: Transport\Regional transport\Stock of vehicles by category at regional level
	10.12	Ireland and EU: Share of road in total inland freight transport, 1998-2007	Eurostat Statistics: Structural indicators\Environment
	10.13	EU: Share of road in total inland freight transport, 2003-2007	Eurostat Statistics: Structural indicators\Environment
	10.14	Ireland and EU: Index of inland freight transport volume, 1998-2007	Eurostat Statistics: Structural indicators\Environment
	10.15	EU: Index of inland freight transport volume, 2003-2007	Eurostat Statistics: Structural indicators\Environment