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An Phríomh-Oifig Staidrimh

Measuring Ireland's Progress

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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 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*, which 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 Measuring Ireland's Progress.



Gerard O'Hanlon
Director General

Chapter

1

Introduction

1.1 Background

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.

The social partnership agreement 2003-2005¹ 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 report². 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, *Measuring Ireland's Progress*, 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. Since then, the CSO has published *Measuring Ireland's Progress* annually and this report is the seventh in the series.

1.2 Overview of indicators

The list of national progress indicators is presented in summary format in Table A. A total of 109 indicators covering 49 domain themes have been selected. More than half of the indicators 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 with other EU countries and, where available, with three EFTA countries (Iceland, Norway and Switzerland) and the three official candidate countries (Croatia, Macedonia and Turkey).

In this report two new indicators have been added: indicator 7.3 on population in the EU and indicator 7.14 on divorce rates in the EU. Four indicators have been dropped from the 2008 report, namely 1.17 and 1.18 which referred to interest rates in the Eurozone and 1.23 and 1.24 which described disposable income and gross value added in the NUTS3 regions in Ireland. The four tables which comprised domain 9 (Crime) in the 2008 report have been replaced by six tables in this years report showing more detail on recorded crimes and detection rates. Due to changing data availability from the Environmental Protection Agency, indicator 10.8 on waste generated no longer contains a breakdown by type of waste.

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.

1.3 Technical notes

In some 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.

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.

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).

From Q1 2009 the QNHS is based on calendar quarters rather than seasonal quarters. QNHS results throughout this report are presented for Q2, and any QNHS data involving a time series have been recreated on a calendar quarter basis.

The figures in the tables and graphs reflect the data availability position as of August 2010.

The following symbols are used:

- : data not available
- not applicable
- (c) data confidential.

Table A Selected key indicators of national progress

| Domain and sub-domain | Indicator | |
|---|-----------|--|
| 1. Economy | | |
| Gross Domestic Product | 1.1 | Ireland: GDP and GNI |
| | 1.2 | EU: GDP and GNI at current market prices |
| | 1.3 | EU: GDP per capita in Purchasing Power Standards |
| Government debt | 1.4 | Ireland, EU and Eurozone: General government consolidated gross debt |
| | 1.5 | EU: General government consolidated gross debt |
| | 1.6 | EU: General government consolidated gross debt map |
| Public balance | 1.7 | EU: Public balance map |
| | 1.8 | Ireland and Eurozone: Public balance |
| | 1.9 | EU: Public balance |
| | 1.10 | Ireland: Central and Local Government current expenditure |
| Gross fixed capital formation | 1.11 | Ireland and EU: Gross fixed capital formation |
| | 1.12 | EU: Gross fixed capital formation |
| International transactions | 1.13 | EU: Current account balance |
| | 1.14 | EU: Direct investment flows |
| International trade | 1.15 | EU: Exports of goods and services |
| | 1.16 | EU: Imports of goods and services |
| Exchange rates | 1.17 | International: Bilateral euro exchange rates |
| | 1.18 | Ireland: Harmonised competitiveness indicator |
| Harmonised Index of Consumer Prices | 1.19 | Ireland and EU: Harmonised Index of Consumer Prices |
| | 1.20 | EU: Harmonised Index of Consumer Prices |
| Price levels | 1.21 | Ireland and EU: Comparative price levels of final consumption by private households including indirect taxes |
| | 1.22 | EU: Comparative price levels of final consumption by private households including indirect taxes |
| 2. Innovation and technology | | |
| Science and technology graduates | 2.1 | Ireland: Mathematics, science and technology graduates |
| | 2.2 | EU: Mathematics, science and technology PhDs awarded |
| Research and development expenditure | 2.3 | Ireland and EU: Gross domestic expenditure on R&D |
| | 2.4 | EU: Gross domestic expenditure on R&D |
| Patent applications | 2.5 | Ireland and EU: European Patent Office applications |
| | 2.6 | EU: European Patent Office applications |
| Household Internet access | 2.7 | Ireland: Private households with a computer connected to the Internet |
| | 2.8 | EU: Private households with Internet access |
| 3. Employment and unemployment | | |
| Employment rate | 3.1 | Ireland: Employment rates by sex |
| | 3.2 | EU: Employment rates by sex |
| Labour productivity | 3.3 | Ireland: GDP in Purchasing Power Standards per hour worked and per person employed |
| | 3.4 | EU: GDP in Purchasing Power Standards per person employed |
| Unemployment rate | 3.5 | Ireland and EU: Unemployment rates |
| | 3.6 | EU: Unemployment rates by sex |
| | 3.7 | Ireland and EU: Long-term unemployment rates |
| Jobless households | 3.8 | EU: Long-term unemployment rates by sex |
| | 3.9 | Ireland: Population aged 18-59 living in jobless households |
| Older workers | 3.10 | EU: Population aged 18-59 living in jobless households |
| | 3.11 | EU: Employment rate of persons aged 55-64 by sex |
| | 3.12 | EU: Average exit age from the labour force by sex |
| 4. Social cohesion | | |
| Social protection expenditure | 4.1 | Ireland and EU: Social protection expenditure |
| | 4.2 | EU: Social protection expenditure in Purchasing Power Parities per capita |
| | 4.3 | EU: Social protection expenditure by type |
| Risk of poverty | 4.4 | EU: At risk of poverty rates |
| | 4.5 | Ireland: At risk of poverty rates by age and sex |
| | 4.6 | Ireland: Persons in consistent poverty by age and sex |
| | 4.7 | Ireland: Persons in consistent poverty by principal economic status |

| Domain and sub-domain | Indicator | |
|--|-----------|---|
| Gender pay gap | 4.8 | EU: Gender pay gap |
| Voter turnout | 4.9 | Ireland: Numbers voting in Dáil elections |
| | 4.10 | EU: Votes recorded at national parliamentary elections |
| Official development assistance | 4.11 | Ireland: Net official development assistance |
| | 4.12 | EU: Net official development assistance |
| 5. Education | | |
| Education expenditure | 5.1 | Ireland: Real non-capital public expenditure on education |
| | 5.2 | Ireland: Student numbers by level |
| | 5.3 | EU: Public expenditure on education |
| Pupil-teacher ratio | 5.4 | EU: Ratio of students to teachers |
| | 5.5 | EU: Average class size at ISCED levels 1 and 2 |
| Third-level education | 5.6 | Ireland: Persons aged 25-34 with third-level education |
| | 5.7 | EU: Persons aged 25-34 with third-level education by sex |
| Literacy | 5.8 | Ireland: Student performance on the combined reading, mathematical and scientific literacy scales by sex |
| | 5.9 | EU: Student performance on the combined reading, mathematical and scientific literacy scales |
| Early school leavers | 5.10 | Ireland: Early school leavers by labour force status and sex |
| | 5.11 | Ireland: Proportion of the population aged 20-64 with at least upper secondary education |
| | 5.12 | EU: Early school leavers |
| 6. Health | | |
| Health care expenditure | 6.1 | Ireland: Non-capital public expenditure on health care |
| | 6.2 | EU: Total expenditure on health as percentage of GDP |
| Life expectancy | 6.3 | Ireland: Life expectancy at birth and at age 65 by sex |
| | 6.4 | EU: Life expectancy at birth by sex |
| 7. Population | | |
| Population distribution | 7.1 | Ireland: Population distribution by age group |
| | 7.2 | Ireland: Household composition |
| | 7.3 | EU: Population |
| | 7.4 | EU: Population change |
| Migration | 7.5 | Ireland: Migration and natural increase |
| | 7.6 | Ireland: Immigration by country of origin |
| | 7.7 | Ireland and EU: Rate of natural increase of population |
| Age of population | 7.8 | Ireland: Age dependency ratio |
| | 7.9 | EU: Young and old as proportion of population aged 15-64 |
| Fertility | 7.10 | Ireland and EU: Total fertility rate |
| | 7.11 | EU: Total fertility rate |
| Lone parent families | 7.12 | Ireland: Lone parent families with children aged under 20 by sex of parent |
| Living alone | 7.13 | Ireland: Persons aged 65 and over living alone by sex |
| Divorce | 7.14 | EU: Divorce rate |
| 8. Housing | | |
| Dwelling completions | 8.1 | Ireland: Dwelling unit completions |
| | 8.2 | Ireland: Nature of occupancy of private households |
| Mortgages | 8.3 | Ireland: Housing loans paid |
| | 8.4 | Eurozone: Interest rates for household mortgages (new business) |
| 9. Crime | | |
| Recorded crimes and detection rates | 9.1 | Ireland: Recorded crimes by type of offence |
| | 9.2 | Ireland: Detection rates |
| Recorded incidents | 9.3 | Ireland: Recorded incidents of driving/in charge of a vehicle while over legal alcohol limit per 100,000 population |
| | 9.4 | Ireland: Recorded incidents of burglary per 100,000 population |
| | 9.5 | Ireland: Recorded incidents of controlled drug offences per 100,000 population |
| Murder/manslaughters | 9.6 | Ireland: Recorded victims of murder/manslaughter |
| 10. Environment | | |
| Greenhouse gases | 10.1 | Ireland: Total net greenhouse gas emissions |
| | 10.2 | EU: Net greenhouse gas emissions 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 |
| | 10.4 | EU: Gross inland consumption of energy divided by GDP |
| River water quality | 10.5 | Ireland: River water quality |
| Urban air quality | 10.6 | Ireland: Particulate matter in urban areas |
| Acid rain precursors | 10.7 | Ireland: Acid rain precursor emissions |
| Waste management | 10.8 | Ireland: Total municipal waste generated, recovered and landfilled |
| | 10.9 | EU: Municipal waste collected and landfilled |
| Transport | 10.10 | Ireland: Private cars under current licence |
| | 10.11 | EU: Passenger cars per 1,000 population aged 15 and over |
| | 10.12 | Ireland and EU: Share of road transport in total inland freight transport |
| | 10.13 | EU: Share of road transport in total inland freight transport |
| | 10.14 | Ireland and EU: Index of inland freight transport volume |
| | 10.15 | EU: Index of inland freight transport volume |

Chapter

2

Indicators

2.1 Highlights

In 2009, Ireland was in recession. GDP fell sharply for the second year in a row, the public balance deficit was the highest of any EU member state, and government debt increased to nearly two-thirds of GDP, having been only a quarter two years before. Ireland's employment rate fell below the EU average, and its unemployment rate was the sixth highest rate in the EU. While inflation fell in 2009 — the only other EU states with price falls were Portugal and Spain — Irish prices remain high by EU standards. The productivity of the Irish workforce remained above the EU average.

Ireland has the lowest divorce rate and the highest fertility rate in the EU, and its population is increasing at a higher rate than in any other EU country. In 2009, Ireland had the highest proportion of young people in the EU, and the lowest proportion of old people. Student numbers increased in 2009, particularly at third-level. The proportion of the Irish population aged 25-34 in Ireland that has completed third-level education is the second highest in the EU. The pupil-teacher ratio at primary level in Ireland is high by EU standards, though the early school-leaver rate is better than the EU average. Over the four-year period 2004-2008, homicide offences fell by nearly one tenth and sexual offences by a fifth, though most other categories recorded increases. The number of murders/manslaughters recorded in Ireland fell from its peak of 84 in 2007 to 55 in 2008. Ireland's greenhouse gas emissions remain high, but its level of acid rain precursor emissions continues to fall.

Economy: The value of GDP fell by 11.3% in 2009. The public balance deficit was 14.3% of GDP, the largest of any EU member state. And government debt increased steeply to 64% of GDP in 2009, having been 25% only two years before. Nonetheless, in 2009 Ireland had the second highest GDP per capita in the EU 27 at 31% above the EU average, although, based on GNI, Ireland was the tenth highest. The productivity of the Irish workforce in 2009, measured by GDP per person employed, was about a third higher than the EU average. As Irish employees work longer hours, the productivity per hour worked is relatively lower, but still about 4% above the EU average. (Tables 1.1, 1.3, 1.5, 1.9, 3.3 and 3.4)

Prices: Inflation in Ireland (as measured by the HICP) fell in 2009. The only other EU states with price falls were Portugal and Spain. Over the past decade, Ireland became less competitive, with the harmonised competitiveness indicator (deflated by consumer prices) increasing by 31% between 2000 and 2009; this indicates a significant deterioration in price competitiveness for Ireland vis-à-vis our main trading partners. Appreciation of the Euro against other major currencies contributed to this decline. In 2008 Ireland had the second highest price levels in the EU. (Tables 1.17, 1.18, 1.20 and 1.22)

Employment and unemployment: The employment rate (15-64) in Ireland rose from 65% in 2000 to 69.2% in 2007, but then fell to 60.2% by 2010. The male employment rate was stable over the 2000 to 2008 period at about 76% but fell sharply over the next two years to stand at 64.2% in early 2010. The female employment rate increased from 53.8% in 2000 to 60.4% in 2008 before falling to 56.3% in early 2010. In 2009, Ireland's employment rate was below the EU average, and its unemployment rate was the sixth highest rate in the EU. (Tables 3.1, 3.2 and 3.6)

Social cohesion: In 2008, 4.2% of the population were in consistent poverty. This was a reduction on the level recorded in 2007, when 5.1% of the population was living in consistent poverty. 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 in most EU countries. Ireland's net official development assistance increased from 0.38% of GNI in 2004 to 0.59% in 2008, still short of the UN 2007 target of 0.7%. (Tables 4.6, 4.9, 4.10 and 4.12)

Education: Student numbers in Ireland increased in 2009, particularly at third-level. In 2009, 45% of the population aged 25-34 had completed third level education, the second highest rate across the EU. The proportion of the Irish population aged 18-24 who left school with at most lower secondary education was 11.3% in 2008, better than the EU average of 14.9%. The pupil-teacher ratio at primary level in Ireland in the school year 2006/2007 was joint fifth highest in the EU 27 at 17.9. Eleven of the reporting EU member states had a pupil-teacher ratio of less than 13 at primary level. (Tables 5.2, 5.4, 5.7 and 5.12)

Health: An average of €3,299 (at constant 2008 prices) per person was spent on non-capital public expenditure on health care in Ireland in 2008, an increase of nearly 62% on the 1999 level. However total expenditure on health is lower than the EU 27 average. Life expectancy at birth in Ireland is 76.8 years for males and 81.6 years for females, and these figures are reasonably close to the EU average. A 65-year old man in Ireland can now expect to live a further 16.6 years, while a 65-year old woman can expect to live 19.8 years. (Tables 6.1, 6.2 and 6.3)

Population: The population of Ireland increased by 17.7% to 4.46 million in the period 2000 to 2009, the highest rate of increase in the EU. The rate of natural increase of the population in Ireland was 10.5 per 1,000 in 2008 compared with an EU 27 average of only 1.2. In 2008, Ireland was the only EU country with a fertility rate greater than 2; the EU average was 1.53. The divorce rate in Ireland was 0.8 divorces per 1,000 population in 2007, the lowest rate in the EU. In 2009, Ireland had the highest proportion of young people (0-14) in the EU, and the lowest proportion of old people (65 and over); these combined to give Ireland an age dependency ratio that was similar to the EU average. (Tables 7.1, 7.7, 7.9, 7.11 and 7.14)

Housing: The number of dwelling units built increased steadily in recent years and peaked at almost 90,000 in 2006 before collapsing to about 26,400 in 2009, the level that prevailed before the mid-1990s. The average value of a new housing loan in Ireland rose from €92,000 in 1999 to €270,000 in 2008. (Graph 8.1 and table 8.3)

Crime: Over the four-year period 2004-2008, homicide offences fell by nearly one tenth and sexual offences by a fifth; most other categories recorded increases, including controlled drug offences (+137%), weapons and explosive offences (+86%), and road and traffic offences (+79%). The number of murders/manslaughters recorded in Ireland decreased from its peak of 84 in 2007 to 55 in 2008. (Tables 9.1 and 9.6.)

Environment: Ireland's greenhouse gas emissions were at 121.3% of 1990 levels in 2008. This was 8.3 percentage points higher than the Kyoto 2008-2012 target. The level of acid rain precursor emissions in Ireland has fallen from 493.4 SO₂ equivalent per 1,000 tonnes of gas emitted in 1999 to 340.1 in 2007, 11% above the Gothenburg Protocol 2010 target level of 306. This decrease is mainly due to lower levels of sulphur dioxide emissions. The percentage of waste recovered in Ireland rose to 36% in 2008, and 60% of waste was landfilled. The landfill percentage varies widely in EU states, from 94.2% in Bulgaria to only 0.5% in Germany, where incineration is used to convert waste to energy. (Tables 10.1, 10.3, 10.4, 10.7, 10.8 and 10.9)

2.2 Indicators

1.1 Ireland: GDP and GNI, 2000–2009

| | €b | €b | % | €000 |
|-------------------|-------|-------|-----------------|--|
| Year | GDP | GNI | GNI as % of GDP | GNI at constant 2008 prices per capita |
| 2000 | 105.0 | 90.5 | 86.2 | 30.7 |
| 2001 | 117.1 | 99.0 | 84.6 | 31.4 |
| 2002 | 130.5 | 108.3 | 83.0 | 31.9 |
| 2003 | 140.0 | 119.7 | 85.5 | 33.1 |
| 2004 | 149.3 | 127.9 | 85.7 | 33.9 |
| 2005 | 162.3 | 139.9 | 86.2 | 35.2 |
| 2006 | 177.3 | 155.4 | 87.6 | 36.6 |
| 2007 | 189.4 | 164.1 | 86.6 | 37.2 |
| 2008 | 180.0 | 156.0 | 86.7 | 35.3 |
| 2009 ⁴ | 159.6 | 132.6 | 83.1 | 31.3 |

Source: CSO National Accounts

- ◆ Gross Domestic Product in Ireland (at current market prices) fell sharply for the second year in a row in 2009. Having peaked at €189.4 billion in 2007, GDP fell 5% in 2008 and a further 11.3% to €159.6 billion in 2009.
- ◆ Similarly, Gross National Income per capita (at constant 2008 prices) fell in 2008 and 2009. It amounted to €31,300 in 2009, almost the same as in 2001.
- ◆ 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. The gap reflects the importance of foreign direct investment to the Irish economy. Luxembourg had a GNI/GDP ratio of 68.7 compared with 83.1 for Ireland in 2009 while the average for the EU 27 countries was 99.6.

1.2 EU: GDP and GNI at current market prices, 2009

| | €b | €b | % |
|----------------|-----------------|-----------------|-----------------|
| Country | GDP | GNI | GNI as % of GDP |
| Latvia | 18.5 | 20.0 | 107.8 |
| Denmark | 222.9 | 229.4 | 102.9 |
| United Kingdom | 1,566.7 | 1,598.1 | 102.0 |
| Sweden | 292.7 | 298.0 | 101.8 |
| Germany | 2,409.1 | 2,444.0 | 101.4 |
| France | 1,907.1 | 1,922.8 | 100.8 |
| Belgium | 337.3 | 340.0 | 100.8 |
| Finland | 171.0 | 170.9 | 99.9 |
| EU 27 | 11,802.5 | 11,749.7 | 99.6 |
| Lithuania | 26.6 | 26.5 | 99.3 |
| Austria | 277.1 | 274.2 | 99.0 |
| Slovakia | 63.3 | 62.6 | 98.8 |
| Slovenia | 34.9 | 34.4 | 98.5 |
| Italy | 1,520.9 | 1,494.6 | 98.3 |
| Cyprus | 16.9 | 16.6 | 98.2 |
| Romania | 115.9 | 113.7 | 98.2 |
| Spain | 1,051.2 | 1,031.4 | 98.1 |
| Bulgaria | 33.9 | 33.1 | 97.7 |
| Netherlands | 570.2 | 557.1 | 97.7 |
| Estonia | 13.7 | 13.4 | 97.7 |
| Greece | 237.5 | 230.9 | 97.2 |
| Poland | 310.1 | 300.0 | 96.7 |
| Portugal | 167.6 | 162.0 | 96.6 |
| Hungary | 93.1 | 87.6 | 94.1 |
| Czech Republic | 137.2 | 129.1 | 94.1 |
| Malta | 5.7 | 5.3 | 93.4 |
| Ireland | 159.6 | 132.6 | 83.1 |
| Luxembourg | 37.8 | 25.9 | 68.7 |
| Norway | 275.1 | 276.4 | 100.5 |
| Switzerland | 354.7 | 353.4 | 99.6 |
| Croatia | 45.4 | 43.9 | 96.7 |
| Iceland | 8.7 | 7.8 | 89.3 |
| Turkey | 441.0 | 328.9 | 74.6 |
| Macedonia | 6.8 | : | : |

Source: Eurostat, CSO National Accounts

⁴ Preliminary data

1.3 EU: GDP per capita in Purchasing Power Standards, 2005–2009⁵

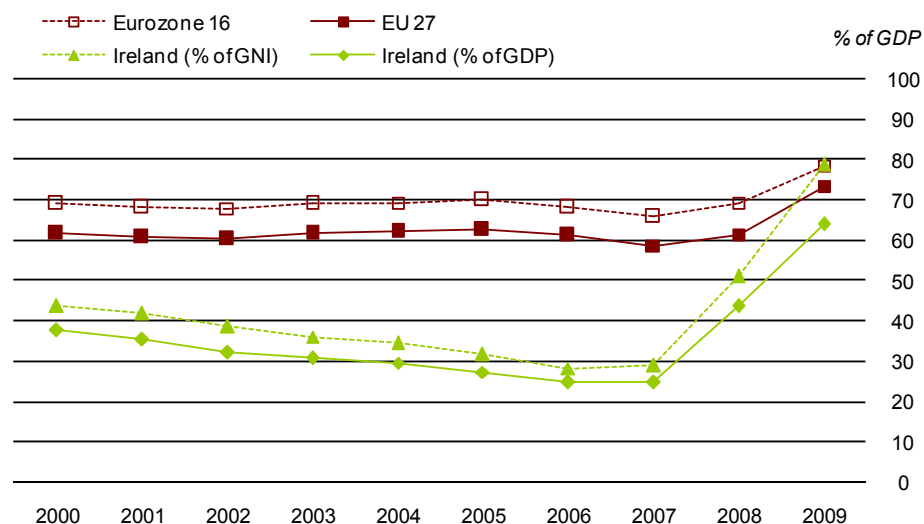
| Country | EU 27=100 | | | | |
|---------------------------|------------|------------|------------|------------|------------|
| | 2005 | 2006 | 2007 | 2008 | 2009 |
| Luxembourg | 254 | 272 | 275 | 276 | 268 |
| Ireland (% of GDP) | 144 | 145 | 148 | 135 | 131 |
| Netherlands | 131 | 131 | 132 | 134 | 130 |
| Austria | 124 | 125 | 123 | 123 | 124 |
| Sweden | 122 | 123 | 125 | 122 | 120 |
| Denmark | 124 | 124 | 121 | 120 | 117 |
| Germany | 117 | 116 | 116 | 116 | 116 |
| United Kingdom | 122 | 120 | 117 | 116 | 116 |
| Belgium | 120 | 118 | 116 | 115 | 115 |
| Finland | 114 | 114 | 118 | 117 | 110 |
| Ireland (% of GNI) | 124 | 127 | 128 | 117 | 109 |
| France | 111 | 109 | 108 | 108 | 107 |
| Spain | 102 | 105 | 105 | 103 | 104 |
| Italy | 105 | 104 | 103 | 102 | 102 |
| EU 27 | 100 | 100 | 100 | 100 | 100 |
| Cyprus | 91 | 91 | 93 | 96 | 98 |
| Greece | 92 | 93 | 93 | 94 | 95 |
| Slovenia | 87 | 88 | 89 | 91 | 86 |
| Czech Republic | 76 | 77 | 80 | 80 | 80 |
| Malta | 78 | 77 | 77 | 76 | 78 |
| Portugal | 79 | 79 | 78 | 78 | 78 |
| Slovakia | 60 | 63 | 68 | 72 | 72 |
| Hungary | 63 | 63 | 63 | 64 | 63 |
| Estonia | 62 | 65 | 69 | 67 | 62 |
| Lithuania | 53 | 55 | 59 | 62 | 53 |
| Latvia | 49 | 52 | 56 | 57 | 49 |
| Bulgaria | 34 | 36 | 38 | 41 | : |
| Poland | 51 | 52 | 54 | 56 | : |
| Romania | 35 | 38 | 42 | : | : |
| Norway | 176 | 184 | 179 | 191 | 177 |
| Switzerland | 133 | 136 | 141 | 141 | 144 |
| Iceland | 130 | 123 | 122 | 121 | 120 |
| Croatia | 57 | 57 | 60 | 63 | : |
| Macedonia | 28 | 30 | 32 | 34 | : |
| Turkey | 42 | 44 | 45 | 46 | : |

Source: Eurostat

- ◆ Despite the drop in GDP, Ireland still had the second highest GDP per capita within the EU 27 in 2009, expressed in terms of purchasing power standards. GDP per capita in Ireland increased from 44% above the EU 27 average in 2005 to 48% above in 2007, before falling back to 31% in 2009.
- ◆ The pattern of GNI per capita in Ireland is similar; it rose from 24% above the EU 27 average in 2005 to 28% above in 2007, falling back to 9% in 2009.
- ◆ In 2009 nine of the twelve new EU Member States for which data is available, as well as Greece and Portugal, were below the EU 27 average.

⁵ Break in series for Slovenia in 2008 and 2009.

1.4 Ireland, EU and Eurozone: General government consolidated gross debt, 2000–2009



Source: Eurostat, CSO National Accounts

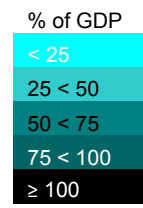
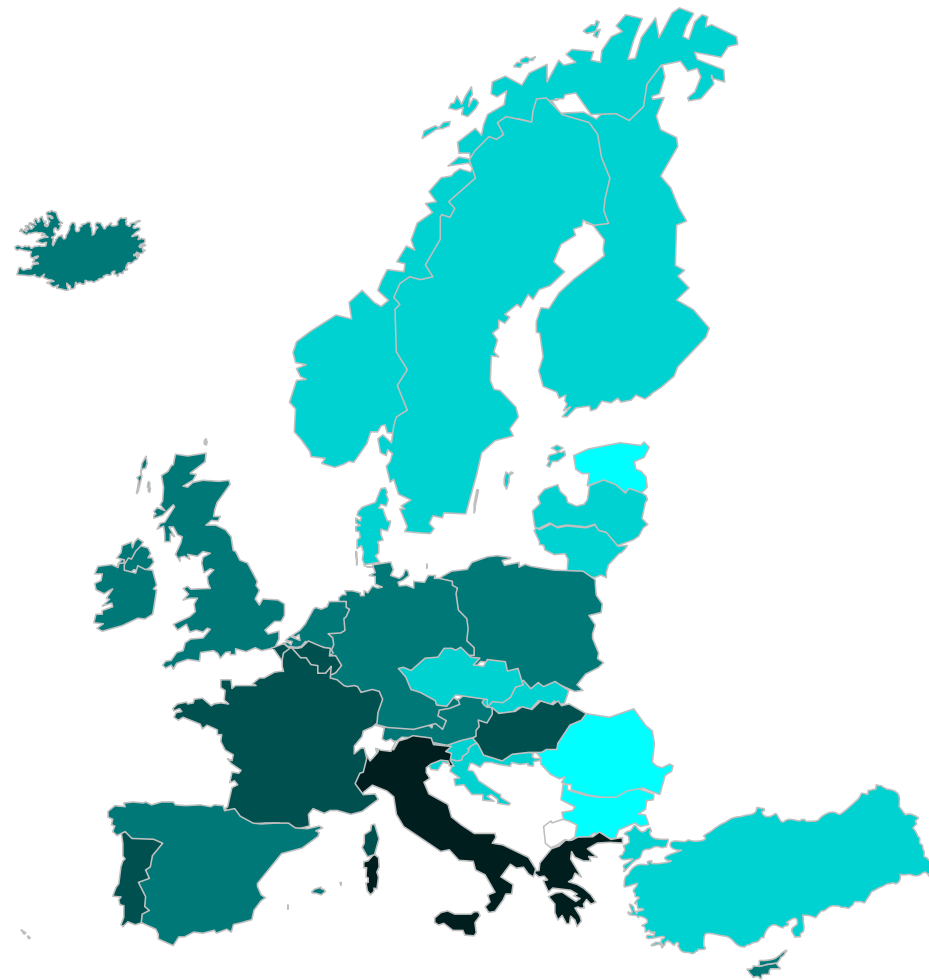
- ◆ General government consolidated gross debt as a percentage of GDP in Ireland declined from 37.8% to 25% over the 2000-2007 period but then increased steeply to 64% in 2009. The Eurozone 16 figure over the period 2000 to 2008 remained close to 70% before rising to nearly 79% in 2009.
- ◆ With the exception of Hungary, the new EU Member States had lower than average debt to GDP ratios in 2009.

1.5 EU: General government consolidated gross debt, 2005–2009

| Country | 2005 | 2006 | 2007 | 2008 | 2009 |
|---------------------------|-------------|-------------|-------------|-------------|-------------|
| Estonia | 4.6 | 4.5 | 3.8 | 4.6 | 7.2 |
| Luxembourg | 6.1 | 6.5 | 6.7 | 13.7 | 14.5 |
| Bulgaria | 29.2 | 22.7 | 18.2 | 14.1 | 14.8 |
| Romania | 15.8 | 12.4 | 12.6 | 13.3 | 23.7 |
| Lithuania | 18.4 | 18.0 | 16.9 | 15.6 | 29.3 |
| Czech Republic | 29.7 | 29.4 | 29.0 | 30.0 | 35.4 |
| Slovakia | 34.2 | 30.5 | 29.3 | 27.7 | 35.7 |
| Slovenia | 27.0 | 26.7 | 23.4 | 22.6 | 35.9 |
| Latvia | 12.4 | 10.7 | 9.0 | 19.5 | 36.1 |
| Denmark | 37.8 | 32.1 | 27.4 | 34.2 | 41.6 |
| Sweden | 50.8 | 45.7 | 40.8 | 38.3 | 42.3 |
| Finland | 41.7 | 39.7 | 35.2 | 34.2 | 44.0 |
| Poland | 47.1 | 47.7 | 45.0 | 47.2 | 51.0 |
| Spain | 43.0 | 39.6 | 36.2 | 39.7 | 53.2 |
| Cyprus | 69.1 | 64.6 | 58.3 | 48.4 | 56.2 |
| Netherlands | 51.8 | 47.4 | 45.5 | 58.2 | 60.9 |
| Ireland (% of GDP) | 27.4 | 24.9 | 25.0 | 43.9 | 64.0 |
| Austria | 63.9 | 62.2 | 59.5 | 62.6 | 66.5 |
| United Kingdom | 42.5 | 43.5 | 44.7 | 52.0 | 68.1 |
| Malta | 70.1 | 63.7 | 61.9 | 63.7 | 69.1 |
| Germany | 68.0 | 67.6 | 65.0 | 66.0 | 73.2 |
| EU 27 | 62.8 | 61.4 | 58.8 | 61.6 | 73.6 |
| Portugal | 63.6 | 64.7 | 63.6 | 66.3 | 76.8 |
| France | 66.4 | 63.7 | 63.8 | 67.5 | 77.6 |
| Hungary | 61.8 | 65.6 | 65.9 | 72.9 | 78.3 |
| Eurozone 16 | 70.1 | 68.3 | 66.0 | 69.4 | 78.7 |
| Ireland (% of GNI) | 31.7 | 28.4 | 28.9 | 51.2 | 78.9 |
| Belgium | 92.1 | 88.1 | 84.2 | 89.8 | 96.7 |
| Greece | 100.0 | 97.8 | 95.7 | 99.2 | 115.1 |
| Italy | 105.8 | 106.5 | 103.5 | 106.1 | 115.8 |
| Norway | 44.5 | 55.3 | 52.4 | 49.9 | 43.7 |
| Croatia | 43.7 | 40.8 | 37.7 | : | : |
| Turkey | 52.3 | 46.1 | 38.8 | : | : |
| Iceland | 26.0 | 27.9 | 29.1 | 57.4 | : |

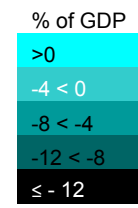
Source: Eurostat, CSO National Accounts

1.6 EU: General government consolidated gross debt map⁶, 2009



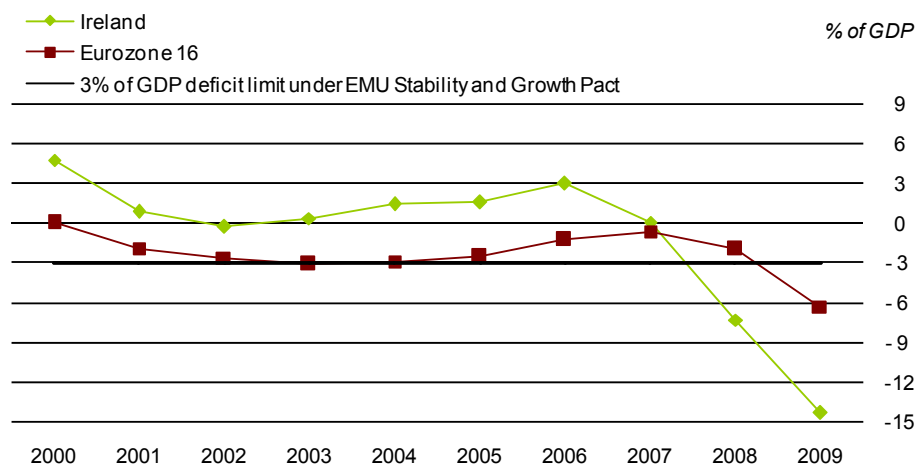
⁶ 2008 data used for Iceland and 2007 data used for Croatia and Turkey.

1.7 EU: Public balance map⁷, 2009



⁷ 2007 data used for Croatia and Turkey.

1.8 Ireland and Eurozone: Public balance, 2000–2009



Source: Eurostat, CSO National Accounts

- ◆ The public balance in Ireland was 0.1% of GDP in 2007 but fell sharply to -7.3% in 2008, exceeding the 3% of GDP deficit limit in the EMU Stability and Growth Pact. In 2009 there was another sharp fall to -14.3% of GDP.
- ◆ In 2009 Ireland had the largest public balance deficit in the EU, followed by Greece, the United Kingdom, Spain and Portugal. All EU 27 member states had a public balance deficit in 2009 and twenty two EU member states exceeded the 3% of GDP deficit limit under the EMU Stability and Growth Pact.

1.9 EU: Public balance, 2005–2009

| Country | % of GDP | | | | |
|---------------------------|-------------|-------------|-------------|-------------|--------------|
| | 2005 | 2006 | 2007 | 2008 | 2009 |
| Sweden | 2.3 | 2.5 | 3.8 | 2.5 | -0.5 |
| Luxembourg | 0.0 | 1.4 | 3.6 | 2.9 | -0.7 |
| Estonia | 1.6 | 2.5 | 2.6 | -2.7 | -1.7 |
| Finland | 2.7 | 4.0 | 5.2 | 4.2 | -2.2 |
| Denmark | 5.2 | 5.2 | 4.8 | 3.4 | -2.7 |
| Germany | -3.3 | -1.6 | 0.2 | 0.0 | -3.3 |
| Austria | -1.7 | -1.5 | -0.4 | -0.4 | -3.4 |
| Malta | -2.9 | -2.6 | -2.2 | -4.5 | -3.8 |
| Bulgaria | 1.9 | 3.0 | 0.1 | 1.8 | -3.9 |
| Hungary | -7.9 | -9.3 | -5.0 | -3.8 | -4.0 |
| Italy | -4.3 | -3.3 | -1.5 | -2.7 | -5.3 |
| Netherlands | -0.3 | 0.5 | 0.2 | 0.7 | -5.3 |
| Slovenia | -1.4 | -1.3 | 0.0 | -1.7 | -5.5 |
| Czech Republic | -3.6 | -2.6 | -0.7 | -2.7 | -5.9 |
| Belgium | -2.7 | 0.3 | -0.2 | -1.2 | -6.0 |
| Cyprus | -2.4 | -1.2 | 3.4 | 0.9 | -6.1 |
| Eurozone 16 | -2.5 | -1.3 | -0.6 | -2.0 | -6.3 |
| EU 27 | -2.5 | -1.4 | -0.8 | -2.3 | -6.8 |
| Slovakia | -2.8 | -3.5 | -1.9 | -2.3 | -6.8 |
| Poland | -4.1 | -3.6 | -1.9 | -3.7 | -7.1 |
| France | -2.9 | -2.3 | -2.7 | -3.3 | -7.5 |
| Romania | -1.2 | -2.2 | -2.5 | -5.4 | -8.3 |
| Lithuania | -0.5 | -0.4 | -1.0 | -3.3 | -8.9 |
| Latvia | -0.4 | -0.5 | -0.3 | -4.1 | -9.0 |
| Portugal | -6.1 | -3.9 | -2.6 | -2.8 | -9.4 |
| Spain | 1.0 | 2.0 | 1.9 | -4.1 | -11.2 |
| United Kingdom | -3.4 | -2.7 | -2.8 | -4.9 | -11.5 |
| Greece | -5.2 | -3.6 | -5.1 | -7.7 | -13.6 |
| Ireland (% of GDP) | 1.6 | 3.0 | 0.1 | -7.3 | -14.3 |
| Ireland (% of GNI) | 1.9 | 3.4 | 0.2 | -8.5 | -17.6 |
| Norway | 15.1 | 18.5 | 17.7 | 19.1 | 9.7 |
| Iceland | 4.9 | 6.3 | 5.4 | -13.5 | -9.1 |
| Croatia | -4 | -2.4 | -1.6 | : | : |
| Turkey | -0.6 | -0.1 | -1.2 | : | : |

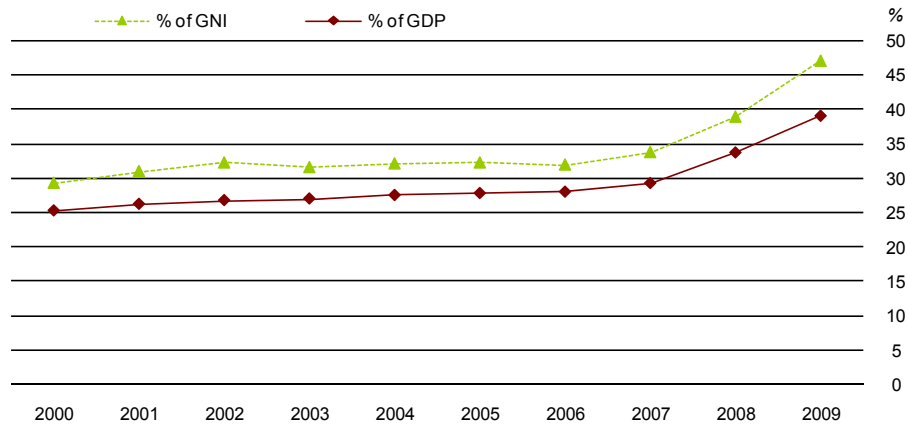
Source: Eurostat, CSO National Accounts

1.10 Ireland: Central and Local Government current expenditure, 2000–2009

| Year | % | |
|------|----------|----------|
| | % of GDP | % of GNI |
| 2000 | 25.3 | 29.3 |
| 2001 | 26.3 | 31.0 |
| 2002 | 26.8 | 32.3 |
| 2003 | 27.0 | 31.6 |
| 2004 | 27.5 | 32.2 |
| 2005 | 27.8 | 32.3 |
| 2006 | 28.0 | 32.0 |
| 2007 | 29.3 | 33.8 |
| 2008 | 33.8 | 39.0 |
| 2009 | 39.1 | 47.1 |

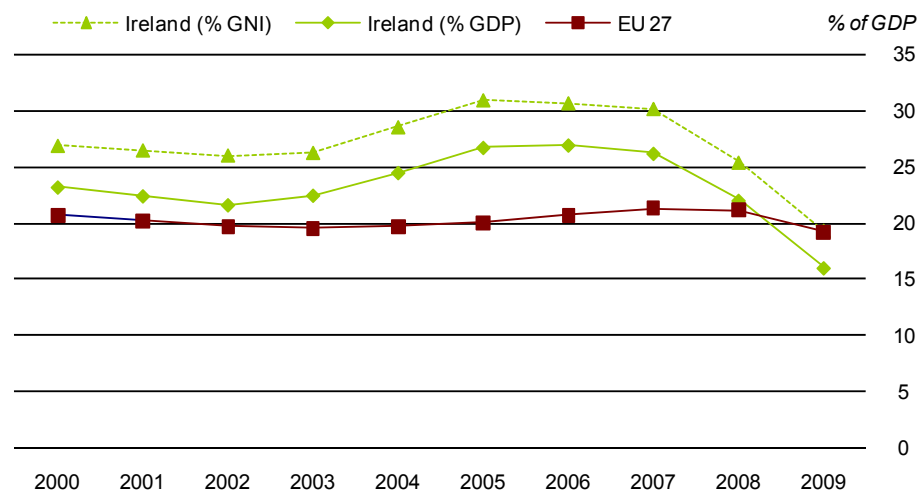
Source: CSO National Accounts

Ireland: Central and Local Government current expenditure as a % of GNI and GDP, 2000 – 2009



- ◆ Current expenditure by central and local government as a percentage of GDP has increased consistently each year over the period 2000 to 2009, rising from 25.3% of GDP in 2000 to 39.1% in 2009.

1.11 Ireland and EU: Gross fixed capital formation, 2000–2009



Source: Eurostat, CSO

- ◆ Between 2000 and 2007, Ireland had a higher rate of investment in gross fixed capital formation than the EU 27 average. In 2008 and 2009 however the rate of investment fell sharply and in 2009 was below the EU 27 average (when calculated as a percentage of GDP). This drop in investment over the last two years is linked to the decline in the construction sector in Ireland over the same time period.
- ◆ Within the EU 27 countries, Malta had the lowest rate of investment in 2009 in gross fixed capital formation at 14.2% of GDP followed by the United Kingdom (14.9%) and Ireland (15.6%). The highest rates were in Romania (25.6%) and Bulgaria (24.8%).

1.12 EU: Gross fixed capital formation, 2005–2009

| Country | % of GDP | | | | |
|---------------------------|-------------|-------------|-------------|-------------|-------------|
| | 2005 | 2006 | 2007 | 2008 | 2009 |
| Romania | 23.7 | 25.6 | 30.2 | 31.9 | 25.6 |
| Bulgaria | 24.2 | 25.9 | 29.8 | 33.4 | 24.8 |
| Spain | 29.4 | 30.6 | 30.7 | 28.8 | 24.4 |
| Slovenia | 25.5 | 26.5 | 27.7 | 28.9 | 24.0 |
| Slovakia | 26.6 | 26.5 | 26.2 | 24.9 | 23.6 |
| Czech Republic | 24.9 | 24.7 | 25.2 | 23.9 | 22.4 |
| Estonia | 32.1 | 34.9 | 34.5 | 29.3 | 21.9 |
| Latvia | 30.6 | 32.6 | 33.7 | 29.3 | 21.5 |
| Belgium | 20.7 | 21.0 | 21.7 | 22.6 | 21.3 |
| Poland | 18.2 | 19.7 | 21.6 | 22.1 | 21.0 |
| Austria | 21.7 | 21.6 | 21.8 | 21.8 | 20.7 |
| France | 20.0 | 20.7 | 21.5 | 21.8 | 20.6 |
| Cyprus | 19.3 | 20.6 | 22.0 | 23.3 | 20.4 |
| Hungary | 23.0 | 21.7 | 21.2 | 20.9 | 20.0 |
| Finland | 20.1 | 20.0 | 21.3 | 21.6 | 19.8 |
| Portugal | 23.0 | 22.4 | 22.3 | 22.2 | 19.5 |
| Ireland (% of GNI) | 30.9 | 30.6 | 30.1 | 25.3 | 19.2 |
| EU 27 | 20.0 | 20.7 | 21.3 | 21.1 | 19.2 |
| Italy | 20.7 | 21.1 | 21.2 | 20.7 | 18.9 |
| Netherlands | 18.9 | 19.7 | 20.0 | 20.4 | 18.9 |
| Denmark | 19.5 | 21.7 | 22.3 | 20.9 | 18.6 |
| Sweden | 17.9 | 18.7 | 19.6 | 20.1 | 17.9 |
| Germany | 17.4 | 18.2 | 18.8 | 19.0 | 17.8 |
| Luxembourg | 20.5 | 19.1 | 19.9 | 19.3 | 17.4 |
| Lithuania | 22.8 | 25.2 | 28.3 | 25.2 | 17.0 |
| Greece | 20.6 | 21.5 | 21.4 | 19.4 | 16.8 |
| Ireland (% of GDP) | 26.6 | 26.9 | 26.0 | 21.7 | 15.6 |
| United Kingdom | 16.7 | 17.1 | 17.8 | 16.8 | 14.9 |
| Malta | 20.1 | 21.1 | 20.4 | 16.5 | 14.2 |
| Croatia | 24.6 | 26.1 | 26.2 | 27.6 | 25.5 |
| Norway | 18.8 | 19.6 | 22.2 | 21.3 | 21.4 |
| Switzerland | 21.2 | 21.3 | 21.5 | 21.2 | 20.4 |
| Macedonia | 17.0 | 17.6 | 19.6 | 21.0 | 19.5 |
| Turkey | 21.0 | 22.3 | 21.4 | 19.9 | 16.8 |
| Iceland | 28.4 | 34.0 | 28.5 | 24.3 | 14.1 |

Source: Eurostat, CSO National Accounts

1.13 EU: Current account balance, 2005–2009

| current account balance as % of GDP | | | | | |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|
| Country | 2005 | 2006 | 2007 | 2008 | 2009 |
| Latvia | -12.5 | -22.5 | -22.3 | -13.1 | 9.5 |
| Sweden | 6.8 | 8.3 | 8.2 | 9.4 | 7.2 |
| Luxembourg | 11.0 | 10.3 | 9.7 | 5.3 | 5.6 |
| Netherlands | 7.3 | 9.3 | 8.7 | 4.8 | 5.4 |
| Germany | 5.1 | 6.5 | 7.6 | 6.7 | 4.9 |
| Estonia | -10.0 | -16.9 | -17.8 | -9.4 | 4.6 |
| Denmark | 4.3 | 3.0 | 1.5 | 2.2 | 4.0 |
| Lithuania | -7.1 | -10.6 | -14.5 | -11.9 | 3.8 |
| Finland | 3.6 | 4.6 | 4.3 | 3.1 | 1.3 |
| Belgium | 2.6 | 2.0 | 2.2 | -2.9 | 0.5 |
| Hungary | -7.2 | -7.2 | -6.6 | -7.0 | 0.2 |
| Eurozone 16⁸ | 0.1 | -0.1 | 0.1 | -1.7 | -0.6 |
| Slovenia | -1.7 | -2.5 | -4.8 | -6.2 | -1.0 |
| Czech Republic | -1.3 | -2.4 | -3.2 | -0.7 | -1.1 |
| EU 27⁸ | -0.7 | -1.3 | -1.0 | -1.9 | -1.1 |
| United Kingdom | -2.6 | -3.3 | -2.7 | -1.5 | -1.3 |
| Poland | -1.2 | -2.7 | -4.7 | -5.1 | -1.6 |
| France | -0.6 | -0.5 | -1.0 | -2.3 | -2.2 |
| Ireland | -3.5 | -3.6 | -5.3 | -5.2 | -2.9 |
| Italy | -1.7 | -2.6 | -2.4 | -3.4 | -3.2 |
| Slovakia | -8.4 | -8.2 | -5.7 | -6.6 | -3.2 |
| Malta | -8.8 | -9.2 | -6.1 | -5.6 | -3.9 |
| Romania | -8.6 | -10.5 | -13.4 | -11.6 | -4.5 |
| Spain | -7.4 | -9.0 | -10.0 | -9.7 | -5.4 |
| Cyprus | -5.9 | -6.9 | -11.7 | -17.5 | -8.3 |
| Bulgaria | -12.4 | -18.4 | -26.8 | -24.0 | -9.4 |
| Portugal | -9.1 | -9.6 | -9.0 | -11.6 | -10.0 |
| Greece | -7.5 | -11.3 | -14.4 | -14.6 | -11.2 |
| Austria | 2.0 | 2.8 | 3.6 | (c) | (c) |
| Norway | 16.3 | 17.2 | 14.2 | 18.5 | 13.9 |
| Turkey | -4.6 | -6.1 | -5.9 | -5.6 | -2.2 |
| Croatia | -5.6 | -6.9 | -7.6 | -9.2 | -5.2 |
| Iceland | -16.4 | -25.6 | -20.1 | -47.0 | : |

Source: Eurostat, CSO Balance of Payments

- ◆ The current account deficit in Ireland's balance of international payments rose from 3.5% of GDP in 2005 to 5.3% in 2007 before falling to 2.9% in 2009.
- ◆ In 2009, the Eurozone 16 current account was in deficit. Nine member states had current account deficits larger than Ireland, with the largest in Greece (11.2%) and Portugal (10%).

⁸ Eurozone and EU 27 data are extra-Eurozone and extra-EU 27 balances respectively.

1.14 EU: Direct investment flows, 2008-2009

| % of GDP | | | | |
|--------------------------------|-------------|-------------|-------------|-------------|
| Country | Inward | | Outward | |
| | 2008 | 2009 | 2008 | 2009 |
| Luxembourg | 177.4 | 318.3 | -237.5 | -359.7 |
| Cyprus | 15.9 | 24.6 | -15.4 | -21.7 |
| Malta | 10.6 | 11.3 | -3.3 | -1.4 |
| Ireland | -7.5 | 11.0 | -5.1 | -9.1 |
| Bulgaria | 19.6 | 9.5 | -1.4 | 0.3 |
| Estonia | 8.2 | 8.8 | -4.5 | -7.7 |
| Belgium | 21.8 | 7.2 | -25.7 | 3.2 |
| Romania | 6.8 | 3.9 | -0.1 | -0.1 |
| Netherlands | -0.9 | 3.4 | -2.3 | -2.2 |
| Sweden | 6.9 | 3.1 | -5.7 | -8.3 |
| Poland | 2.8 | 2.7 | -0.6 | -0.7 |
| Denmark | 0.8 | 2.6 | -4.1 | -5.1 |
| Eurozone 16⁹ | 1.4 | 2.4 | -3.5 | -3.5 |
| France | 3.4 | 2.3 | -7.0 | -6.2 |
| United Kingdom | 3.5 | 2.1 | -6.1 | -0.8 |
| Czech Republic | 3.0 | 1.4 | -2.0 | -0.7 |
| Italy | 0.7 | 1.4 | -1.9 | -2.1 |
| Portugal | 1.9 | 1.2 | -1.1 | -0.6 |
| Finland | -0.7 | 1.1 | -3.1 | -1.2 |
| Germany | 0.7 | 1.1 | -3.7 | -1.9 |
| Spain | 4.6 | 1.0 | -4.7 | -1.1 |
| Greece | 1.3 | 1.0 | -0.7 | -0.6 |
| Lithuania | 3.9 | 0.9 | -0.7 | -0.6 |
| Latvia | 3.8 | 0.3 | -0.7 | 0.1 |
| Slovakia | 3.7 | -0.1 | -0.3 | -0.5 |
| Slovenia | 3.5 | -0.1 | -2.5 | -1.8 |
| Hungary | 41.0 | -4.4 | -39.6 | 5.4 |
| Austria | (c) | (c) | (c) | (c) |
| Croatia | 6.8 | 4.1 | -0.3 | -2.0 |
| Norway | 1.4 | 1.8 | -6.3 | -9.0 |
| Turkey | 2.5 | 1.3 | -0.3 | -0.3 |
| Iceland | 4.1 | : | 46.0 | : |

Source: Eurostat, CSO Balance of Payments

- ◆ Direct investment in Ireland by foreign companies in 2009 was positive and represented 11% of GDP compared with disinvestment (negative) of 7.5% in 2008. Outward investment by companies resident in Ireland into their foreign subsidiaries and associates increased from 5.1% of GDP in 2008 to 9.1% in 2009. Increases in outward direct investment are shown with a negative sign.

⁹ Eurozone data are extra-Eurozone flows.

1.15 EU: Exports of goods and services, 2005–2009

| Country | exports as % of GDP | | | | |
|----------------|---------------------|-------------|-------------|-------------|-------------|
| | 2005 | 2006 | 2007 | 2008 | 2009 |
| Luxembourg | 147.3 | 156.7 | 163.0 | 160.0 | 145.7 |
| Ireland | 80.8 | 79.4 | 80.1 | 82.9 | 90.1 |
| Hungary | 67.7 | 77.0 | 79.9 | 82.0 | 77.2 |
| Malta | 77.4 | 87.1 | 89.5 | 81.9 | 72.4 |
| Belgium | 84.7 | 85.3 | 87.0 | 82.5 | 71.2 |
| Estonia | 80.1 | 79.7 | 72.2 | 75.1 | 70.4 |
| Slovakia | 76.2 | 84.6 | 86.2 | 82.6 | 69.8 |
| Czech Republic | 72.1 | 76.3 | 79.9 | 77.1 | 69.4 |
| Netherlands | 66.6 | 69.9 | 71.8 | 72.8 | 64.3 |
| Slovenia | 61.9 | 66.3 | 69.3 | 67.6 | 58.8 |
| Lithuania | 57.5 | 59.0 | 54.0 | 60.2 | 54.4 |
| Austria | 55.3 | 57.7 | 60.2 | 60.2 | 50.5 |
| Cyprus | 47.5 | 46.3 | 46.9 | 55.8 | 50.5 |
| Bulgaria | 59.5 | 64.2 | 63.2 | 60.3 | 49.2 |
| Sweden | 47.2 | 49.6 | 50.5 | 52.7 | 47.6 |
| Denmark | 48.9 | 52.0 | 52.2 | 54.6 | 47.1 |
| Latvia | 47.0 | 43.9 | 41.3 | 41.8 | 42.4 |
| Germany | 41.2 | 45.5 | 47.4 | 47.6 | 40.9 |
| Poland | 37.1 | 40.3 | 40.8 | 40.1 | 39.0 |
| Finland | 42.2 | 45.7 | 46.1 | 47.5 | 36.7 |
| Romania | 33.1 | 32.3 | 29.2 | 30.3 | 31.2 |
| Portugal | 28.1 | 30.8 | 32.5 | 32.6 | 28.4 |
| United Kingdom | 26.0 | 28.1 | 25.9 | 28.2 | 27.2 |
| Italy | 26.0 | 27.7 | 28.9 | 28.8 | 24.0 |
| Spain | 25.8 | 26.5 | 27.2 | 26.7 | 23.6 |
| France | 26.2 | 27.1 | 26.8 | 26.8 | 23.1 |
| Greece | 21.2 | 21.2 | 21.6 | 22.5 | 17.8 |
| Norway | 44.4 | 46.2 | 45.6 | 48.0 | 41.8 |
| Croatia | 42.7 | 43.1 | 42.8 | 42.0 | 35.5 |
| Turkey | 21.9 | 22.6 | 22.3 | 23.9 | 23.2 |
| Iceland | 31.6 | 32.0 | 34.5 | 50.0 | : |

Source: Eurostat, CSO Balance of Payments

- Exports of merchandise goods and services from Ireland represented 90.1% of GDP in 2009, the second highest proportion in the EU after Luxembourg (145.7%).

1.16 EU: Imports of goods and services, 2005–2009

| Country | imports as % of GDP | | | | |
|----------------|---------------------|-------------|-------------|-------------|-------------|
| | 2005 | 2006 | 2007 | 2008 | 2009 |
| Italy | 26.0 | 28.5 | 29.2 | 29.3 | 24.6 |
| France | 26.7 | 28.0 | 28.2 | 29.1 | 25.0 |
| Greece | 27.4 | 30.6 | 32.6 | 33.8 | 25.4 |
| Spain | 30.9 | 32.7 | 33.6 | 32.2 | 25.5 |
| United Kingdom | 29.5 | 31.3 | 29.4 | 31.5 | 29.8 |
| Finland | 37.6 | 40.7 | 40.7 | 43.2 | 33.8 |
| Portugal | 36.2 | 38.1 | 38.9 | 41.1 | 35.0 |
| Germany | 36.0 | 39.8 | 40.3 | 41.2 | 36.1 |
| Romania | 43.3 | 44.3 | 43.2 | 43.5 | 37.3 |
| Poland | 37.8 | 42.2 | 43.7 | 44.0 | 38.9 |
| Sweden | 39.8 | 41.9 | 43.6 | 45.5 | 40.9 |
| Latvia | 62.2 | 66.2 | 61.8 | 55.4 | 42.8 |
| Denmark | 43.6 | 48.4 | 49.6 | 51.9 | 43.7 |
| Austria | 52.0 | 53.8 | 55.6 | 55.7 | 47.3 |
| Cyprus | 50.1 | 50.3 | 53.5 | 63.2 | 51.1 |
| Lithuania | 64.7 | 69.3 | 67.4 | 71.1 | 55.1 |
| Bulgaria | 76.0 | 82.6 | 84.2 | 81.6 | 56.7 |
| Netherlands | 58.0 | 61.5 | 62.9 | 64.8 | 57.3 |
| Slovenia | 62.3 | 66.8 | 71.1 | 70.4 | 57.7 |
| Czech Republic | 68.9 | 72.9 | 75.1 | 72.5 | 63.7 |
| Estonia | 86.5 | 91.8 | 83.9 | 79.3 | 64.5 |
| Slovakia | 80.5 | 88.9 | 87.0 | 84.4 | 69.9 |
| Belgium | 81.8 | 82.9 | 85.0 | 84.9 | 70.0 |
| Malta | 82.8 | 92.0 | 92.1 | 85.1 | 70.1 |
| Hungary | 68.9 | 78.0 | 78.7 | 81.1 | 71.3 |
| Ireland | 69.1 | 69.1 | 70.3 | 72.7 | 73.1 |
| Luxembourg | 115.4 | 118.1 | 118.7 | 119.2 | 106.0 |
| Norway | 25.6 | 27.8 | 27.4 | 28.7 | 24.5 |
| Turkey | 27.9 | 28.2 | 30.3 | 28.8 | 27.3 |
| Croatia | 48.9 | 45.0 | 50.2 | 50.1 | 39.4 |
| Iceland | 43.9 | 49.5 | 44.6 | 54.0 | : |

Source: Eurostat, CSO Balance of Payments

- Imports of goods and services into Ireland represented 73.1% of GDP in 2009, the second highest proportion in the EU after Luxembourg (106%).

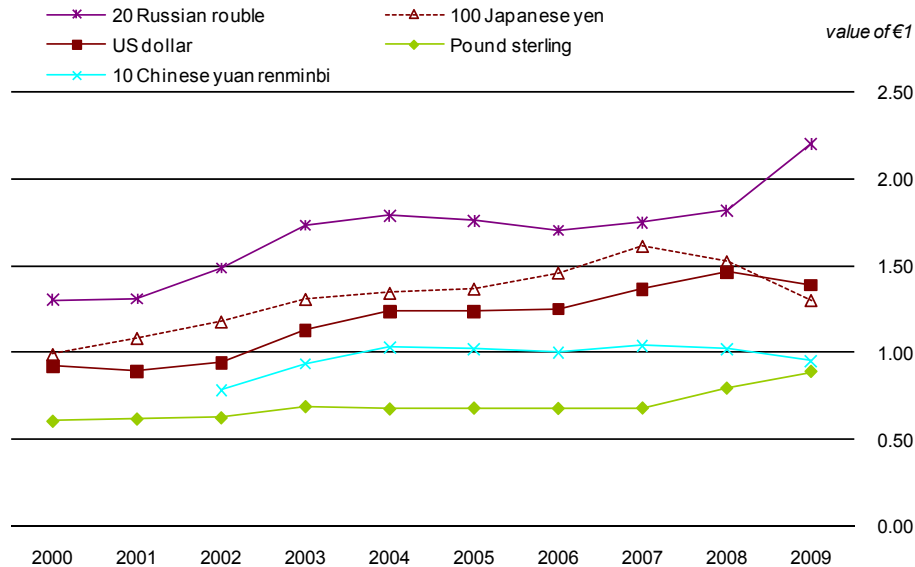
1.17 International: Bilateral euro¹⁰ exchange rates, 2000–2009

value of €1

| Year | US dollar | Pound sterling | Japanese yen | Chinese yuan renminbi | Russian rouble |
|------|-----------|----------------|--------------|-----------------------|----------------|
| 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 |
| 2009 | 1.395 | 0.891 | 130.3 | 9.53 | 44.14 |

Source: European Central Bank

Bilateral euro exchange rates, 2000-2009



¹⁰ On 1 January 1999 the euro became the national currency of the 11 participating EU countries. Greece joined the euro currency on 1 January 2001. Slovenia joined the euro currency on 1 January 2007. Malta and Cyprus joined the euro currency on 1 January 2008 and Slovakia became the 16th country in the Eurozone when it joined on 1 January 2009.

1.18 Ireland: Harmonised competitiveness indicator¹¹, 2000–2009

1999Q1=100

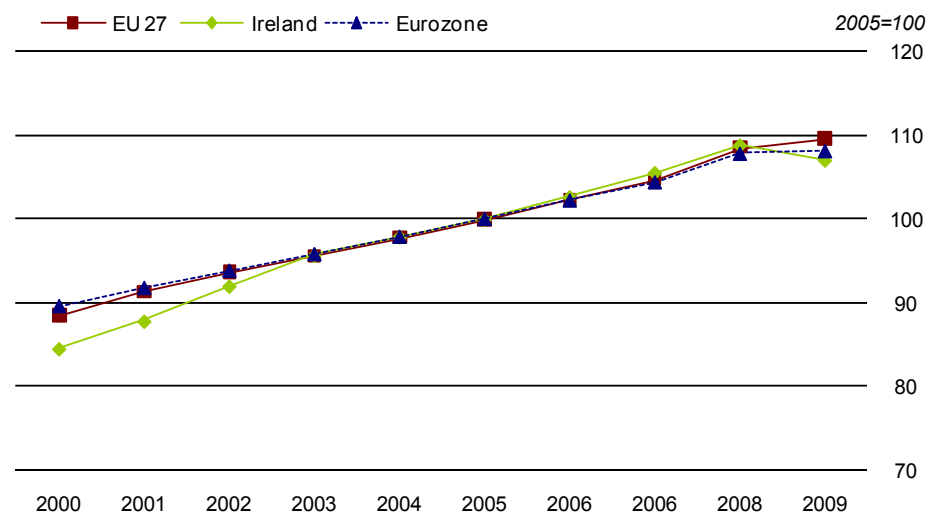
| Year | Nominal HCI | Real HCI (Deflated by consumer prices) | Real HCI (Deflated by producer prices) |
|------|-------------|--|--|
| 2000 | 90.0 | 93.3 | 94.2 |
| 2001 | 91.0 | 95.8 | 96.3 |
| 2002 | 93.5 | 101.2 | 100.9 |
| 2003 | 101.8 | 112.4 | 108.5 |
| 2004 | 104.7 | 115.8 | 108.2 |
| 2005 | 104.2 | 115.1 | 106.0 |
| 2006 | 104.3 | 115.5 | 104.5 |
| 2007 | 107.2 | 119.2 | 105.5 |
| 2008 | 112.0 | 123.8 | 108.8 |
| 2009 | 113.1 | 121.9 | 114.0 |

Source: Central Bank, Financial Services Authority of Ireland

- ◆ The euro decreased in value against the US dollar during 2000 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 before falling back in 2009 to stand at 1.395 dollars.
- ◆ The relationship between the euro and the pound sterling was stable between 2000 and 2007 followed by a sharp rise in the euro against sterling in 2008 and 2009.
- ◆ Ireland's harmonised competitiveness, based on consumer prices, disimproved over the period 2000-2008, from 93.3 in 2000 to 123.8 in 2008, mainly due to higher inflation and an appreciating euro. This indicator improved slightly in 2009 to stand at 121.9.

¹¹ 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.

1.19 Ireland and EU: Harmonised Index of Consumer Prices, 2000–2009



Source: Eurostat HICP

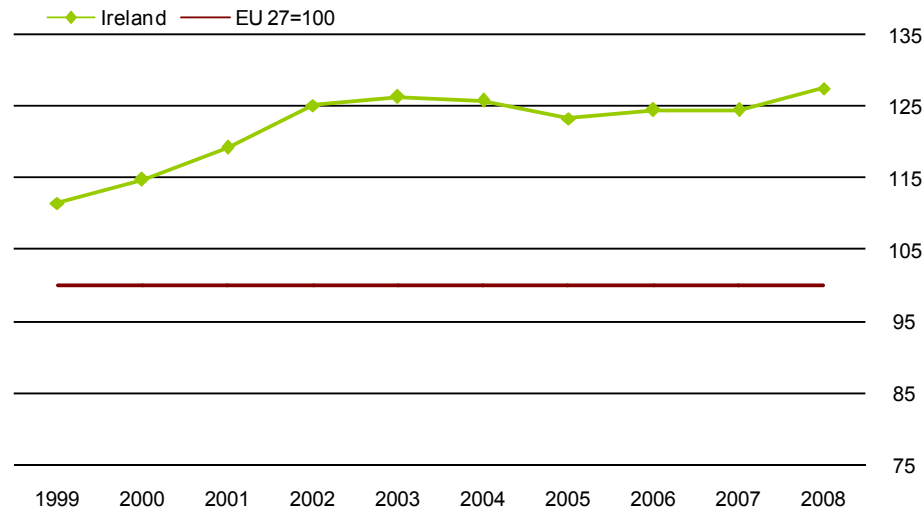
- ◆ Inflation in Ireland, as measured by the HICP, was higher than the EU 27 average from 2000 to 2003. Since 2004 inflation in Ireland has been broadly similar to the averages for the EU 27 and for the Eurozone.
- ◆ The eight EU countries with the highest cumulative inflation rate between 2006 and 2009 are all new EU member states.

1.20 EU: Harmonised Index of Consumer Prices, 2006–2009

| Country | 2006 | 2007 | 2008 | 2009 |
|--------------------|--------------|--------------|--------------|--------------|
| Netherlands | 101.7 | 103.3 | 105.5 | 106.6 |
| France | 101.9 | 103.6 | 106.8 | 106.9 |
| Ireland | 102.7 | 105.6 | 108.9 | 107.1 |
| Germany | 101.8 | 104.1 | 107.0 | 107.2 |
| Portugal | 103.0 | 105.5 | 108.3 | 107.4 |
| Austria | 101.7 | 103.9 | 107.3 | 107.7 |
| Eurozone 16 | 102.2 | 104.4 | 107.8 | 108.1 |
| Denmark | 101.8 | 103.5 | 107.3 | 108.4 |
| Finland | 101.3 | 102.9 | 106.9 | 108.7 |
| Sweden | 101.5 | 103.2 | 106.7 | 108.7 |
| Italy | 102.2 | 104.3 | 108.0 | 108.8 |
| Belgium | 102.3 | 104.2 | 108.9 | 108.9 |
| Cyprus | 102.3 | 104.5 | 109.0 | 109.2 |
| EU 27 | 102.3 | 104.7 | 108.6 | 109.6 |
| Luxembourg | 103.0 | 105.7 | 110.0 | 110.0 |
| Malta | 102.6 | 103.3 | 108.1 | 110.1 |
| Spain | 103.6 | 106.5 | 110.9 | 110.6 |
| United Kingdom | 102.3 | 104.7 | 108.5 | 110.8 |
| Slovakia | 104.3 | 106.2 | 110.4 | 111.4 |
| Czech Republic | 102.1 | 105.1 | 111.7 | 112.4 |
| Greece | 103.3 | 106.4 | 110.9 | 112.4 |
| Poland | 101.3 | 103.9 | 108.3 | 112.6 |
| Slovenia | 102.5 | 106.4 | 112.3 | 113.3 |
| Estonia | 104.5 | 111.5 | 123.3 | 123.6 |
| Hungary | 104.0 | 112.3 | 119.1 | 123.9 |
| Lithuania | 103.8 | 109.8 | 122.0 | 127.1 |
| Romania | 106.6 | 111.8 | 120.7 | 127.4 |
| Bulgaria | 107.4 | 115.6 | 129.4 | 132.6 |
| Latvia | 106.6 | 117.3 | 135.2 | 139.6 |
| Switzerland | 101.0 | 101.8 | 104.2 | 103.4 |
| Norway | 102.5 | 103.2 | 106.7 | 109.2 |
| Croatia | 103.3 | 106.0 | 112.2 | 114.7 |
| Turkey | 109.3 | 118.9 | 131.3 | 139.5 |
| Iceland | 104.7 | 108.5 | 122.3 | 142.2 |

Source: Eurostat HICP

1.21 Ireland and EU: Comparative price levels of final consumption by private households including indirect taxes, 1999–2008¹²



Source: Eurostat HICP

- ◆ Ireland became considerably more expensive between 1999 and 2002. Since 2002 our price levels for final consumption by private households have been about 25% above the EU 27 average.
- ◆ In 2008, Ireland had the second highest price levels among EU 27 countries after Denmark, with a price level for final consumption by private households 27.6% above the EU 27 average.
- ◆ In 2008, Ireland remained the most expensive country in the Eurozone, while Slovakia was the cheapest, with a price level for final consumption by private households 29.9% less than the EU 27 average.

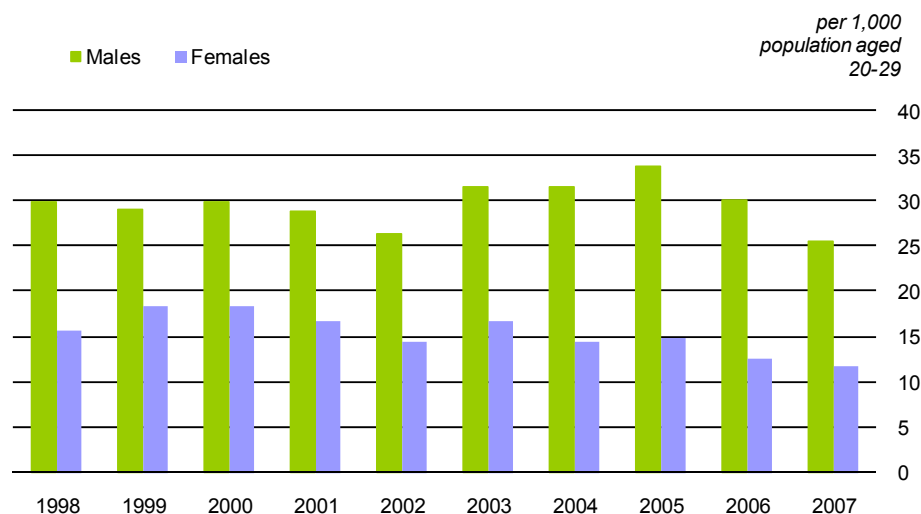
1.22 EU: Comparative price levels of final consumption by private households including indirect taxes, 2004–2008¹²

| Country | EU 27=100 | | | | |
|--------------------|--------------|--------------|--------------|--------------|--------------|
| | 2004 | 2005 | 2006 | 2007 | 2008 |
| Bulgaria | 42.0 | 43.2 | 44.9 | 46.2 | 50.2 |
| Romania | 43.3 | 54.4 | 57.6 | 63.8 | 60.9 |
| Lithuania | 53.5 | 54.8 | 57.3 | 60.0 | 64.6 |
| Hungary | 62.0 | 63.3 | 60.6 | 66.7 | 68.1 |
| Poland | 53.2 | 61.1 | 62.4 | 61.9 | 69.1 |
| Slovakia | 54.9 | 55.4 | 58.0 | 63.2 | 70.1 |
| Latvia | 56.1 | 57.0 | 60.7 | 66.6 | 72.6 |
| Czech Republic | 55.4 | 58.1 | 61.3 | 62.4 | 72.8 |
| Estonia | 63.0 | 64.7 | 68.5 | 73.1 | 78.0 |
| Malta | 73.2 | 73.0 | 74.8 | 75.5 | 78.8 |
| Slovenia | 75.5 | 76.0 | 76.7 | 79.0 | 82.3 |
| Portugal | 87.3 | 85.0 | 84.9 | 85.7 | 87.0 |
| Cyprus | 91.2 | 90.3 | 90.3 | 88.1 | 90.5 |
| Greece | 87.6 | 88.2 | 89.0 | 90.7 | 94.0 |
| Spain | 90.9 | 91.1 | 91.8 | 92.8 | 95.4 |
| EU 27 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| United Kingdom | 108.5 | 109.7 | 110.6 | 112.6 | 100.0 |
| Germany | 104.7 | 103.3 | 102.6 | 101.9 | 103.7 |
| Eurozone 16 | 103.1 | 102.1 | 102.0 | 101.6 | 104.0 |
| Netherlands | 106.1 | 104.7 | 104.0 | 101.8 | 104.0 |
| Austria | 103.3 | 102.5 | 101.9 | 102.2 | 105.1 |
| Italy | 104.9 | 104.7 | 104.2 | 102.9 | 105.6 |
| France | 109.9 | 108.2 | 108.5 | 108.0 | 110.7 |
| Belgium | 106.7 | 106.4 | 107.7 | 108.3 | 111.1 |
| Sweden | 121.4 | 119.0 | 118.5 | 115.7 | 114.5 |
| Luxembourg | 103.0 | 111.6 | 111.3 | 115.3 | 119.1 |
| Finland | 123.8 | 123.6 | 122.7 | 119.9 | 124.3 |
| Ireland | 125.9 | 123.4 | 124.5 | 124.5 | 127.6 |
| Denmark | 139.5 | 140.3 | 138.4 | 137.4 | 141.2 |
| Macedonia | 44.4 | 43.2 | 44.5 | 43.9 | 46.9 |
| Turkey | 59.1 | 66.7 | 66.4 | 71.9 | 71.4 |
| Croatia | 66.5 | 68.7 | 72.6 | 71.8 | 75.9 |
| Iceland | 137.8 | 153.3 | 144.7 | 149.1 | 117.2 |
| Switzerland | 140.8 | 137.5 | 134.6 | 124.5 | 131.1 |
| Norway | 135.2 | 140.6 | 139.8 | 137.7 | 138.9 |

Source: Eurostat HICP

¹² Break in series in 2005.

2.1 Ireland: Mathematics, science and technology graduates, 1998–2007



Source: Eurostat

- ◆ Over the period 1998 to 2006, the proportion of male mathematics, science and technology graduates has been close to or above 30 per 1,000 males aged 20-29, falling to just over 25 in 2007. The proportion of male graduates in these disciplines has been around double the corresponding female rate.
- ◆ In 2007 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 2004. Ireland had the eighth highest rate in the EU in 2007, while Sweden had the highest rate at 1.7.

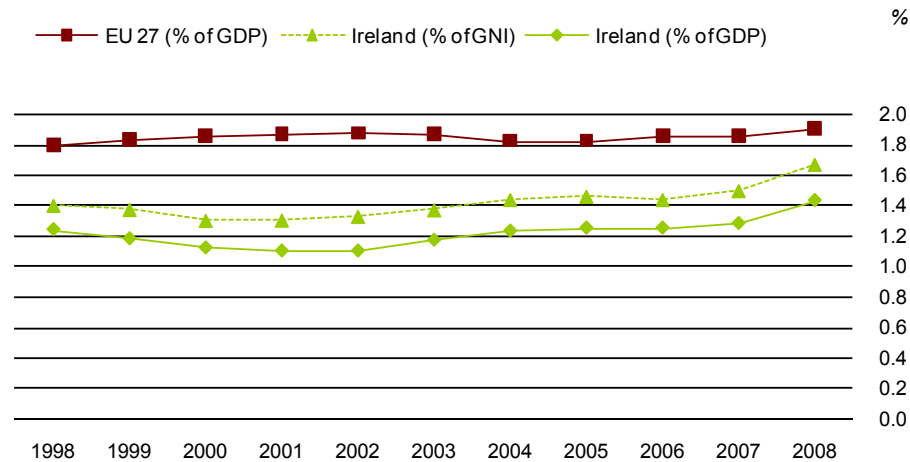
2.2 EU: Mathematics, science and technology PhDs awarded, 2003–2007

per 1,000 population aged 25-34

| Country | 2003 | 2004 | 2005 | 2006 | 2007 |
|----------------|------------|------------|------------|------------|------------|
| Sweden | 1.5 | 1.8 | 1.0 | 1.7 | 1.7 |
| Portugal | 0.7 | 1.0 | 1.1 | 1.3 | 1.4 |
| Finland | 1.0 | 1.3 | 1.2 | 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 |
| France | 0.6 | : | 0.7 | 0.7 | 0.8 |
| Austria | 0.7 | 0.7 | 0.8 | 0.8 | 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 |
| Italy | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 |
| Slovenia | 0.6 | 0.6 | 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 |
| Latvia | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 |
| Hungary | 0.2 | 0.1 | 0.1 | 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 |
| EU 27 | 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 |
| Macedonia | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Iceland | 0.0 | 0.1 | 0.0 | 0.2 | 0.1 |
| Turkey | 0.1 | 0.1 | 0.1 | 0.1 | : |

Source: Eurostat

2.3 Ireland and EU: Gross domestic expenditure on R&D, 1998–2008



Source: Eurostat, Forfás

- ◆ Ireland spends consistently less on research and development as a percentage of GDP/GNI than the EU 27 average but the gap has narrowed a lot since 2002.
- ◆ The big research and development investors in 2008 were Sweden and Finland. Investment was also high in Denmark, Austria, Germany and France.

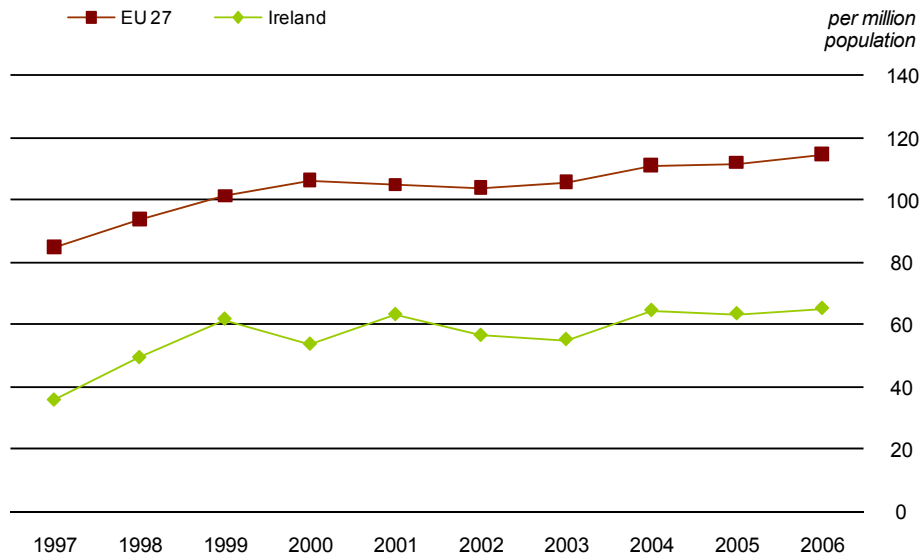
2.4 EU: Gross domestic expenditure on R&D, 1998–2008¹³

| Country | % of GDP | | |
|---------------------------|-------------|-------------|-------------|
| | 1998 | 2003 | 2008 |
| Sweden | 3.61 | 3.85 | 3.75 |
| Finland | 2.87 | 3.43 | 3.72 |
| Denmark | 2.04 | 2.58 | 2.73 |
| Austria | 1.78 | 2.26 | 2.67 |
| Germany | 2.27 | 2.52 | 2.63 |
| France | 2.14 | 2.17 | 2.02 |
| Belgium | 1.86 | 1.88 | 1.92 |
| EU 27 | 1.79 | 1.86 | 1.90 |
| United Kingdom | 1.76 | 1.75 | 1.88 |
| Ireland (% of GNI) | 1.40 | 1.37 | 1.67 |
| Slovenia | 1.34 | 1.27 | 1.66 |
| Netherlands | 1.90 | 1.76 | 1.63 |
| Luxembourg | 1.65 | 1.65 | 1.62 |
| Portugal | 0.65 | 0.74 | 1.51 |
| Czech Republic | 1.15 | 1.25 | 1.47 |
| Ireland (% of GDP) | 1.24 | 1.17 | 1.43 |
| Spain | 0.87 | 1.05 | 1.35 |
| Estonia | 0.57 | 0.77 | 1.29 |
| Italy | 1.05 | 1.11 | 1.18 |
| Hungary | 0.66 | 0.93 | 1.00 |
| Lithuania | 0.54 | 0.67 | 0.80 |
| Latvia | 0.40 | 0.38 | 0.61 |
| Poland | 0.67 | 0.54 | 0.61 |
| Romania | 0.49 | 0.39 | 0.59 |
| Greece | 0.60 | 0.57 | 0.58 |
| Malta | : | 0.26 | 0.54 |
| Bulgaria | 0.57 | 0.50 | 0.49 |
| Cyprus | 0.22 | 0.35 | 0.47 |
| Slovakia | 0.78 | 0.57 | 0.47 |
| Iceland | 2.00 | 2.82 | 2.65 |
| Norway | 1.64 | 1.71 | 1.62 |
| Croatia | : | 0.97 | 0.90 |
| Turkey | 0.37 | 0.48 | : |

Source: Eurostat

¹³ 1999 data used for 1998 for Greece, Sweden and Norway. 2000 data used for 1998 for Luxembourg and 2007 data used for 2008 for Greece.

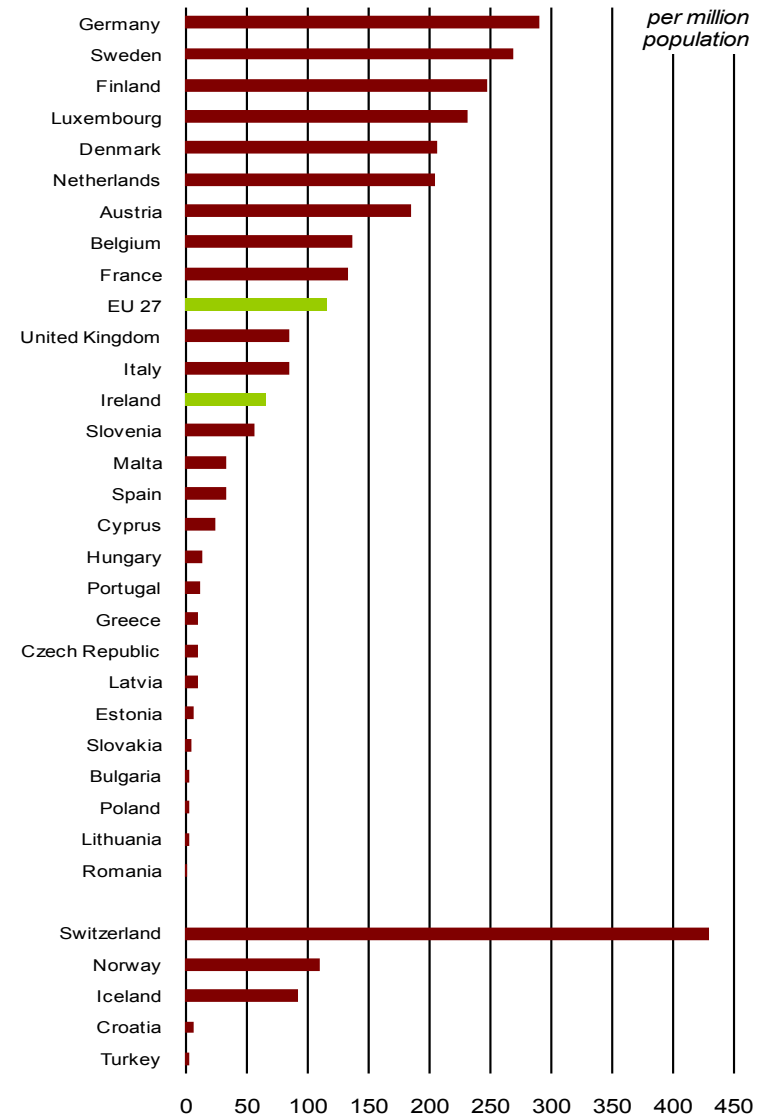
2.5 Ireland and EU: European Patent Office applications, 1997–2006



Source: Eurostat, EPO

- ◆ The rate of applications from Ireland to the European Patent Office is significantly lower than the EU average. There are about 60 applications from Ireland per million population and this rate has remained steady for several years. The EU rate has been climbing slightly and in 2006 stood at close to 120 per million population.
- ◆ The EU average masks large variations, as graph 2.6 shows. The rate is negligible in Romania and some other member states and highest for Germany at over 290 per million population. But the highest rate by far is for Switzerland which, at 430 applications per million population, is about seven times the Irish rate.

2.6 EU: European Patent Office applications, 2006



Source: Eurostat, European Patent Office

2.7 Ireland: Private households¹⁴ with a computer connected to the Internet, 1998–2009

| Year | % of all households with a computer connected to the Internet | % of all households with broadband Internet connection |
|------|---|--|
| 1998 | 5 | : |
| 2000 | 20 | : |
| 2005 | 45 | 7 |
| 2006 | 49 | 13 |
| 2007 | 57 | 31 |
| 2008 | 62 | 43 |
| 2009 | 66 | 54 |

Source: CSO

- ◆ Two-thirds of all private households in Ireland had a computer connected to the Internet in 2009. Since 1998, when only one in twenty households had a computer connected to the internet, there has been steady growth each year in internet connections.
- ◆ The Netherlands, at 90%, had the highest rate of household Internet access in the EU 27 in 2009. Ireland, at 66%, was ranked tenth in the EU in 2009. The EU 27 average was 65% of households.

2.8 EU: Private households with Internet access, 2005–2009¹⁴

| Country | % of households | | | | |
|----------------|-----------------|-----------|-----------|-----------|-----------|
| | 2005 | 2006 | 2007 | 2008 | 2009 |
| Netherlands | 78 | 80 | 83 | 86 | 90 |
| Luxembourg | 65 | 70 | 75 | 80 | 87 |
| Sweden | 73 | 77 | 79 | 84 | 86 |
| Denmark | 75 | 79 | 78 | 82 | 83 |
| Germany | 62 | 67 | 71 | 75 | 79 |
| Finland | 54 | 65 | 69 | 72 | 78 |
| United Kingdom | 60 | 63 | 67 | 71 | 77 |
| Austria | 47 | 52 | 60 | 69 | 70 |
| Belgium | 50 | 54 | 60 | 64 | 67 |
| Ireland | 47 | 50 | 57 | 63 | 67 |
| EU 27 | 48 | 49 | 54 | 60 | 65 |
| Malta | 41 | 53 | 54 | 59 | 64 |
| Slovenia | 48 | 54 | 58 | 59 | 64 |
| Estonia | 39 | 46 | 53 | 58 | 63 |
| France | : | 41 | 49 | 62 | 63 |
| Slovakia | 23 | 27 | 46 | 58 | 62 |
| Lithuania | 16 | 35 | 44 | 51 | 60 |
| Poland | 30 | 36 | 41 | 48 | 59 |
| Latvia | 31 | 42 | 51 | 53 | 58 |
| Hungary | 22 | 32 | 38 | 48 | 55 |
| Czech Republic | 19 | 29 | 35 | 46 | 54 |
| Spain | 36 | 39 | 45 | 51 | 54 |
| Italy | 39 | 40 | 43 | 47 | 53 |
| Cyprus | 32 | 37 | 39 | 43 | 53 |
| Portugal | 31 | 35 | 40 | 46 | 48 |
| Greece | 22 | 23 | 25 | 31 | 38 |
| Romania | : | 14 | 22 | 30 | 38 |
| Bulgaria | : | 17 | 19 | 25 | 30 |
| Turkey | 8 | : | 20 | : | : |
| Iceland | 84 | 83 | 84 | 88 | 90 |
| Norway | 64 | 69 | 78 | 84 | 86 |
| Macedonia | : | 14 | : | 29 | 42 |

Source: Eurostat, CSO QNHS

¹⁴ 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.

3.1 Ireland: Employment rates by sex, 2000-2010

% of population aged 15-64

| Year | Persons | Males | Females |
|------|---------|-------|---------|
| 2000 | 65.0 | 76.1 | 53.8 |
| 2001 | 65.7 | 76.7 | 54.6 |
| 2002 | 65.2 | 75.1 | 55.2 |
| 2003 | 65.2 | 74.9 | 55.5 |
| 2004 | 65.9 | 75.7 | 56.1 |
| 2005 | 67.5 | 76.6 | 58.2 |
| 2006 | 68.5 | 77.7 | 59.1 |
| 2007 | 69.2 | 77.6 | 60.7 |
| 2008 | 68.1 | 75.7 | 60.4 |
| 2009 | 62.5 | 67.3 | 57.8 |
| 2010 | 60.2 | 64.2 | 56.3 |

Source: CSO QNHS¹⁵

Ireland: Employment rates by sex, 2000-2010



- ◆ The overall employment rate in Ireland for those aged 15-64 rose from 65% in 2000 to 69.2% in 2007, before decreasing to 60.2% in the first quarter of 2010. The male employment rate was stable over the 2000 to 2008 period at about 76% but fell sharply over the next two years to stand at 64.2% in early 2010. The female employment rate increased from 53.8% in 2000 to 60.4% in 2008 before falling to 56.3% in early 2010.

3.2 EU: Employment rates by sex, 2009

% of population aged 15-64

| Country | Total Persons | Males | Females | Gender differential |
|----------------|---------------|-------------|-------------|---------------------|
| Netherlands | 77.0 | 82.4 | 71.5 | 10.9 |
| Denmark | 75.7 | 78.3 | 73.1 | 5.2 |
| Sweden | 72.2 | 74.2 | 70.2 | 4.0 |
| Austria | 71.6 | 76.9 | 66.4 | 10.5 |
| Germany | 70.9 | 75.6 | 66.2 | 9.4 |
| Cyprus | 69.9 | 77.6 | 62.5 | 15.1 |
| United Kingdom | 69.9 | 74.8 | 65.0 | 9.8 |
| Finland | 68.7 | 69.5 | 67.9 | 1.6 |
| Slovenia | 67.5 | 71.0 | 63.8 | 7.2 |
| Portugal | 66.3 | 71.1 | 61.6 | 9.5 |
| Czech Republic | 65.4 | 73.8 | 56.7 | 17.1 |
| Luxembourg | 65.2 | 73.2 | 57.0 | 16.2 |
| EU 27 | 64.6 | 70.7 | 58.6 | 12.1 |
| France | 64.2 | 68.5 | 60.1 | 8.4 |
| Estonia | 63.5 | 64.1 | 63.0 | 1.1 |
| Bulgaria | 62.6 | 66.9 | 58.3 | 8.6 |
| Ireland | 62.5 | 67.3 | 57.8 | 9.5 |
| Belgium | 61.6 | 67.2 | 56.0 | 11.2 |
| Greece | 61.2 | 73.5 | 48.9 | 24.6 |
| Latvia | 60.9 | 61.0 | 60.9 | 0.1 |
| Slovakia | 60.2 | 67.6 | 52.8 | 14.8 |
| Lithuania | 60.1 | 59.5 | 60.7 | -1.2 |
| Spain | 59.8 | 66.6 | 52.8 | 13.8 |
| Poland | 59.3 | 66.1 | 52.8 | 13.3 |
| Romania | 58.6 | 65.2 | 52.0 | 13.2 |
| Italy | 57.5 | 68.6 | 46.4 | 22.2 |
| Hungary | 55.4 | 61.1 | 49.9 | 11.2 |
| Malta | 54.9 | 71.5 | 37.7 | 33.8 |
| Switzerland | 79.2 | 84.5 | 73.8 | 10.7 |
| Iceland | 78.3 | 80.0 | 76.5 | 3.5 |
| Norway | 76.4 | 78.3 | 74.4 | 3.9 |
| Croatia | 56.6 | 62.4 | 51.0 | 11.4 |
| Turkey | 44.3 | 64.5 | 24.2 | 40.3 |
| Macedonia | 43.3 | 52.8 | 33.5 | 19.3 |

Source: Eurostat LFS, CSO QNHS

- ◆ Ireland's overall employment rate, at 62.5%, was below the average EU 27 rate of 64.6% in 2009. All EU states, with the exception of Lithuania, had higher male than female employment rates with the highest differences in Malta, Greece and Italy.

¹⁵ Data from QNHS is Q2 for all years except 2010 which is Q1.

3.3 Ireland: GDP in Purchasing Power Standards per hour worked¹⁶ and per person employed, 1999–2009

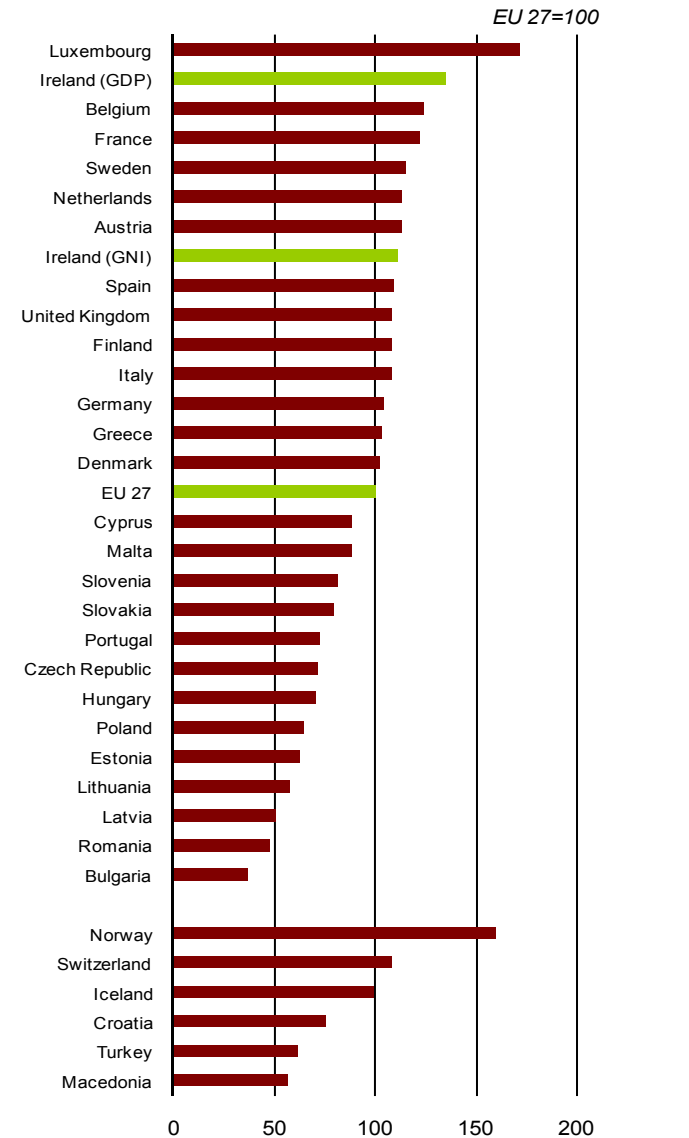
| Year | EU 15=100 | EU 27=100 |
|------|-----------------|---------------------|
| | per hour worked | per person employed |
| 1999 | 94.1 | : |
| 2000 | 95.3 | 127.5 |
| 2001 | 97.0 | 127.9 |
| 2002 | 102.0 | 133.6 |
| 2003 | 104.6 | 135.9 |
| 2004 | 104.9 | 135.2 |
| 2005 | 103.8 | 134.3 |
| 2006 | 104.5 | 134.8 |
| 2007 | 107.8 | 137.4 |
| 2008 | 104.2 | 130.2 |
| 2009 | : | 134.9 |

Source: Eurostat

- ◆ The productivity of the Irish workforce can be measured by GDP in Purchasing Power Standards (PPS) per person employed. Productivity per person employed stands at about a third higher than the EU average. As Irish employees work longer hours, the productivity per hour worked is relatively lower, but still about 4% above the EU average.
- ◆ Ireland had the second highest productivity rate among EU 27 states in 2009, after Luxembourg. Productivity was lowest in Bulgaria and Romania.

¹⁶ See Appendix 1 for details of PPS.

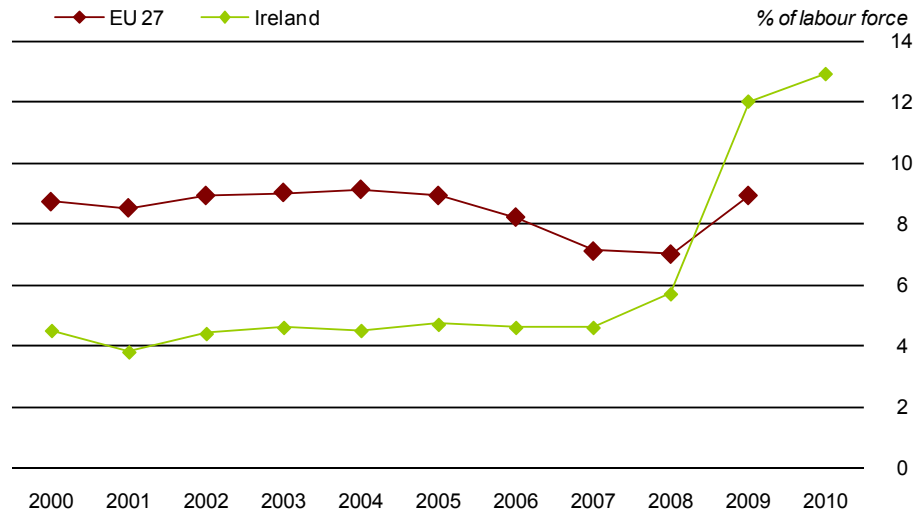
3.4 EU: GDP in Purchasing Power Standards per person employed¹⁷, 2009



Source: Eurostat

¹⁷ 2008 data used for Switzerland, data for all other countries are forecasts.

3.5 Ireland and EU: Unemployment rates, 2000-2010



Source: Eurostat, CSO¹⁸

- ◆ The unemployment rate in Ireland had fallen to 4.5% in 2000 the having been significantly higher in the 1990's. Over the following seven years the rate remained fairly stable at around 4.5% and then increased to 5.7% in 2008. However in 2009 the unemployment rate in Ireland increased dramatically to stand at 12%, higher than the EU 27 average of 8.9%, and increased again in early 2010 to 12.9%.
- ◆ Up to 2008 the unemployment rate in Ireland was consistently lower than the rate for the EU 27. However by 2009 the unemployment rate in Ireland was the joint fifth highest in the EU. Spain had the highest unemployment rate at 18%.
- ◆ Fourteen EU 27 countries, including Ireland, had higher male than female unemployment rates, with Ireland having the largest gender differential in the EU: 15.1% of males and 8.1% of females were unemployed.

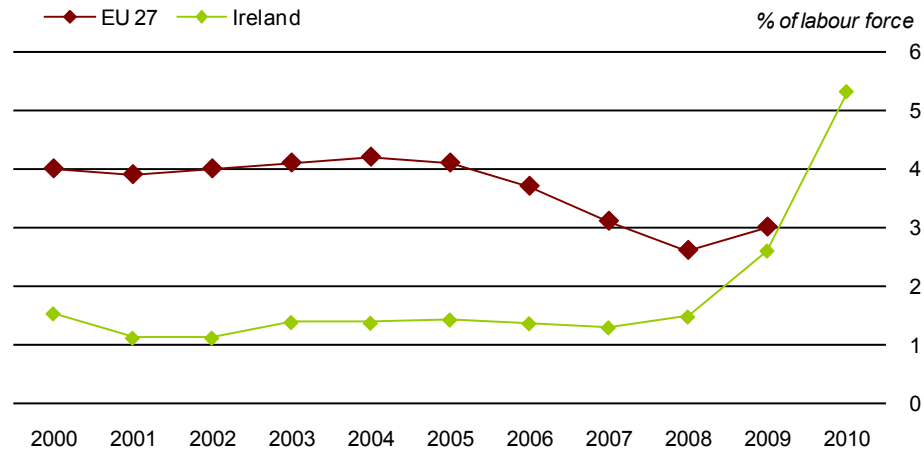
3.6 EU: Unemployment rates by sex, 2009

| Country | Total Persons | % of labour force | | Gender differential |
|----------------|---------------|-------------------|------------|---------------------|
| | | Males | Females | |
| Netherlands | 3.4 | 3.4 | 3.5 | -0.1 |
| Austria | 4.8 | 5.0 | 4.6 | 0.4 |
| Cyprus | 5.3 | 5.1 | 5.5 | -0.4 |
| Luxembourg | 5.4 | 4.8 | 6.1 | -1.3 |
| Slovenia | 5.9 | 5.9 | 5.8 | 0.1 |
| Denmark | 6.0 | 6.5 | 5.4 | 1.1 |
| Czech Republic | 6.7 | 5.9 | 7.7 | -1.8 |
| Bulgaria | 6.8 | 7.0 | 6.6 | 0.4 |
| Malta | 6.9 | 6.6 | 7.6 | -1.0 |
| Romania | 6.9 | 7.7 | 5.8 | 1.9 |
| Germany | 7.5 | 8.0 | 6.9 | 1.1 |
| United Kingdom | 7.6 | 8.6 | 6.4 | 2.2 |
| Italy | 7.8 | 6.8 | 9.3 | -2.5 |
| Belgium | 7.9 | 7.8 | 8.1 | -0.3 |
| Poland | 8.2 | 7.8 | 8.7 | -0.9 |
| Finland | 8.2 | 8.9 | 7.6 | 1.3 |
| Sweden | 8.3 | 8.6 | 8.0 | 0.6 |
| EU 27 | 8.9 | 9.0 | 8.8 | 0.2 |
| Greece | 9.5 | 6.9 | 13.2 | -6.3 |
| France | 9.5 | 9.2 | 9.8 | -0.6 |
| Portugal | 9.6 | 9.0 | 10.3 | -1.3 |
| Hungary | 10.0 | 10.3 | 9.7 | 0.6 |
| Ireland | 12.0 | 15.1 | 8.1 | 7.0 |
| Slovakia | 12.0 | 11.4 | 12.8 | -1.4 |
| Lithuania | 13.7 | 17.1 | 10.4 | 6.7 |
| Estonia | 13.8 | 16.9 | 10.6 | 6.3 |
| Latvia | 17.1 | 20.3 | 13.9 | 6.4 |
| Spain | 18.0 | 17.7 | 18.4 | -0.7 |
| Norway | 3.1 | 3.6 | 2.6 | 1.0 |
| Croatia | 9.6 | 8.7 | 10.6 | -1.9 |
| Turkey | 12.5 | 12.5 | 12.6 | -0.1 |

Source: Eurostat LFS

¹⁸ Data from QNHS is Q2 for all years except for 2010 which is Q1.

3.7 Ireland and EU: Long-term unemployment rates, 2000–2010



Source: Eurostat, CSO¹⁹

- ◆ The long-term unemployment rate (those unemployed for a year or more) in Ireland was fairly stable at around 1.4% between 2000 and 2008 but it rose in 2009 to 2.6% and increased strongly to 5.3% in early 2010.
- ◆ The EU 27 long-term unemployment rate was around 4% between 2000 and 2005 and then decreased over the following few years to stand at 2.6% in 2008 before rising to 3% in 2009.
- ◆ The long-term unemployment rate for Ireland was 2.6% in 2009 compared with an EU 27 average of 3%. However since 2009 the rate for Ireland increased strongly and was 5.3% in early 2010. The rate for men in Ireland was nearly three times that for women in 2009. However, at EU 27 level, the rate for women was higher at 3.1% compared with 2.9% for men. Iceland had a lower long-term unemployment rate than any EU 27 country at 0.4%.

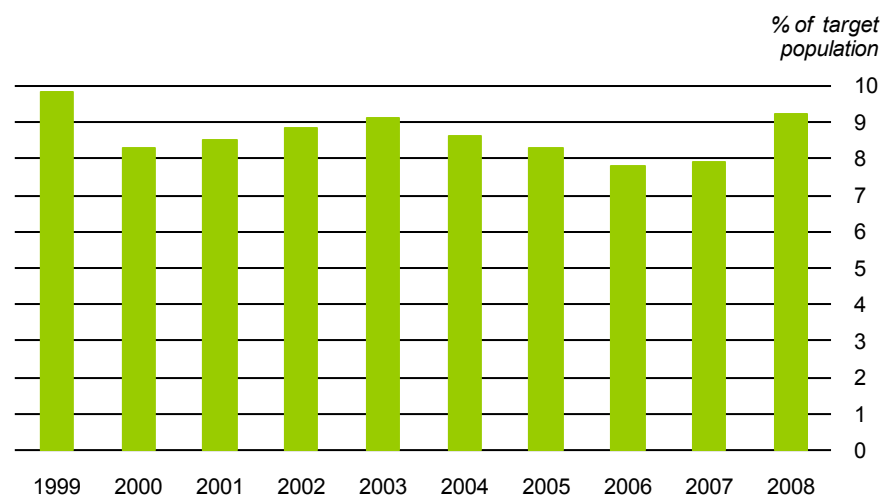
3.8 EU: Long-term unemployment rates by sex, 2009

| Country | % of labour force | | |
|----------------|-------------------|------------|------------|
| | Total Persons | Males | Females |
| Denmark | 0.5 | 0.6 | 0.5 |
| Cyprus | 0.6 | 0.5 | 0.6 |
| Netherlands | 0.8 | 0.8 | 0.9 |
| Austria | 1.0 | 1.1 | 1.0 |
| Sweden | 1.1 | 1.2 | 1.0 |
| Luxembourg | 1.2 | 0.9 | 1.6 |
| Finland | 1.4 | 1.6 | 1.1 |
| Slovenia | 1.8 | 1.7 | 1.9 |
| United Kingdom | 1.9 | 2.3 | 1.4 |
| Czech Republic | 2.0 | 1.6 | 2.5 |
| Romania | 2.2 | 2.5 | 1.8 |
| Poland | 2.5 | 2.2 | 2.9 |
| Ireland | 2.6 | 3.6 | 1.3 |
| EU 27 | 3.0 | 2.9 | 3.1 |
| Bulgaria | 3.0 | 2.8 | 3.1 |
| Malta | 3.0 | 3.4 | 2.4 |
| Lithuania | 3.2 | 3.6 | 2.8 |
| France | 3.3 | 3.3 | 3.4 |
| Germany | 3.4 | 3.6 | 3.2 |
| Belgium | 3.5 | 3.4 | 3.6 |
| Italy | 3.5 | 2.8 | 4.3 |
| Estonia | 3.8 | 4.5 | 3.0 |
| Greece | 3.9 | 2.4 | 6.0 |
| Hungary | 4.2 | 4.2 | 4.1 |
| Spain | 4.3 | 3.7 | 5.0 |
| Portugal | 4.3 | 3.7 | 4.9 |
| Latvia | 4.6 | 5.5 | 3.6 |
| Slovakia | 6.5 | 5.8 | 7.4 |
| Iceland | 0.4 | 0.5 | 0.4 |
| Norway | 0.5 | 0.6 | 0.4 |
| Turkey | 2.8 | 2.5 | 3.8 |
| Croatia | 5.1 | 4.1 | 6.3 |

Source: Eurostat LFS

¹⁹ Data from QNHS is Q2 for all years except 2010 which is Q1.

3.9 Ireland: Population aged 18–59 living in jobless households²⁰, 1999–2008



Source: Eurostat

- ◆ The proportion of the population aged 18-59 living in jobless households in Ireland decreased in the period 1999-2007, falling from 9.8% in 1999 to 7.8% in 2006 before rising in 2008 to 9.2%.
- ◆ Only seven EU 27 countries reported a higher proportion of 18-59 year olds living in jobless households than Ireland in 2008, with Hungary having the highest reported rate at 12.5% in 2008.

3.10 EU: Population aged 18–59 living in jobless households²⁰, 2004–2008

| Country | % of target population ⁶ | | | | |
|----------------|-------------------------------------|-------------|------------|------------|------------|
| | 2004 | 2005 | 2006 | 2007 | 2008 |
| Cyprus | 5.1 | 5.3 | 5.2 | 4.7 | 4.9 |
| Portugal | 5.3 | 5.7 | 5.8 | 5.7 | 5.5 |
| Netherlands | 7.9 | 7.9 | 7.4 | 6.5 | 5.9 |
| Czech Republic | 8.0 | 7.4 | 7.2 | 6.5 | 6.0 |
| Estonia | 9.7 | 8.6 | 6.6 | 6.0 | 6.2 |
| Latvia | 8.1 | 8.5 | 6.7 | 6.6 | 6.4 |
| Slovenia | 7.7 | 7.1 | 7.4 | 6.5 | 6.4 |
| Denmark | 9.4 | 8.6 | 7.7 | 8.1 | 6.8 |
| Austria | 8.2 | 8.4 | 7.6 | 7.1 | 7.0 |
| Spain | 7.2 | 6.6 | 6.3 | 6.2 | 7.4 |
| Greece | 9.1 | 8.9 | 8.1 | 8.0 | 7.5 |
| Slovakia | 10.5 | 10.3 | 9.5 | 8.9 | 7.5 |
| Luxembourg | 7.1 | 6.7 | 7.1 | 7.0 | 7.9 |
| Malta | 8.8 | 8.2 | 7.9 | 7.7 | 8.1 |
| Finland | 11.1 | 10.5 | 9.5 | 9.1 | 8.1 |
| Bulgaria | 14.4 | 13.7 | 12.1 | 10.2 | 9.0 |
| Germany | 11.1 | 11.0 | 10.5 | 9.5 | 9.0 |
| Lithuania | 7.8 | 6.8 | 6.9 | 7.0 | 9.0 |
| EU 27 | 10.4 | 10.3 | 9.8 | 9.3 | 9.2 |
| Ireland | 8.6 | 8.3 | 7.8 | 7.9 | 9.2 |
| Italy | 9.4 | 9.8 | 9.5 | 9.2 | 9.6 |
| France | 10.2 | 10.3 | 10.5 | 10.0 | 9.8 |
| Poland | 15.5 | 14.8 | 13.2 | 11.6 | 10.1 |
| Romania | 11.8 | 11.3 | 10.3 | 10.4 | 10.5 |
| United Kingdom | 11.0 | 10.9 | 10.8 | 10.7 | 10.7 |
| Belgium | 13.8 | 13.7 | 13.6 | 12.3 | 12.0 |
| Hungary | 12.0 | 12.3 | 11.8 | 11.9 | 12.5 |
| Croatia | 11.8 | 12.2 | 12.4 | 11.3 | 10.8 |
| Turkey | : | : | 15.2 | 15.4 | 15.9 |
| Macedonia | : | : | 24.7 | 24.2 | : |

Source: Eurostat LFS

²⁰ This indicator is calculated as the share of persons aged 18-59 who are living in households where no one works. Households containing only students aged 18-24 are not included.

3.11 EU: Employment rate of persons aged 55–64 by sex, 2009

| Country | Total Persons | % of 55-64 age group | |
|----------------|---------------|----------------------|-------------|
| | | Males | Females |
| Sweden | 70.0 | 73.2 | 66.7 |
| Estonia | 60.4 | 59.4 | 61.2 |
| Denmark | 57.5 | 64.1 | 50.9 |
| United Kingdom | 57.5 | 66.2 | 49.2 |
| Germany | 56.2 | 63.9 | 48.7 |
| Cyprus | 56.0 | 71.7 | 40.8 |
| Finland | 55.5 | 54.6 | 56.3 |
| Netherlands | 55.1 | 65.4 | 44.7 |
| Latvia | 53.2 | 53.1 | 53.3 |
| Lithuania | 51.6 | 56.0 | 48.3 |
| Ireland | 51.0 | 60.9 | 41.0 |
| Portugal | 49.7 | 57.5 | 42.7 |
| Czech Republic | 46.8 | 59.6 | 35.0 |
| Bulgaria | 46.1 | 54.1 | 39.2 |
| EU 27 | 46.0 | 54.8 | 37.8 |
| Spain | 44.1 | 56.7 | 32.3 |
| Romania | 42.6 | 52.3 | 34.1 |
| Greece | 42.2 | 57.7 | 27.7 |
| Austria | 41.1 | 51.0 | 31.7 |
| Slovakia | 39.5 | 54.9 | 26.1 |
| France | 38.9 | 41.4 | 36.6 |
| Luxembourg | 38.2 | 46.5 | 29.4 |
| Italy | 35.7 | 46.7 | 25.4 |
| Slovenia | 35.6 | 46.4 | 24.8 |
| Belgium | 35.3 | 42.9 | 27.7 |
| Hungary | 32.8 | 39.9 | 27.0 |
| Poland | 32.3 | 44.3 | 21.9 |
| Malta | 28.1 | 45.3 | 11.2 |
| Iceland | 80.2 | 84.3 | 76.0 |
| Norway | 68.7 | 72.8 | 64.6 |
| Switzerland | 68.4 | 77.1 | 59.8 |
| Croatia | 38.4 | 50.1 | 28.0 |
| Macedonia | 34.6 | 47.6 | 22.4 |
| Turkey | 28.2 | 41.1 | 16.0 |

Source: Eurostat LFS

- ◆ Ireland had the eleventh highest employment rate for people aged 55-64 in the EU in 2009 at 51% but the highest rate, by a wide margin, was in Sweden at 70%.
- ◆ In Ireland, 60.9% of men aged 55-64 were employed in 2009 compared with 41% of women. In the EU the rates were 54.8% for males and 37.8% for females.

3.12 EU: Average exit age from the labour force by sex, 2008²¹

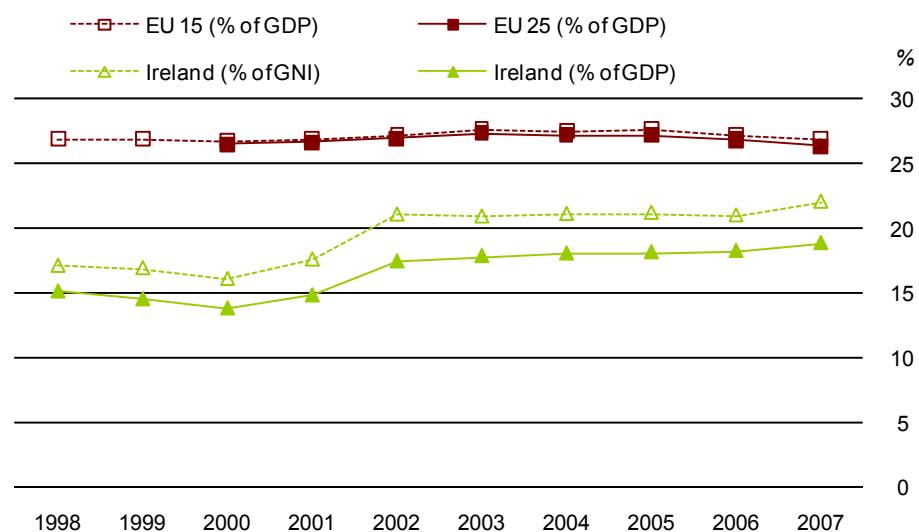
| Country | Total Persons | years | |
|----------------|---------------|-------------|-------------|
| | | Males | Females |
| Romania | 64.3 | 65.5 | 63.2 |
| Bulgaria | 64.1 | 64.1 | 64.1 |
| Ireland | 64.1 | 63.5 | 64.7 |
| Sweden | 63.8 | 64.4 | 63.2 |
| Cyprus | 63.5 | : | : |
| Netherlands | 63.2 | 63.7 | 62.8 |
| United Kingdom | 63.1 | 64.1 | 62.0 |
| Latvia | 62.7 | : | : |
| Spain | 62.6 | 62.5 | 62.7 |
| Portugal | 62.6 | 62.9 | 62.3 |
| Estonia | 62.1 | : | : |
| Germany | 61.7 | 62.1 | 61.4 |
| Belgium | 61.6 | 61.2 | 61.9 |
| Finland | 61.6 | 62.0 | 61.3 |
| EU 27 | 61.4 | 62.0 | 60.8 |
| Greece | 61.4 | 61.9 | 61.0 |
| Denmark | 61.3 | 62.3 | 60.3 |
| Austria | 60.9 | 62.6 | 59.4 |
| Italy | 60.8 | 60.8 | 60.7 |
| Czech Republic | 60.6 | 62.3 | 59.0 |
| Lithuania | 59.9 | : | : |
| Hungary | 59.8 | 61.2 | 58.7 |
| Malta | 59.8 | : | : |
| Slovenia | 59.8 | : | : |
| Luxembourg | 59.4 | : | : |
| France | 59.3 | 59.4 | 59.1 |
| Poland | 59.3 | 61.4 | 57.5 |
| Slovakia | 58.7 | 59.7 | 57.8 |
| Iceland | 64.4 | : | : |
| Norway | 64.0 | 64.0 | 64.0 |
| Switzerland | 63.7 | 63.6 | 63.7 |
| Croatia | 59.9 | : | : |

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 2008, the average exit age from the labour force in the EU 27 was 61.4 years and in eight member states the exit age was under 60 years.

²¹ 2007 data used for Austria, Belgium, Cyprus, Finland, Poland, Portugal and Slovakia. 2006 data for Bulgaria, Ireland, Lithuania, Romania and Slovenia and 2005 data for Luxembourg and Hungary

4.1 Ireland and EU: Social protection expenditure, 1998–2007



Source: Eurostat, CSO National Accounts

- ◆ Social protection expenditure²² as a proportion of GDP was lower in Ireland over the period 1999-2007 than in the EU 15 and EU 25 Member States. Expenditure in Ireland decreased from 15.2% of GDP in 1998 to 13.9% in 2000, but subsequently increased over the following years to stand at 18.9% in 2007.
- ◆ Social protection expenditure on a per capita basis in Ireland increased from 4,856 PPPs in 2003 to 6,544 PPPs in 2007. This placed Ireland eleventh among EU 27 countries in 2007 and just below the EU 25 average.

4.2 EU: Social protection expenditure in Purchasing Power Parities²³ per capita, 2003-2007

| Country | PPP per capita | | | | |
|----------------|----------------|--------------|--------------|--------------|--------------|
| | 2003 | 2004 | 2005 | 2006 | 2007 |
| Luxembourg | 11,150 | 11,984 | 12,171 | 12,625 | 12,993 |
| Sweden | 8,122 | 8,469 | 8,359 | 8,643 | 8,842 |
| Netherlands | 7,103 | 7,397 | 7,643 | 8,355 | 8,766 |
| Denmark | 7,717 | 8,115 | 8,172 | 8,281 | 8,400 |
| Austria | 7,550 | 7,811 | 7,834 | 8,104 | 8,375 |
| Belgium | 7,078 | 7,305 | 7,599 | 8,057 | 8,236 |
| France | 6,723 | 6,994 | 7,332 | 7,537 | 7,868 |
| Germany | 7,094 | 7,236 | 7,511 | 7,560 | 7,642 |
| United Kingdom | 6,378 | 6,795 | 7,065 | 7,296 | 7,316 |
| Finland | 6,012 | 6,496 | 6,651 | 6,891 | 7,094 |
| EU 25 | 5,696 | 5,911 | 6,136 | 6,365 | 6,556 |
| Ireland | 4,856 | 5,184 | 5,452 | 5,894 | 6,544 |
| Italy | 5,708 | 5,796 | 5,983 | 6,284 | 6,464 |
| EU 27 | : | : | 5,866 | 6,093 | 6,283 |
| Greece | 4,362 | 4,644 | 4,930 | 5,246 | 5,576 |
| Spain | 4,215 | 4,416 | 4,688 | 5,011 | 5,392 |
| Slovenia | 4,010 | 4,271 | 4,429 | 4,594 | 4,639 |
| Portugal | 3,552 | 3,724 | 4,096 | 4,296 | 4,442 |
| Cyprus | 3,312 | 3,463 | 3,682 | 3,842 | 4,099 |
| Czech Republic | 2,973 | 3,032 | 3,158 | 3,304 | 3,596 |
| Malta | 2,941 | 3,084 | 3,204 | 3,269 | 3,462 |
| Hungary | 2,710 | 2,778 | 3,051 | 3,292 | 3,413 |
| Slovakia | 2,020 | 2,049 | 2,153 | 2,360 | 2,570 |
| Poland | 2,099 | 2,157 | 2,220 | 2,345 | 2,380 |
| Estonia | 1,400 | 1,595 | 1,715 | 1,887 | 2,130 |
| Lithuania | 1,332 | 1,404 | 1,513 | 1,680 | 2,077 |
| Latvia | 1,175 | 1,216 | 1,296 | 1,484 | 1,537 |
| Bulgaria | : | : | 1,198 | 1,247 | 1,358 |
| Romania | 825 | 920 | 1,020 | 1,108 | 1,333 |
| Norway | 8,659 | 9,064 | 9,267 | 9,619 | 9,916 |
| Switzerland | 7,631 | 8,005 | 8,126 | 8,383 | 8,778 |
| Iceland | 5,884 | 6,345 | 6,235 | 6,133 | 6,422 |

Source: Eurostat

²² It should be noted that in 2009 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 7.9).

²³ See Appendix 1 for details of PPPs.

4.3 EU: Social protection expenditure by type, 2007

| Country | % of GDP | | | | | Total |
|------------------------|---------------------|--------------|---------------------------------|-------------------------------|----------------------------------|-------------|
| | Family/ Children | Unemployment | Sickness and dis- ability | Old age and sur- vivors | Housing & social exclusion | |
| France | 2.5 | 1.8 | 10.4 | 13.1 | 1.2 | 30.5 |
| Sweden | 3.0 | 1.1 | 12.0 | 11.9 | 1.1 | 29.7 |
| Belgium | 2.0 | 3.3 | 9.3 | 12.7 | 0.8 | 29.5 |
| Denmark | 3.7 | 1.6 | 10.7 | 10.7 | 1.4 | 28.9 |
| Netherlands | 1.6 | 1.2 | 11.2 | 10.8 | 2.1 | 28.4 |
| Austria | 2.8 | 1.4 | 9.2 | 13.3 | 0.4 | 28.0 |
| Germany | 2.8 | 1.5 | 10.0 | 11.5 | 0.8 | 27.7 |
| Italy | 1.2 | 0.5 | 8.2 | 15.6 | 0.1 | 26.7 |
| EU 27 | 2.0 | 1.3 | 9.4 | 11.7 | 0.9 | 26.2 |
| Finland | 2.9 | 1.9 | 9.6 | 9.5 | 0.8 | 25.4 |
| United Kingdom | 1.5 | 0.5 | 10.0 | 11.1 | 1.6 | 25.3 |
| Portugal | 1.2 | 1.2 | 9.0 | 11.7 | 0.3 | 24.8 |
| Greece | 1.5 | 1.1 | 7.9 | 12.4 | 1.0 | 24.4 |
| Hungary | 2.8 | 0.8 | 7.7 | 9.6 | 1.1 | 22.3 |
| Ireland (% GNI) | 3.0 | 1.6 | 9.6 | 5.6 | 0.7 | 22.1 |
| Slovenia | 1.8 | 0.5 | 8.3 | 9.7 | 0.5 | 21.4 |
| Spain | 1.2 | 2.4 | 8.0 | 8.5 | 0.5 | 21.0 |
| Luxembourg | 3.2 | 0.9 | 7.3 | 7.1 | 0.6 | 19.3 |
| Ireland (% GDP) | 2.6 | 1.4 | 8.2 | 4.8 | 0.6 | 18.9 |
| Czech Republic | 1.7 | 0.6 | 7.6 | 7.9 | 0.3 | 18.6 |
| Cyprus | 2.0 | 0.9 | 5.2 | 8.5 | 1.6 | 18.5 |
| Malta | 1.1 | 0.5 | 6.4 | 9.4 | 0.6 | 18.1 |
| Poland | 0.8 | 0.4 | 5.6 | 10.7 | 0.3 | 18.1 |
| Slovakia | 1.5 | 0.6 | 6.1 | 6.8 | 0.5 | 16.0 |
| Bulgaria | 1.3 | 0.3 | 5.1 | 7.5 | 0.4 | 15.1 |
| Lithuania | 1.2 | 0.3 | 5.7 | 6.5 | 0.2 | 14.3 |
| Romania | 1.7 | 0.3 | 4.3 | 6.0 | 0.4 | 12.8 |
| Estonia | 1.4 | 0.1 | 5.3 | 5.4 | 0.1 | 12.5 |
| Latvia | 1.2 | 0.3 | 3.9 | 5.0 | 0.2 | 11.0 |
| Switzerland | 1.2 | 0.8 | 9.9 | 12.7 | 0.8 | 27.3 |
| Norway | 2.8 | 0.3 | 11.4 | 7.0 | 0.7 | 22.8 |
| Iceland | 2.9 | 0.2 | 11.7 | 5.3 | 1.2 | 21.5 |

Source: Eurostat

- ◆ Ireland's expenditure on social protection was 18.9% of GDP compared with an EU 27 average of 26.2%. France was the highest at 30.5% and Latvia the lowest at 11%.
- ◆ Social protection expenditure on old age and survivors was 4.8% of GDP and 5.6% of GNI in Ireland in 2007, compared with 11.7% in the EU 27, partly reflecting the fact that in 2009 Ireland had the lowest proportion of persons aged 65 and over in the EU.

4.4 EU: At risk of poverty rates²⁴, 2008

| Country | % of population | | | |
|----------------|--------------------------------------|---------------------|-------------------------------------|----------------|
| | Before pensions and social transfers | After pensions only | After pensions and social transfers | Risk reduction |
| Czech Republic | 38 | 20 | 9 | 29 |
| Netherlands | 35 | 20 | 11 | 24 |
| Slovakia | 37 | 18 | 11 | 26 |
| Denmark | 37 | 28 | 12 | 25 |
| Hungary | 52 | 30 | 12 | 40 |
| Austria | 43 | 24 | 12 | 31 |
| Slovenia | 39 | 23 | 12 | 27 |
| Sweden | 42 | 29 | 12 | 30 |
| France | 45 | 23 | 13 | 32 |
| Luxembourg | 40 | 24 | 13 | 27 |
| Finland | 40 | 28 | 14 | 26 |
| Belgium | 42 | 27 | 15 | 27 |
| Germany | 44 | 24 | 15 | 29 |
| Malta | 36 | 23 | 15 | 21 |
| Ireland | 42 | 34 | 16 | 26 |
| Cyprus | 29 | 22 | 16 | 13 |
| EU 27 | 42 | 25 | 17 | 25 |
| Poland | 44 | 25 | 17 | 27 |
| Portugal | 41 | 25 | 18 | 23 |
| Estonia | 36 | 25 | 19 | 17 |
| Italy | 43 | 23 | 19 | 24 |
| United Kingdom | 41 | 29 | 19 | 22 |
| Greece | 42 | 23 | 20 | 22 |
| Spain | 38 | 24 | 20 | 18 |
| Lithuania | 38 | 27 | 20 | 18 |
| Bulgaria | 40 | 27 | 21 | 19 |
| Romania | 48 | 31 | 23 | 25 |
| Latvia | 37 | 30 | 26 | 11 |
| Iceland | 27 | 19 | 10 | 17 |
| Norway | 26 | 26 | 11 | 15 |

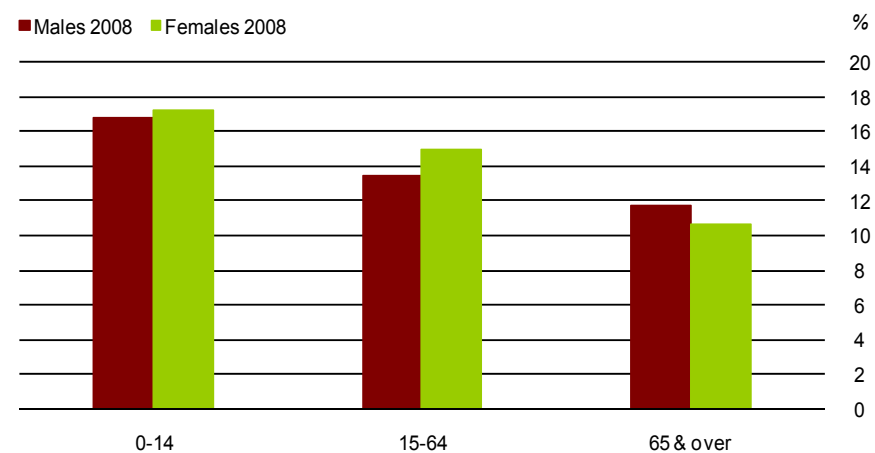
Source: Eurostat, EU SILC

4.5 Ireland: At risk of poverty rates by age and sex²⁵, 2007-2008

| Age group | 2007 | | | 2008 | | |
|--------------|-------------|-------------|---------------|-------------|-------------|---------------|
| | Males | Females | Total Persons | Males | Females | Total Persons |
| 0-14 | 18.3 | 19.5 | 18.9 | 16.8 | 17.2 | 17.0 |
| 15-64 | 15.4 | 16.2 | 15.8 | 13.4 | 14.9 | 14.2 |
| 65 & over | 15.4 | 17.6 | 16.6 | 11.7 | 10.7 | 11.1 |
| Total | 16.0 | 17.0 | 16.5 | 14.0 | 14.9 | 14.4 |

Source: CSO, EU SILC

Ireland: At risk of poverty rates by age and sex²⁵, 2008



- ◆ In 2008 the percentage of the population at risk of poverty in Ireland, before pensions and social transfers, was 42%, the same percentage as in the EU 27. The at risk of poverty rate in Ireland after pensions and social transfers, at 16%, was just below the EU 27 figure of 17%.
- ◆ The Czech Republic had the lowest at risk of poverty rate (after pensions and social transfers) in the EU at 9% while Latvia had the highest at 26%.
- ◆ In 2008, 14% of males and 14.9% of females were at risk of poverty in Ireland. The rates for women were higher than the rates for men for those aged under 65, while for those aged 65 and over the rates were higher for men.

²⁴ 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).

²⁵ Data in Tables 4.5 and 4.6 and graph 4.7 are calculated using the national definition of income and national equivalence scale (see Appendix 1).

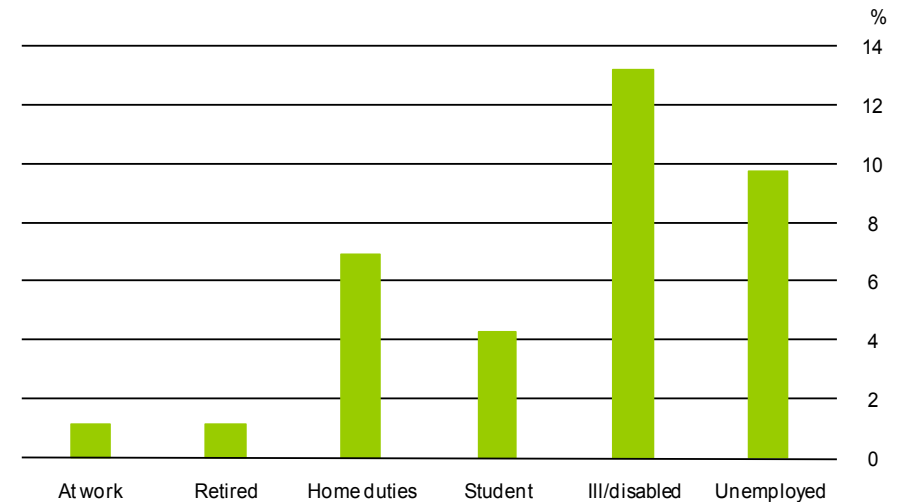
4.6 Ireland: Persons in consistent poverty by age and sex, 2007-2008

| Age group | % of age group | | | | | |
|--------------|----------------|------------|---------------|------------|------------|---------------|
| | 2007 | | | 2008 | | |
| | Males | Females | Total Persons | Males | Females | Total Persons |
| 0-14 | 6.9 | 8.1 | 7.5 | 5.5 | 6.8 | 6.1 |
| 15-64 | 4.9 | 5.0 | 4.9 | 3.8 | 4.3 | 4.1 |
| 65+ | 2.1 | 2.0 | 2.0 | 1.7 | 1.1 | 1.4 |
| Total | 5.0 | 5.2 | 5.1 | 4.0 | 4.4 | 4.2 |

Source: CSO, EU SILC

- ◆ In 2008, 4.2% of the population were living in consistent poverty with little difference between women (4.4%) and men (4.0%). This was a reduction on the level recorded in 2007, when 5.1% of the population was living in consistent poverty.
- ◆ 6.1% of children under the age of fifteen were in consistent poverty in 2008, a decrease on the figure of 7.5% recorded in 2007.

4.7 Ireland: Persons in consistent poverty by principal economic status, 2008



Source: CSO, EU SILC

- ◆ In 2008, 13.2% of ill or disabled people were experiencing consistent poverty. 9.7% of unemployed persons were in consistent poverty compared with 1.1% of people at work.

4.8 EU: Gender pay gap²⁶, 2006–2008

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

| Country | 2006 | 2007 | 2008 |
|----------------|-----------|-----------|-----------|
| Italy | 4 | 5 | 5 |
| Slovenia | 8 | 8 | 9 |
| Belgium | 10 | 9 | 9 |
| Romania | 8 | 13 | 9 |
| Malta | 5 | 2 | 9 |
| Portugal | 8 | 8 | 9 |
| Poland | 8 | 8 | 10 |
| Luxembourg | 11 | 13 | 12 |
| Latvia | 15 | 15 | 13 |
| Bulgaria | 12 | 12 | 14 |
| Spain | 18 | 17 | 17 |
| Denmark | 18 | 18 | 17 |
| Sweden | 17 | 18 | 17 |
| Hungary | 14 | 16 | 18 |
| EU 27 | 18 | 18 | 18 |
| France | 15 | 17 | 19 |
| Finland | 21 | 20 | 20 |
| Slovakia | 26 | 24 | 21 |
| United Kingdom | 24 | 21 | 21 |
| Lithuania | 17 | 20 | 22 |
| Cyprus | 22 | 23 | 22 |
| Greece | 21 | 22 | 22 |
| Germany | 23 | 23 | 23 |
| Austria | 26 | 26 | 26 |
| Czech Republic | 23 | 24 | 26 |
| Ireland | 17 | 17 | : |
| Netherlands | 24 | 24 | : |
| Estonia | 30 | 31 | : |
| Norway | 16 | 16 | 17 |
| Switzerland | 19 | 19 | 18 |

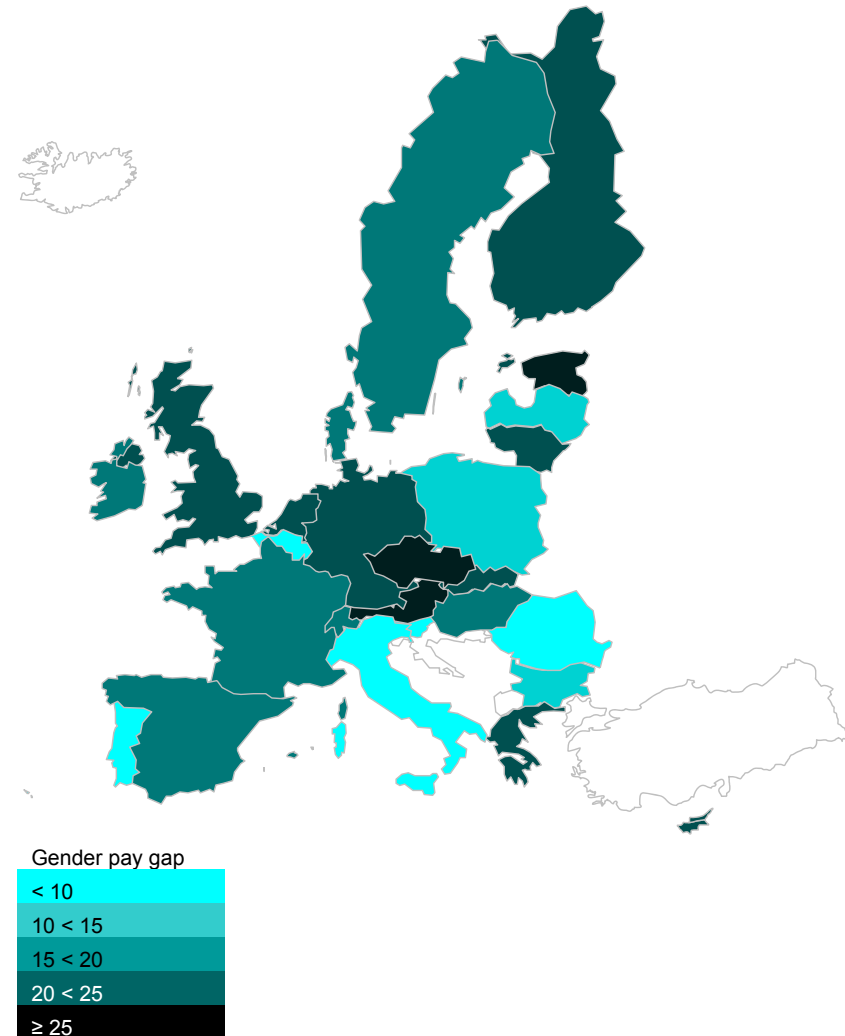
Source: Eurostat, EU Structure of Earnings Survey

◆

²⁶ 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).

- ◆ On average, female employees were paid 17% an hour less than male employees in Ireland in 2007. The average EU 27 gender pay gap was 18% in 2008.
- ◆ Of those EU countries for which data was available in 2008, Italy had the lowest gender pay gap at 5% while Austria and the Czech Republic had the highest at 26%.

EU : Gender pay gap²⁷, 2008



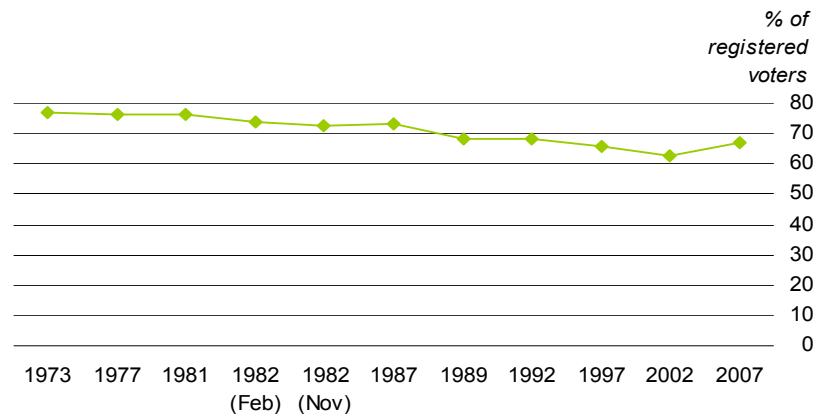
²⁷ 2007 data used for Ireland, Netherlands and Estonia.

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

| Year of election | Registered voters | 000's | | % |
|------------------|-------------------|----------------|-----------|---|
| | | Votes recorded | % 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 Dáil 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 1984-2009.
- ◆ 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 2004-2009. The average turnout for EU 27 countries in that period was 69.7%. 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, 1984–2009

| Country | % of registered voters | | |
|----------------|------------------------|-------------|-------------|
| | 1984-1989 | 1994-1999 | 2004-2009 |
| Malta | 96.1 | 96.3 | 93.3 |
| Luxembourg | 88.1 | 87.4 | 91.7 |
| Belgium | 93.5 | 90.9 | 91.1 |
| Cyprus | 94.6 | 90.1 | 89.0 |
| Denmark | 86.9 | 85.1 | 85.6 |
| Italy | 88.9 | 84.5 | 82.1 |
| Sweden | 87.9 | 84.1 | 82.0 |
| Netherlands | 83.0 | 76.0 | 80.4 |
| Austria | 90.5 | 82.9 | 78.0 |
| Germany | 84.3 | 80.6 | 77.7 |
| Spain | 70.2 | 78.1 | 75.8 |
| Greece | 84.2 | 76.3 | 75.4 |
| EU 27 | : | 75.9 | 69.7 |
| Ireland | 70.9 | 65.9 | 67.0 |
| Finland | 72.1 | 66.9 | 65.0 |
| Czech Republic | : | 75.1 | 64.5 |
| Hungary | : | 62.8 | 64.4 |
| Portugal | 74.0 | 63.7 | 64.3 |
| Estonia | : | 62.9 | 61.9 |
| Slovenia | : | 73.7 | 61.9 |
| United Kingdom | 75.4 | 71.5 | 61.4 |
| Latvia | : | 71.9 | 61.0 |
| France | 72.3 | 68.0 | 60.4 |
| Romania | : | 76.0 | 58.5 |
| Bulgaria | : | 66.9 | 55.8 |
| Slovakia | : | 79.9 | 54.7 |
| Lithuania | : | 52.9 | 47.3 |
| Poland | 62.1 | 47.9 | 47.3 |
| Turkey | 93.3 | 86.2 | 84.2 |
| Iceland | 90.1 | 85.7 | 83.6 |
| Norway | 83.6 | 78.3 | 77.4 |
| Croatia | : | 68.8 | 59.6 |
| Macedonia | : | 53.7 | 57.0 |
| Switzerland | 47.5 | 42.7 | 48.3 |

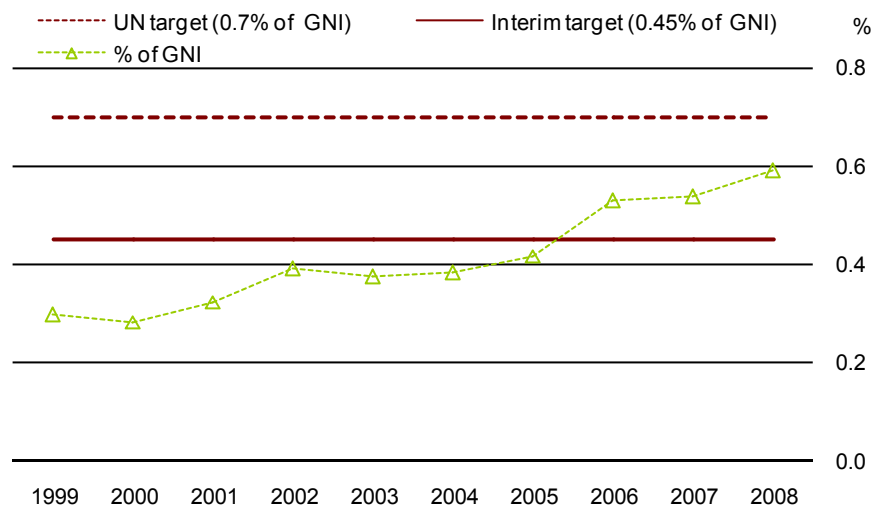
Source: International Institute for Democracy and Electoral Assistance

4.11 Ireland: Net official development assistance, 1999–2008

| Year | €m | % |
|------|---------|-----------------------------------|
| | Net ODA | % of GNI at current market prices |
| 1999 | 230.3 | 0.30 |
| 2000 | 254.9 | 0.28 |
| 2001 | 319.9 | 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 |
| 2008 | 920.7 | 0.59 |

Source: Irish Aid, Department of Foreign Affairs

Ireland: Net official development assistance, 1999-2008



4.12 EU: Net official development assistance, 2004–2008

| Country | % of GNI | | | | |
|----------------|-------------|-------------|-------------|-------------|-------------|
| | 2004 | 2005 | 2006 | 2007 | 2008 |
| Sweden | 0.78 | 0.94 | 1.02 | 0.93 | 0.98 |
| Luxembourg | 0.79 | 0.79 | 0.89 | 0.92 | 0.97 |
| Denmark | 0.85 | 0.81 | 0.80 | 0.81 | 0.82 |
| Netherlands | 0.73 | 0.82 | 0.81 | 0.81 | 0.80 |
| Ireland | 0.38 | 0.42 | 0.53 | 0.54 | 0.59 |
| Belgium | 0.41 | 0.53 | 0.50 | 0.43 | 0.48 |
| Spain | 0.24 | 0.27 | 0.32 | 0.37 | 0.45 |
| Finland | 0.37 | 0.46 | 0.40 | 0.39 | 0.44 |
| United Kingdom | 0.36 | 0.47 | 0.51 | 0.35 | 0.43 |
| Austria | 0.23 | 0.52 | 0.47 | 0.50 | 0.43 |
| France | 0.41 | 0.47 | 0.47 | 0.38 | 0.39 |
| Germany | 0.28 | 0.36 | 0.36 | 0.37 | 0.38 |
| Portugal | 0.63 | 0.21 | 0.21 | 0.22 | 0.27 |
| Italy | 0.15 | 0.29 | 0.20 | 0.19 | 0.22 |
| Greece | 0.16 | 0.17 | 0.17 | 0.16 | 0.21 |
| Norway | 0.87 | 0.94 | 0.89 | 0.95 | 0.88 |
| Switzerland | 0.40 | 0.43 | 0.39 | 0.38 | 0.42 |

Source: OECD Development Co-operation Report

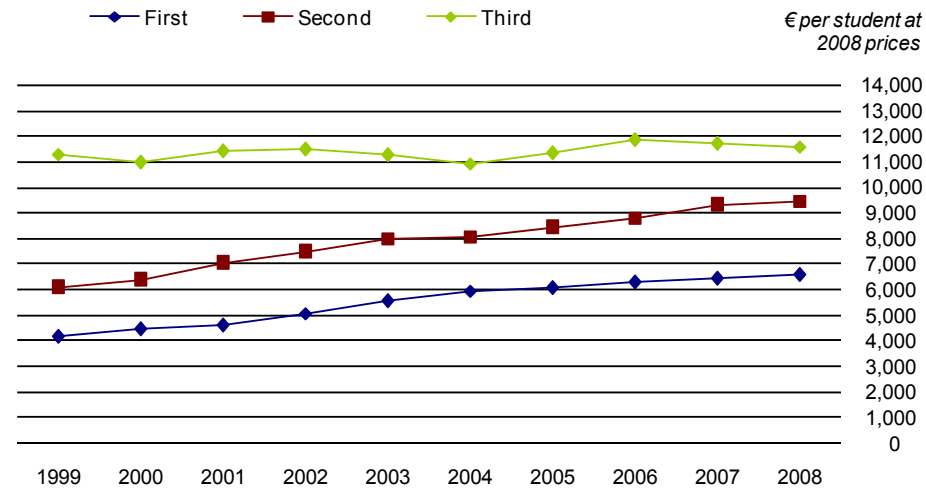
- ◆ Net official development assistance in Ireland as a percentage of Gross National Income increased from 0.30% in 1999 to 0.59% in 2008.
- ◆ In 2008, the Irish contribution was above the 2002 interim Irish Government target of 0.45% of GNI but below the UN 2007 target of 0.7%.
- ◆ Four EU countries (Sweden, Luxembourg, Denmark and the Netherlands) and Norway exceeded the UN target in 2008.

5.1 Ireland: Real non-capital public expenditure on education, 1999–2008

| Year | € per student at 2008 prices | | | Real non-capital public expenditure €m at 2008 prices | |
|------|------------------------------|-------|--------|--|-------|
| | Level | First | Second | | Third |
| 1999 | | 4,136 | 6,069 | 11,288 | 5,473 |
| 2000 | | 4,449 | 6,372 | 10,964 | 5,698 |
| 2001 | | 4,613 | 6,985 | 11,412 | 6,020 |
| 2002 | | 5,064 | 7,453 | 11,456 | 6,425 |
| 2003 | | 5,532 | 8,000 | 11,257 | 6,847 |
| 2004 | | 5,944 | 8,070 | 10,909 | 7,051 |
| 2005 | | 6,060 | 8,397 | 11,316 | 7,274 |
| 2006 | | 6,293 | 8,803 | 11,848 | 7,640 |
| 2007 | | 6,442 | 9,268 | 11,673 | 7,967 |
| 2008 | | 6,546 | 9,447 | 11,567 | 8,211 |

Source: Department of Education and Science, CSO

Ireland: Real non-capital public expenditure on education, 1999-2008



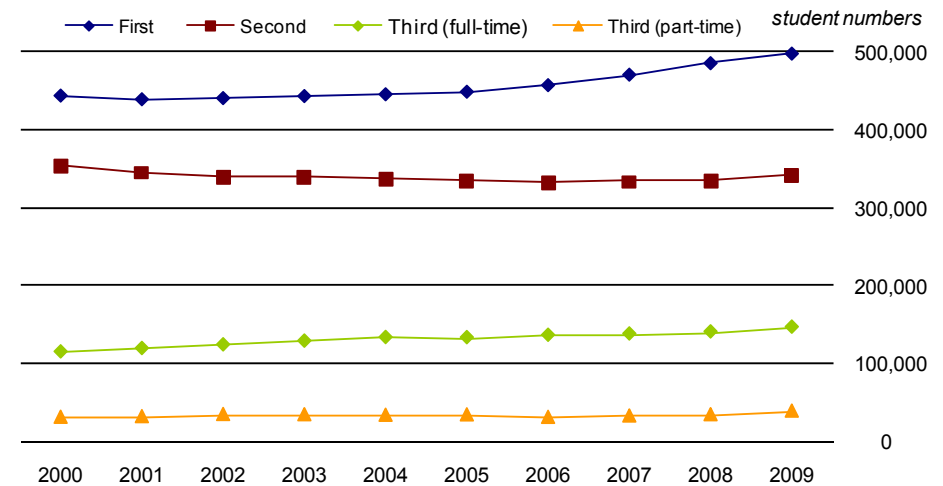
- ◆ Real expenditure per student in Ireland increased over the period 1999-2008 by 58.3% at first level and 55.7% at second level. There was a small increase of 2.5% at third level over the same time period. Expenditure per student in 2008 at primary level was just over half that at third level (56.6%) while expenditure at second level was about four-fifths that at third level.

5.2 Ireland: Student numbers²⁸ by level, 1999–2009

| Year | Level | | | |
|-----------|---------|---------|-------------------|-------------------|
| | First | Second | Third (full-time) | Third (part-time) |
| 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 |
| 2008/2009 | 498,914 | 341,312 | 146,981 | 39,278 |

Source: Department of Education and Science

Ireland: Student numbers⁴⁰ by level, 1999-2009



- ◆ Student numbers increased by 12.3% at first level and decreased by 3.5% at second level between 1999/2000 and 2008/2009. However, over the same period, the number of full-time third level students increased by 27%.

²⁸ Only students in institutions which are aided by the Department of Education and Science are included in this table.

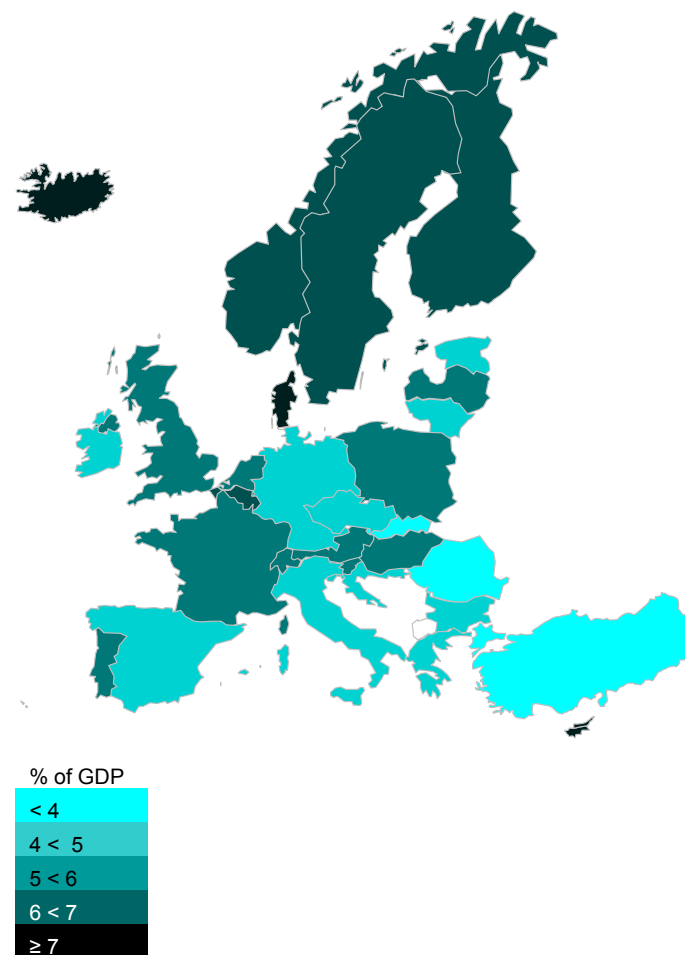
5.3 EU: Public expenditure on education²⁹, 2004–2006

| Country | % of GDP | | | per pupil/student |
|---------------------------|------------|------------|------------|-------------------|
| | 2004 | 2005 | 2006 | in €PPS |
| Denmark | 8.4 | 8.3 | 8.0 | 8,259 |
| Cyprus | 6.7 | 6.9 | 7.0 | 7,936 |
| Sweden | 7.2 | 7.0 | 6.9 | 7,440 |
| Finland | 6.4 | 6.3 | 6.1 | 6,408 |
| Belgium | 6.0 | 6.0 | 6.0 | 7,541 |
| Slovenia | 5.8 | 5.7 | 5.7 | 6,369 |
| France | 5.8 | 5.7 | 5.6 | 6,737 |
| United Kingdom | 5.2 | 5.4 | 5.5 | 6,439 |
| Netherlands | 5.5 | 5.5 | 5.5 | 7,044 |
| Ireland (% of GNI) | 5.5 | 5.5 | 5.4 | 6,624 |
| Austria | 5.5 | 5.5 | 5.4 | : |
| Hungary | 5.4 | 5.5 | 5.4 | 4,010 |
| Poland | 5.4 | 5.5 | 5.3 | 3,278 |
| Portugal | 5.3 | 5.4 | 5.3 | 5,246 |
| Latvia | 5.1 | 5.1 | 5.1 | 2,937 |
| EU 27 | 5.1 | 5.0 | 5.0 | 5,718 |
| Lithuania | 5.2 | 4.9 | 4.8 | 2,756 |
| Estonia | 4.9 | 4.9 | 4.8 | 3,255 |
| Ireland (% of GDP) | 4.7 | 4.8 | 4.7 | 6,624 |
| Italy | 4.6 | 4.4 | 4.7 | 6,772 |
| Czech Republic | 4.4 | 4.3 | 4.6 | 4,537 |
| Germany | 4.6 | 4.5 | 4.4 | 6,016 |
| Spain | 4.3 | 4.2 | 4.3 | 7,051 |
| Bulgaria | 4.5 | 4.5 | 4.2 | 2,089 |
| Slovakia | 4.2 | 3.9 | 3.8 | 2,954 |
| Luxembourg | 3.9 | 3.8 | 3.4 | 14,041 |
| Greece | 3.8 | 4.0 | : | 4,484 |
| Malta | 4.8 | 6.8 | : | 5,999 |
| Romania | 3.3 | 3.5 | : | 1,450 |
| Iceland | 7.5 | 7.6 | 7.6 | 8,109 |
| Norway | 7.5 | 7.0 | 6.6 | 9,491 |
| Switzerland | 5.9 | 5.7 | 5.5 | 8,734 |
| Croatia | 3.9 | 4.0 | 4.1 | 3,558 |
| Turkey | 3.1 | : | 2.9 | 1,345 |

Source: Eurostat

- Public expenditure on education in Ireland as a percentage of both GNI and GDP showed little change 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 tenth highest expenditure in the EU.

EU: Public expenditure on education³⁰, 2006



²⁹ 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.

³⁰ 2005 data used for Greece, Malta and Romania.

5.4 EU: Ratio of students to teachers, 2006/2007³¹

| Country | ratio | | | |
|----------------|-----------------------|-------------|-----------------|-----------------|
| | Primary and secondary | Primary | Lower secondary | Upper secondary |
| Lithuania | 8.4 | 10.0 | 7.9 | 9.4 |
| Greece | 8.6 | 10.1 | 7.7 | 7.3 |
| Hungary | 10.8 | 10.2 | 10.2 | 12.1 |
| Italy | 10.3 | 10.5 | 9.4 | 10.8 |
| Poland | 11.7 | 11.0 | 12.4 | 12.2 |
| Denmark | : | 11.2 | : | : |
| Luxembourg | 10.0 | 11.2 | : | 9.0 |
| Latvia | 10.6 | 11.4 | 9.9 | 11.2 |
| Portugal | 9.6 | 11.8 | 7.9 | 8.4 |
| Sweden | 12.4 | 12.3 | 11.5 | 13.6 |
| Belgium | 10.8 | 12.6 | 9.2 | 10.2 |
| Spain | 11.5 | 13.6 | 11.7 | 7.7 |
| Austria | 11.5 | 13.6 | 10.3 | 11.0 |
| Malta | 11.5 | 13.7 | 9.3 | 14.3 |
| Estonia | 12.7 | 14.4 | 11.4 | 12.2 |
| Finland | 13.8 | 15.0 | 9.9 | 15.9 |
| Slovenia | 12.7 | 15.2 | 9.5 | 13.7 |
| Netherlands | 15.6 | 15.6 | : | 15.7 |
| Cyprus | 13.0 | 15.9 | 11.2 | 11.1 |
| Bulgaria | 12.8 | 16.0 | 12.1 | 11.6 |
| Romania | 14.5 | 16.9 | 12.2 | 15.3 |
| Ireland | 15.6 | 17.9 | : | 13.2 |
| Slovakia | 14.9 | 17.9 | 13.9 | 14.1 |
| Germany | 16.9 | 18.3 | 15.2 | 14.3 |
| Czech Republic | 13.8 | 18.7 | 12.3 | 12.3 |
| United Kingdom | 15.2 | 19.4 | 16.7 | 11.2 |
| France | 14.3 | 19.7 | 14.3 | 9.6 |
| Iceland | 10.3 | 10.4 | : | 10.2 |
| Norway | 10.5 | 11.0 | 10.2 | 9.8 |
| Croatia | 13.5 | 17.3 | 12.6 | 11.6 |
| Macedonia | 15.4 | 18.4 | 13.6 | 16.3 |
| Turkey | 23.0 | 26.2 | : | 16.2 |

Source: Eurostat, Department of Education and Science

- ◆ Ireland had a student to teacher ratio of 17.9 at primary education level (ISCED 1) in 2006/2007. This was the joint fifth highest reported ratio in the EU. The overall student to teacher ratio for first and second level education for Ireland in 2006/2007 was 15.6, which was the joint second highest ratio in the EU.

³¹ 2005/2006 data used for Malta.

5.5 EU: Average class size at ISCED levels 1 and 2, 2006/2007³²

| Country | number | |
|----------------|-------------|-----------------|
| | Primary | Lower Secondary |
| Lithuania | 14.6 | 21.3 |
| Latvia | 15.5 | 18.1 |
| Luxembourg | 15.8 | 20.0 |
| Greece | 17.0 | 21.6 |
| Slovenia | 17.5 | 19.2 |
| Italy | 18.1 | 20.2 |
| Romania | 18.1 | 19.8 |
| Estonia | 18.9 | 22.8 |
| Denmark | 19.5 | 19.9 |
| Cyprus | 19.6 | 22.8 |
| Poland | 19.6 | 24.3 |
| Slovakia | 19.6 | 22.5 |
| Portugal | 19.7 | 22.3 |
| Finland | 19.8 | 20.1 |
| Austria | 19.9 | 24.1 |
| Czech Republic | 20.0 | 22.9 |
| Hungary | 20.0 | 21.0 |
| Bulgaria | 20.2 | 21.7 |
| Spain | 20.8 | 24.5 |
| Germany | 22.1 | 24.7 |
| Malta | 22.4 | 22.1 |
| Netherlands | 22.4 | : |
| France | 22.6 | 24.3 |
| Ireland | 24.5 | 20.3 |
| United Kingdom | 24.6 | 22.6 |
| Iceland | 18.2 | 19.8 |
| Croatia | 19.5 | 22.2 |
| Switzerland | 19.5 | 19.0 |
| Macedonia | 24.3 | 23.9 |
| Turkey | 27.2 | : |

Source: Eurostat, Department of Education and Science

- ◆ In 2006/2007, the average class size in Ireland for primary education was 24.5 which was the second highest among reporting EU 27 countries, after the United Kingdom. However, at ISCED 2 level (lower secondary) Ireland had the eighth lowest ratio.

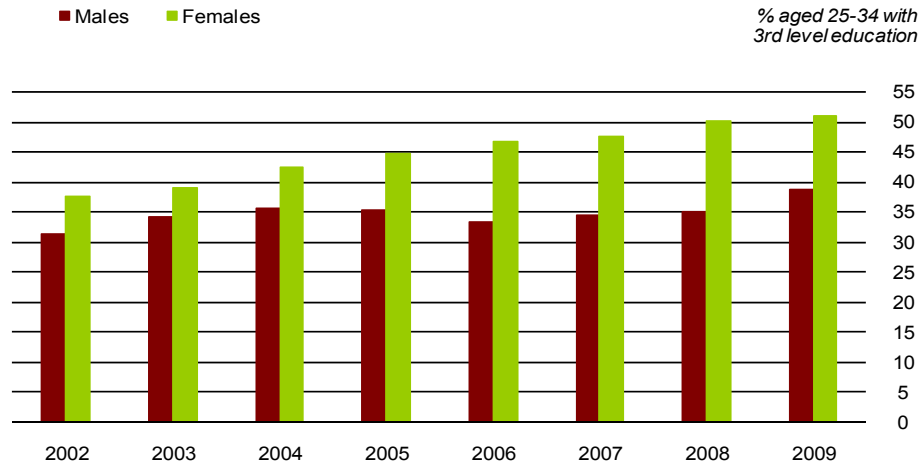
³² 2005/2006 data used for the Netherlands.

5.6 Ireland: Persons aged 25–34 with third-level education, 2002–2009

| Year | % of population aged 25-34 | | |
|------|----------------------------|-------|---------|
| | Total Persons | Males | Females |
| 2002 | 34.4 | 31.2 | 37.5 |
| 2003 | 36.5 | 34.2 | 38.8 |
| 2004 | 39.0 | 35.6 | 42.4 |
| 2005 | 39.8 | 35.2 | 44.6 |
| 2006 | 39.9 | 33.3 | 46.7 |
| 2007 | 40.9 | 34.4 | 47.6 |
| 2008 | 42.6 | 35.1 | 50.1 |
| 2009 | 44.8 | 38.6 | 51.0 |

Source: CSO QNHS

Ireland: Persons aged 25-34 with third-level education, 2002-2009



- Over the period 2002-2009, the proportion of females aged 25-34 in Ireland with 3rd level education rose from 37.5% in 2002 to 51% in 2009. Over the same period, the rate for males increased from 31.2% to 35.6% in 2004 before falling back to 33.3% in 2006 and then increasing to 38.6% in 2009.
- In 2009, 44.8% of the population aged 25-34 in Ireland had third level education, which was the second highest in the EU 27 and compares with 31.4% across the EU 27 as a whole. In all EU countries more females than males aged 25-34 had third level education.

5.7 EU: Persons aged 25–34 with third-level education by sex, 2009³³

| Country | % of population aged 25-34 | | | Percentage points differential |
|----------------|----------------------------|-------------|-------------|--------------------------------|
| | Total Persons | Males | Females | |
| Cyprus | 46.7 | 40.8 | 52.9 | -12.1 |
| Ireland | 44.8 | 38.6 | 51.0 | -12.4 |
| Lithuania | 43.7 | 36.2 | 51.5 | -15.3 |
| Luxembourg | 42.7 | 40.3 | 45.1 | -4.7 |
| Belgium | 42.3 | 36.2 | 48.6 | -12.4 |
| Denmark | 42.1 | 35.0 | 49.2 | -14.1 |
| Sweden | 41.9 | 36.2 | 47.9 | -11.7 |
| France | 41.3 | 36.9 | 45.6 | -8.7 |
| Finland | 39.3 | 30.2 | 49.0 | -18.7 |
| Netherlands | 38.8 | 35.6 | 42.0 | -6.3 |
| United Kingdom | 38.2 | 36.1 | 40.2 | -4.1 |
| Spain | 37.6 | 32.7 | 42.9 | -10.2 |
| Estonia | 36.4 | 27.2 | 45.7 | -18.5 |
| Poland | 34.3 | 27.1 | 41.8 | -14.7 |
| EU 27 | 31.4 | 27.3 | 35.6 | -8.2 |
| Latvia | 31.2 | 21.1 | 41.6 | -20.5 |
| Slovenia | 29.9 | 21.3 | 39.3 | -18.1 |
| Greece | 27.2 | 22.5 | 32.2 | -9.7 |
| Germany | 25.6 | 24.3 | 26.9 | -2.6 |
| Hungary | 24.1 | 19.5 | 28.8 | -9.3 |
| Portugal | 23.3 | 17.9 | 29.0 | -11.1 |
| Malta | 22.4 | 18.8 | 26.0 | -7.3 |
| Bulgaria | 21.8 | 15.8 | 28.1 | -12.2 |
| Austria | 20.9 | 19.4 | 22.4 | -3.0 |
| Slovakia | 20.5 | 17.4 | 23.8 | -6.4 |
| Czech Republic | 20.0 | 18.0 | 22.2 | -4.2 |
| Italy | 20.0 | 15.6 | 24.4 | -8.8 |
| Romania | 19.5 | 17.4 | 21.7 | -4.2 |
| Norway | 44.0 | 35.2 | 53.1 | -17.9 |
| Iceland | 33.5 | 27.4 | 39.7 | -12.3 |
| Turkey | 15.7 | 16.6 | 14.7 | 2.0 |
| Macedonia | 14.9 | 13.2 | 16.8 | -3.6 |
| Croatia | 14.2 | 11.3 | 17.2 | -5.9 |
| Switzerland | 10.0 | 10.6 | 9.4 | 1.3 |

Source: Eurostat LFS

³³ 2008 data used for Belgium and the UK, EU 27 data is based on 2009 for all countries except Belgium and the UK.

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

Mean score of 15 year old students

| Literacy type | Ireland | | All OECD countries | |
|------------------|---------|---------|--------------------|---------|
| | 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

- ◆ Ireland had the second highest reading literacy for 15 year old students among participating EU countries in 2006. Girls in Ireland performed much better than boys with an average score of 534 for females compared with 500 for males.
- ◆ However on mathematical literacy Ireland was eleventh highest in 2006. Boys in Ireland performed better than girls in mathematical literacy, reflecting a similar trend across OECD countries.
- ◆ There was no significant difference in the overall science measure with an average score for males of 508 and 509 for females. Ireland was above the OECD average for scientific literacy.

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

Mean score of 15 year old students

| 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 leavers³⁴ by labour force status and sex, 2009

| Labour force status | 000s | | |
|---|---------------|-------|---------|
| | Total Persons | Males | Females |
| In employment | 14.3 | 9.1 | 5.3 |
| Unemployed | 14.6 | 11.8 | 2.8 |
| Unemployment rate of persons aged 18-24 (%) | 25.2 | 32.2 | 18.0 |
| Unemployment rate of early school leavers (%) | 50.5 | 56.5 | 34.6 |

Source: CSO QNHS

5.11 Ireland: Proportion of the population aged 20–64 with at least upper secondary education, 2009

| Age group | % of age group | | |
|-----------|----------------|-------|---------|
| | Total Persons | Males | Females |
| 20-24 | 84.6 | 81.6 | 87.6 |
| 25-34 | 82.5 | 79.4 | 85.6 |
| 35-44 | 75.0 | 71.3 | 78.7 |
| 45-54 | 63.1 | 59.8 | 66.4 |
| 55-64 | 46.8 | 44.2 | 49.4 |

Source: CSO QNHS

- ◆ The unemployment rate for persons in Ireland aged 18-24 with, at most, lower secondary education was 50.5% in 2009, compared with 25.2% for that age group overall.
- ◆ More than 84% of persons aged 20-24 in 2009 had completed second level education or higher. This figure decreased for older age groups down to 46.8% of persons aged 55-64. Women of all ages in Ireland are more likely than men to have completed at least upper secondary education.
- ◆ The proportion of persons aged 18-24 who left school with, at most, lower secondary education in Ireland, was 11.3% in 2008. The EU 27 average rate was 14.9%.
- ◆ The proportion of males aged 18-24 who left school early is higher than females in all the reporting countries shown with the exception of Bulgaria, Romania, Macedonia and Turkey.

5.12 EU: Early school leavers³⁴, 2008

| Country | % of population aged 18-24 | | |
|----------------|----------------------------|-------------|-------------|
| | Total Persons | Males | Females |
| Poland | 5.0 | 6.1 | 3.9 |
| Slovenia | 5.1 | 7.2 | 2.6 |
| Czech Republic | 5.6 | 5.8 | 5.4 |
| Slovakia | 6.0 | 7.1 | 4.9 |
| Lithuania | 7.4 | 10.0 | 4.7 |
| Finland | 9.8 | 12.1 | 7.7 |
| Austria | 10.1 | 10.4 | 9.8 |
| Sweden | 11.1 | 12.3 | 9.9 |
| Ireland | 11.3 | 14.6 | 8.0 |
| Netherlands | 11.4 | 14.0 | 8.8 |
| Denmark | 11.5 | 13.7 | 9.2 |
| Hungary | 11.7 | 12.5 | 10.9 |
| Germany | 11.8 | 12.4 | 11.2 |
| France | 11.8 | 13.8 | 9.8 |
| Belgium | 12.0 | 13.4 | 10.6 |
| Luxembourg | 13.4 | 15.8 | 10.9 |
| Cyprus | 13.7 | 19.0 | 9.5 |
| Estonia | 14.0 | 19.8 | 8.2 |
| Bulgaria | 14.8 | 14.1 | 15.5 |
| Greece | 14.8 | 18.5 | 10.9 |
| EU 27 | 14.9 | 16.9 | 12.9 |
| Latvia | 15.5 | 20.2 | 10.7 |
| Romania | 15.9 | 15.9 | 16.0 |
| United Kingdom | 17.0 | 18.3 | 15.6 |
| Italy | 19.7 | 22.6 | 16.7 |
| Spain | 31.9 | 38.0 | 25.7 |
| Portugal | 35.4 | 41.9 | 28.6 |
| Malta | 39.0 | 41.7 | 36.1 |
| Croatia | 3.7 | 4.1 | 3.3 |
| Switzerland | 7.7 | 7.8 | 7.5 |
| Norway | 17.0 | 21.0 | 12.9 |
| Macedonia | 19.6 | 17.6 | 21.7 |
| Iceland | 24.4 | 26.2 | 22.4 |
| Turkey | 46.6 | 38.5 | 53.7 |

Source: Eurostat LFS

³⁴ Persons aged 18-24 with, at most, lower secondary education and not in further education or training.

6.1 Ireland: Non-capital public expenditure on health care, 1999–2008

| Year | Non-capital public expenditure | | | Per capita at constant 2008 prices (€) |
|--------------------|--------------------------------|----------|----------|--|
| | Total (€m) | % of GNI | % of GDP | |
| 1999 | 4,647 | 6.0 | 5.1 | 2,040 |
| 2000 | 5,423 | 6.0 | 5.2 | 2,213 |
| 2001 | 6,802 | 6.9 | 5.8 | 2,555 |
| 2002 | 7,933 | 7.3 | 6.1 | 2,731 |
| 2003 | 8,853 | 7.4 | 6.3 | 2,821 |
| 2004 | 9,653 | 7.5 | 6.5 | 2,837 |
| 2005 ³⁵ | 11,160 | 8.0 | 6.9 | 3,085 |
| 2006 | 12,248 | 7.9 | 6.9 | 3,145 |
| 2007 | 13,736 | 8.4 | 7.3 | 3,310 |
| 2008 | 14,588 | 9.4 | 8.1 | 3,299 |

Source: Department of Health and Children, CSO

- ◆ Non-capital public expenditure on health care in Ireland as a proportion of GNI rose from 6% in 1999 to 9.4% in 2008.
- ◆ An average of €3,299 per person was spent on non-capital public expenditure on health care in Ireland in 2008 while the average in 1999 (at constant 2008 prices) was €2,040. This represented an increase of nearly 62% between 1999 and 2008.
- ◆ Ireland's total expenditure on public and private health was 7.6% of GDP and 8.8% of GNI in 2007. The EU 27 average was 9.3% of GDP in 2007 while four countries had expenditures of 10% of GDP or more.

³⁵Break in series in 2005, see Appendix 1 for more details.

6.2 EU: Total expenditure³⁶ on health as percentage of GDP, 2005–2007

| Country | % of GDP | | | PPS \$ per capita 2007 |
|---------------------------|------------|------------|------------|------------------------|
| | 2005 | 2006 | 2007 | |
| France | 11.1 | 11.0 | 11.0 | 3,709 |
| Germany | 10.7 | 10.5 | 10.4 | 3,588 |
| Austria | 10.4 | 10.2 | 10.1 | 3,763 |
| Portugal | 10.2 | 9.9 | 10.0 | 2,284 |
| Denmark | 9.5 | 9.6 | 9.8 | 3,513 |
| Greece | 9.4 | 9.5 | 9.6 | 2,727 |
| Belgium | 9.8 | 9.5 | 9.4 | 3,323 |
| EU 27 | 9.4 | 9.3 | 9.3 | 2,753 |
| Sweden | 9.2 | 9.1 | 9.1 | 3,323 |
| Netherlands | 9.1 | 8.9 | 8.9 | 3,509 |
| Ireland (% of GNI) | 8.5 | 8.2 | 8.8 | 3,424 |
| Italy | 8.9 | 9.0 | 8.7 | 2,686 |
| Spain | 8.3 | 8.4 | 8.5 | 2,671 |
| United Kingdom | 8.2 | 8.5 | 8.4 | 2,992 |
| Finland | 8.5 | 8.3 | 8.2 | 2,840 |
| Slovenia | 8.5 | 8.3 | 7.8 | 2,099 |
| Slovakia | 7.0 | 7.3 | 7.7 | 1,555 |
| Ireland (% of GDP) | 7.3 | 7.1 | 7.6 | 3,424 |
| Malta | 8.5 | 8.4 | 7.5 | 4,053 |
| Hungary | 8.3 | 8.1 | 7.4 | 1,388 |
| Bulgaria | 7.7 | 7.2 | 7.3 | 835 |
| Luxembourg | 7.7 | 7.3 | 7.1 | 5,734 |
| Czech Republic | 7.2 | 7.0 | 6.8 | 1,626 |
| Cyprus | 6.1 | 6.2 | 6.6 | 3,034 |
| Poland | 6.2 | 6.2 | 6.4 | 1,035 |
| Lithuania | 5.9 | 6.2 | 6.2 | 1,109 |
| Latvia | 6.3 | 6.9 | 6.2 | 1,071 |
| Estonia | 5.0 | 5.1 | 5.4 | 1,094 |
| Romania | 5.1 | 4.5 | 4.7 | 592 |
| Switzerland | 11.2 | 10.8 | 10.8 | 4,417 |
| Iceland | 9.4 | 9.1 | 9.3 | 3,323 |
| Norway | 9.1 | 8.6 | 8.9 | 4,763 |
| Croatia | 7.0 | 7.1 | 7.6 | 1,398 |
| Macedonia | 7.8 | 7.6 | 7.1 | 669 |
| Turkey | 5.7 | 4.8 | 5.0 | 677 |

Source: WHO Health for All Databases

³⁶Public and private. See Appendix 1 for details of PPS.

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

| Period | years | | | |
|-----------|----------|---------|-------------|---------|
| | At birth | | At 65 years | |
| | Males | Females | Males | Females |
| 1925-1927 | 57.4 | 57.9 | 12.8 | 13.4 |
| 1935-1937 | 58.2 | 59.6 | 12.5 | 13.1 |
| 1940-1942 | 59.0 | 61.0 | 12.3 | 13.2 |
| 1945-1947 | 60.5 | 62.4 | 12.0 | 13.1 |
| 1950-1952 | 64.5 | 67.1 | 12.1 | 13.3 |
| 1960-1962 | 68.1 | 71.9 | 12.6 | 14.4 |
| 1965-1967 | 68.6 | 72.9 | 12.4 | 14.7 |
| 1970-1972 | 68.8 | 73.5 | 12.4 | 15.0 |
| 1978-1980 | 69.5 | 75.0 | 12.4 | 15.4 |
| 1980-1982 | 70.1 | 75.6 | 12.6 | 15.7 |
| 1985-1987 | 71.0 | 76.7 | 12.6 | 16.2 |
| 1990-1992 | 72.3 | 77.9 | 13.4 | 17.1 |
| 1995-1997 | 73.0 | 78.5 | 13.8 | 17.4 |
| 2001-2003 | 75.1 | 80.3 | 15.4 | 18.7 |
| 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.
- ◆ The 2006 value for life expectancy at birth for males in Ireland was 0.7 years higher than the 2007 EU 27 average of 76.1 years, while that of females was 0.6 years lower than the 2007 EU 27 average of 82.2 years.
- ◆ Life expectancy at birth in 2008 for females was highest in Spain at 85 years, and for males was highest in Sweden at 79.1 years.
- ◆ The difference between life expectancy at birth for men and women was lowest in the Netherlands at 4 years and highest in Lithuania at 11.3 years. The corresponding difference for Ireland was 4.8 years.

6.4 EU: Life expectancy at birth by sex, 2008³⁷

| Country | years | | |
|----------------|-------------|-------------|---------------------|
| | Males | Females | Gender differential |
| Spain | 78.9 | 85.0 | 6.2 |
| France | 77.5 | 84.3 | 6.8 |
| Italy | 78.8 | 84.1 | 5.3 |
| Belgium | 77.5 | 83.5 | 6.1 |
| Sweden | 79.1 | 83.2 | 4.1 |
| Finland | 76.3 | 83.0 | 6.7 |
| Austria | 77.6 | 83.0 | 5.3 |
| Luxembourg | 77.6 | 82.7 | 5.1 |
| Greece | 77.5 | 82.5 | 4.9 |
| Germany | 77.2 | 82.4 | 5.2 |
| Malta | 76.7 | 82.3 | 5.6 |
| Netherlands | 78.3 | 82.3 | 4.0 |
| Slovenia | 75.4 | 82.3 | 6.8 |
| EU 27 | 76.1 | 82.2 | 6.1 |
| Portugal | 75.5 | 81.7 | 6.3 |
| Cyprus | 77.0 | 81.7 | 4.7 |
| United Kingdom | 77.6 | 81.7 | 4.1 |
| Ireland | 76.8 | 81.6 | 4.8 |
| Denmark | 76.3 | 80.7 | 4.4 |
| Czech Republic | 74.0 | 80.1 | 6.2 |
| Poland | 71.3 | 80.0 | 8.7 |
| Estonia | 68.6 | 79.2 | 10.6 |
| Slovakia | 70.9 | 78.7 | 7.9 |
| Latvia | 67.2 | 77.9 | 10.7 |
| Hungary | 69.8 | 77.8 | 8.0 |
| Lithuania | 66.3 | 77.6 | 11.3 |
| Bulgaria | 69.5 | 76.6 | 7.1 |
| Romania | 69.2 | 76.1 | 7.0 |
| Switzerland | 79.7 | 84.4 | 4.7 |
| Iceland | 79.6 | 83.0 | 3.4 |
| Norway | 78.3 | 83.0 | 4.6 |
| Croatia | 72.4 | 79.6 | 7.2 |
| Macedonia | 72.0 | 76.1 | 4.2 |
| Turkey | 71.4 | 75.8 | 4.4 |

Source: Eurostat

³⁷ 2004 data for Cyprus, 2006 data for Ireland and 2007 data for EU 27 and UK.

7.1 Ireland: Population distribution by age group, 2000–2009

| Year | % 000 persons | | | | | Total |
|------|---------------|-------|-------|-------|-------------|---------|
| | 0-14 | 15-24 | 25-44 | 45-64 | 65 and over | |
| 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 | 4,232.9 |
| 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 |
| 2009 | 21.0 | 13.1 | 32.4 | 22.4 | 11.1 | 4,459.3 |

Source: CSO Population and Migration Estimates³⁸

- ◆ The population increased by 17.7% to nearly 4.46 million persons over the period 2000-2009. The proportion of the population aged 25-64 increased from 50% in 2000 to 54.8% in 2009. Conversely, there was a decrease in the 0-24 age group from 38.7% in 2000 to 34.1% of the population in 2009.

7.2 Ireland: Household composition, 2000–2009

| Year | 000 households | | | | Persons | Average household size |
|------|------------------|---------------------|---------------------|-----------------------------|---------|------------------------|
| | Total households | 1 person households | 2 person households | 3 or more person households | | |
| 2000 | 1,277.4 | 288.2 | 315.7 | 673.4 | 2.97 | |
| 2001 | 1,304.7 | 284.7 | 331.1 | 689.0 | 2.95 | |
| 2002 | 1,348.1 | 298.0 | 345.9 | 704.1 | 2.91 | |
| 2003 | 1,385.3 | 308.4 | 371.1 | 705.9 | 2.88 | |
| 2004 | 1,409.3 | 297.6 | 386.4 | 725.2 | 2.88 | |
| 2005 | 1,461.4 | 318.4 | 400.2 | 742.8 | 2.83 | |
| 2006 | 1,492.6 | 325.8 | 411.6 | 755.2 | 2.84 | |
| 2007 | 1,532.1 | 325.7 | 427.3 | 779.1 | 2.84 | |
| 2008 | 1,581.9 | 334.6 | 462.0 | 785.2 | 2.80 | |
| 2009 | 1,627.2 | 352.5 | 494.1 | 780.6 | 2.74 | |

Source: CSO QNHS

- ◆ In Ireland, average household size decreased from 2.97 persons in 2000 to 2.74 persons in 2009. The growth in two-person households at 56.5% over the same period was more than double the growth in the total number of households at 27.4%.

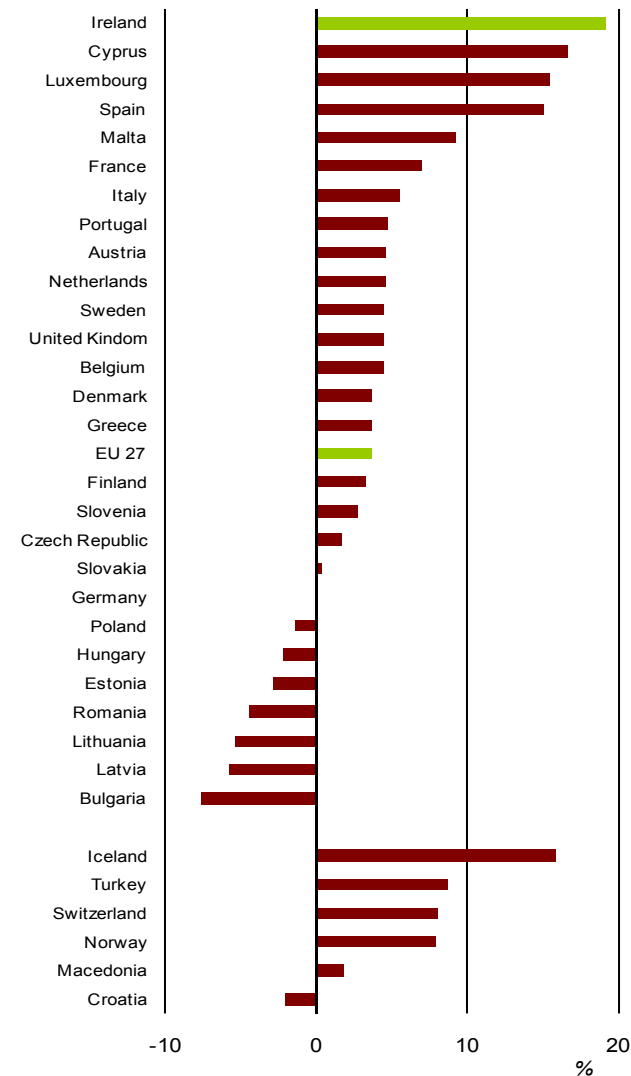
³⁸ Persons in April of each year. Figures for 2007, 2008 and 2009 are preliminary.

7.3 EU: Population 1999 and 2009³⁹

| Country | persons | | |
|----------------|--------------------|--------------------|-------------------|
| | 1999 | 2009 | Change |
| EU 27 | 481,617,952 | 499,185,059 | 17,567,107 |
| Germany | 82,037,011 | 82,002,356 | -34,655 |
| France | 60,158,533 | 64,350,759 | 4,192,226 |
| United Kingdom | 58,579,685 | 61,179,256 | 2,599,571 |
| Italy | 56,909,109 | 60,045,068 | 3,135,959 |
| Spain | 39,802,827 | 45,828,172 | 6,025,345 |
| Poland | 38,666,983 | 38,135,876 | -531,107 |
| Romania | 22,488,595 | 21,498,616 | -989,979 |
| Netherlands | 15,760,225 | 16,485,787 | 725,562 |
| Greece | 10,861,402 | 11,260,402 | 399,000 |
| Belgium | 10,213,752 | 10,666,866 | 453,114 |
| Portugal | 10,148,883 | 10,627,250 | 478,367 |
| Czech Republic | 10,289,621 | 10,467,542 | 177,921 |
| Hungary | 10,253,416 | 10,030,975 | -222,441 |
| Sweden | 8,854,322 | 9,256,347 | 402,025 |
| Austria | 7,982,461 | 8,355,260 | 372,799 |
| Bulgaria | 8,230,371 | 7,606,551 | -623,820 |
| Denmark | 5,313,577 | 5,511,451 | 197,874 |
| Slovakia | 5,393,382 | 5,412,254 | 18,872 |
| Finland | 5,159,646 | 5,326,314 | 166,668 |
| Ireland | 3,732,201 | 4,450,030 | 717,829 |
| Lithuania | 3,536,401 | 3,349,872 | -186,529 |
| Latvia | 2,399,248 | 2,261,294 | -137,954 |
| Slovenia | 1,978,334 | 2,032,362 | 54,028 |
| Estonia | 1,379,237 | 1,340,415 | -38,822 |
| Cyprus | 682,862 | 796,875 | 114,013 |
| Luxembourg | 427,350 | 493,500 | 66,150 |
| Malta | 378,518 | 413,609 | 35,091 |
| Turkey | 65,786,563 | 71,517,100 | 5,730,537 |
| Switzerland | 7,123,537 | 7,701,856 | 578,319 |
| Norway | 4,445,329 | 4,799,252 | 353,923 |
| Croatia | 4,527,459 | 4,435,056 | -92,403 |
| Macedonia | 2,012,705 | 2,048,619 | 35,914 |
| Iceland | 275,712 | 319,368 | 43,656 |

Source: Eurostat

7.4 EU: Population change, 1999-2009³⁹



Source: Eurostat

- ◆ Ireland had the highest percentage increase in population between 1999 and 2009 in the EU 27 while seven EU countries (all recent member states) experienced population decline over the same period.

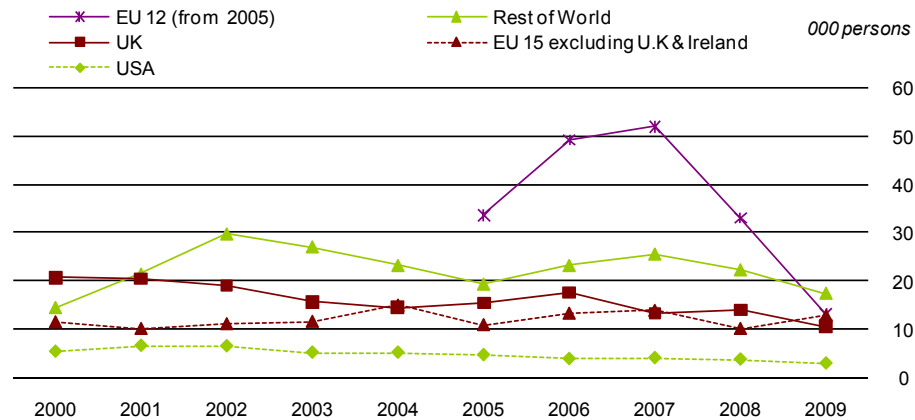
³⁹ Population on the 1st January of specific year. 2008 population data used for Belgium and the UK for 2009, and population data for EU 27 in 2009 is calculated using 2008 data for these 2 countries and 2009 for the remaining EU 27 countries.

7.5 Ireland: Migration and natural increase⁴⁰, 2000–2009

| Year | 000 persons | | | | |
|------|------------------|-------------------|-----------------------------|------------------|-------------------|
| | Inward migration | Outward migration | Net migration ⁴¹ | Natural increase | Population change |
| 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 |
| 2009 | 57.3 | 65.1 | -7.8 | 45.1 | 37.3 |

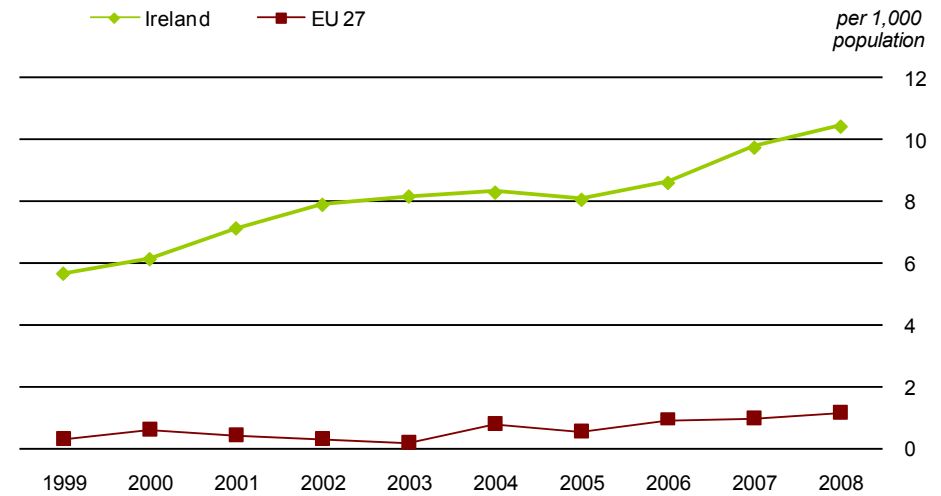
Source: CSO Population and Migration Estimates

7.6 Ireland: Immigration by country of origin, 2000–2009



Source: CSO Population and Migration Estimates

7.7 Ireland and EU: Rate of natural increase of population, 1999–2008



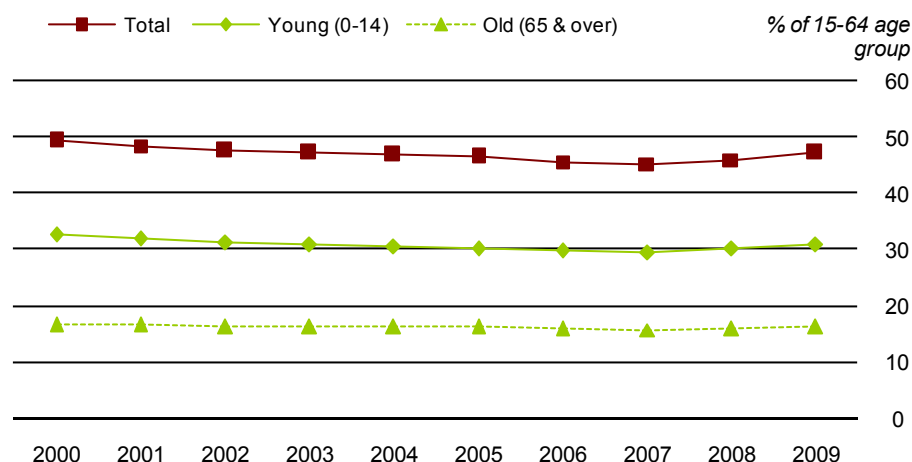
Source: Eurostat

- ◆ The level of net migration increased from 26,000 in 2000 to 71,800 in 2006 before decreasing to 38,500 in 2008. However in 2009 net migration fell to minus 7,800, i.e., more people left the country than arrived.
- ◆ Annual immigration rose sharply from 52,600 persons in 2000 to peak at 109,500 in 2007 before falling back to 57,300 persons in 2009.
- ◆ The level of annual emigration from Ireland was reasonably stable at about 26,000 persons from 2000 to 2004 but it rose gradually between 2005 and 2008 before increasing sharply to 65,100 persons in 2009.
- ◆ In 2005 about 33,700 persons moved to Ireland from the 12 new EU countries who joined in 2004 and 2007, rising to 52,100 in 2007 and then falling back sharply to 33,100 in 2008 and 13,100 in 2009.
- ◆ The rate of natural increase of the population in Ireland was 10.5 per 1,000 population in 2008 compared with an average of 1.2 per 1,000 in the EU 27. The EU 27 rate was consistently below 1.0 over the 1999-2005 period before rising to 1.0 in 2006, whereas the rate for Ireland increased from 5.7 per 1,000 in 1999.

⁴⁰ Data refers to the 12 months up to April of each year.

⁴¹ Net migration is the number of immigrants less emigrants.

7.8 Ireland: Age dependency ratio, 2000–2009



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 (30.8%) and the lowest proportion of persons aged 65 and over (16.2%) in 2009.
- ◆ This resulted in a combined age dependency ratio of 47% in Ireland in 2009 which was similar to the average for other EU 27 member states although markedly different in composition.
- ◆ 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.
- ◆ In 2009 France had the highest combined age dependency ratio in the EU at 53.9 while Slovakia had the lowest at 38.

7.9 EU: Young and old as proportion of population aged 15–64, 2009⁴²

| Country | % of population aged 15–64 | | |
|----------------|----------------------------|--------------|-----------------|
| | Young and old | Young (0–14) | Old (65 & over) |
| Ireland | 47.0 | 30.8 | 16.2 |
| France | 53.9 | 28.5 | 25.4 |
| Denmark | 51.9 | 27.8 | 24.1 |
| United Kingdom | 50.7 | 26.5 | 24.3 |
| Luxembourg | 46.9 | 26.4 | 20.5 |
| Netherlands | 48.6 | 26.4 | 22.3 |
| Belgium | 51.4 | 25.6 | 25.8 |
| Sweden | 52.5 | 25.4 | 27.1 |
| Finland | 50.3 | 25.2 | 25.2 |
| Cyprus | 42.6 | 24.4 | 18.2 |
| EU 27 | 48.9 | 23.3 | 25.6 |
| Portugal | 49.0 | 22.8 | 26.3 |
| Malta | 42.7 | 22.6 | 20.1 |
| Austria | 48.1 | 22.4 | 25.7 |
| Estonia | 47.2 | 22.0 | 25.2 |
| Lithuania | 45.1 | 21.9 | 23.2 |
| Romania | 43.0 | 21.7 | 21.3 |
| Hungary | 45.4 | 21.6 | 23.8 |
| Spain | 45.8 | 21.5 | 24.3 |
| Poland | 40.4 | 21.5 | 18.9 |
| Greece | 49.3 | 21.4 | 27.9 |
| Italy | 51.9 | 21.4 | 30.6 |
| Slovakia | 38.0 | 21.3 | 16.7 |
| Germany | 51.5 | 20.6 | 30.9 |
| Slovenia | 43.7 | 20.1 | 23.6 |
| Czech Republic | 40.9 | 19.9 | 20.9 |
| Latvia | 44.9 | 19.9 | 25.1 |
| Bulgaria | 44.6 | 19.4 | 25.2 |
| Turkey | 49.5 | 39.3 | 10.2 |
| Iceland | 48.1 | 30.9 | 17.2 |
| Norway | 50.8 | 28.7 | 22.1 |
| Macedonia | 42.0 | 25.7 | 16.3 |
| Croatia | 48.2 | 22.7 | 25.5 |
| Switzerland | 46.8 | 22.5 | 24.3 |

Source: Eurostat

⁴² Data refers to estimated situation at January. 2008 data used for Belgium and UK, EU 27 calculated using 2008 for these 2 countries and 2009 data for the remaining EU 27 countries.

7.10 Ireland and EU: Total fertility rate⁴³, 1999–2008

Projected number of children a woman will have

| Year | EU 27 | Ireland |
|------|-------|---------|
| 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 | 1.50 | 1.95 |
| 2005 | 1.51 | 1.88 |
| 2006 | 1.53 | 1.94 |
| 2007 | : | 2.03 |
| 2008 | : | 2.10 |

Source: Eurostat, CSO Vital Statistics

- ◆ The total fertility rate in Ireland rose from 1.91 in 1999 to reach 1.98 by 2003 before decreasing to 1.88 in 2005. Since then it has increased each year to reach 2.1 in 2008, which is equal to the replacement rate for developed countries.
- ◆ For the EU 27 as a whole, the total fertility rate was significantly lower in the range 1.43 to 1.53.
- ◆ Ireland had the highest reported fertility rate in the EU 27 in 2008, while Slovakia had the lowest rate. Iceland had the highest rate of all the reported countries with a fertility rate of 2.15.
- ◆ The new member states, together with the Mediterranean countries, tended to have the lowest fertility rates.

⁴³ EU 25 data for years 1999 to 2001.

7.11 EU: Total fertility rate⁴⁴, 1998–2008

Projected number of children a woman will have

| Country | 1998 | 2003 | 2008 |
|----------------|-------------|-------------|-------------|
| Ireland | 1.95 | 1.98 | 2.10 |
| France | 1.78 | 1.89 | 2.00 |
| Sweden | 1.50 | 1.71 | 1.91 |
| Denmark | 1.72 | 1.76 | 1.89 |
| Finland | 1.70 | 1.76 | 1.85 |
| United Kingdom | 1.71 | 1.71 | 1.84 |
| Netherlands | 1.63 | 1.75 | 1.77 |
| Belgium | 1.60 | 1.66 | 1.76 |
| Estonia | 1.28 | 1.37 | 1.65 |
| Luxembourg | 1.68 | 1.62 | 1.61 |
| EU 27 | 1.43 | 1.47 | 1.53 |
| Slovenia | 1.23 | 1.20 | 1.53 |
| Greece | 1.26 | 1.28 | 1.51 |
| Czech Republic | 1.16 | 1.18 | 1.50 |
| Bulgaria | 1.11 | 1.23 | 1.48 |
| Lithuania | 1.46 | 1.26 | 1.47 |
| Spain | 1.16 | 1.31 | 1.46 |
| Cyprus | 1.76 | 1.50 | 1.46 |
| Latvia | : | 1.29 | 1.44 |
| Malta | 1.88 | 1.48 | 1.44 |
| Austria | 1.37 | 1.38 | 1.41 |
| Poland | 1.44 | 1.22 | 1.39 |
| Germany | 1.38 | 1.34 | 1.38 |
| Italy | 1.21 | 1.29 | 1.37 |
| Portugal | 1.48 | 1.44 | 1.37 |
| Hungary | 1.32 | 1.27 | 1.35 |
| Romania | 1.32 | 1.27 | 1.35 |
| Slovakia | 1.37 | 1.20 | 1.32 |
| Iceland | 2.05 | 1.99 | 2.15 |
| Norway | 1.81 | 1.80 | 1.96 |
| Switzerland | 1.47 | 1.39 | 1.48 |
| Macedonia | 1.90 | 1.77 | 1.47 |
| Croatia | : | 1.32 | 1.46 |

Source: Eurostat

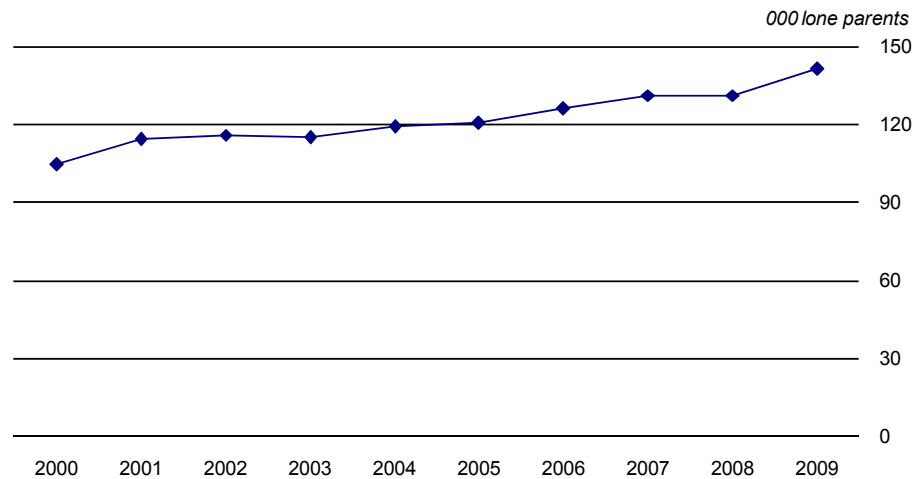
⁴⁴ 2000 data used for 1998 for Germany. 2007 data used for 2008 for Italy, 2006 data used for 2008 for EU 27 and United Kingdom, 2005 data used for 2008 for Belgium.

7.12 Ireland: Lone parent families with children aged under 20 by sex of parent⁴⁵, 2000–2009

| <i>000 families</i> | | | |
|---------------------|------|--------|-------|
| Year | Male | Female | Total |
| 2000 | 10.6 | 93.8 | 104.4 |
| 2001 | 10.7 | 103.2 | 113.9 |
| 2002 | 11.4 | 104.4 | 115.8 |
| 2003 | 9.8 | 105.1 | 114.9 |
| 2004 | 10.8 | 108.3 | 119.1 |
| 2005 | 9.8 | 110.4 | 120.3 |
| 2006 | 10.8 | 114.9 | 125.7 |
| 2007 | 9.9 | 121.2 | 131.1 |
| 2008 | 11.5 | 119.5 | 131.1 |
| 2009 | 12.4 | 129.0 | 141.4 |

Source: CSO QNHS

Ireland: Lone parent families with children aged under 20, 2000-2009



- ◆ The number of lone parent families whose youngest child was less than 20 increased by more than a third between 2000 and 2009, from 104,400 families in 2000 to 141,400 families in 2009.
- ◆ The number of female headed lone parent families increased by 37.5% over this time period while the number of lone parent families headed by males increased by 17%.

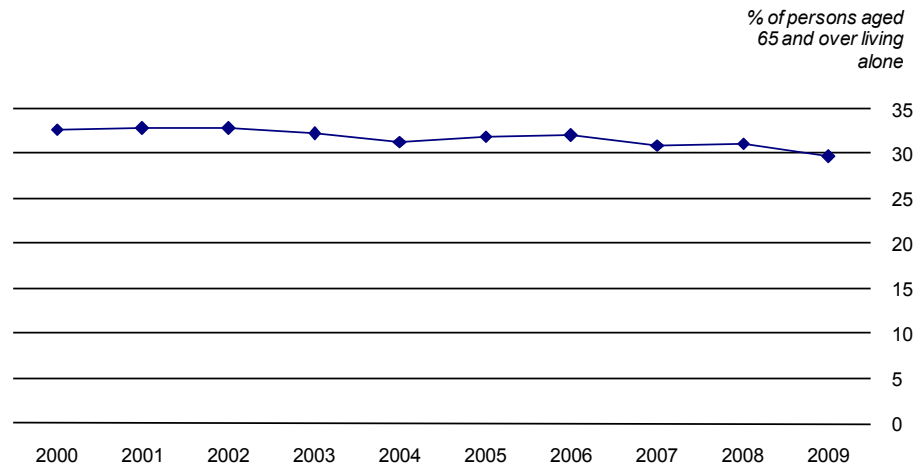
⁴⁵ Refers to persons living as lone parents whose youngest child was less than 20 years of age.

7.13 Ireland: Persons aged 65 and over living alone by sex, 2000–2009

| Year | 000 persons aged 65 and over living alone | | | % | |
|------|---|-------|---------|---------------------|-------------------------------|
| | Persons | Males | Females | % of all households | % of persons aged 65 and over |
| 2000 | 139.4 | 44.7 | 94.7 | 9.2 | 32.8 |
| 2001 | 141.5 | 45.5 | 96.0 | 9.2 | 32.9 |
| 2002 | 143.5 | 45.8 | 97.7 | 9.4 | 32.9 |
| 2003 | 143.3 | 45.8 | 97.4 | 9.7 | 32.4 |
| 2004 | 141.5 | 44.1 | 97.3 | 10.0 | 31.4 |
| 2005 | 147.2 | 46.4 | 100.8 | 9.9 | 32.0 |
| 2006 | 148.5 | 46.0 | 102.6 | 10.0 | 32.1 |
| 2007 | 146.5 | 46.1 | 100.4 | 10.5 | 31.1 |
| 2008 | 150.4 | 49.8 | 100.6 | 10.5 | 31.2 |
| 2009 | 147.4 | 47.7 | 99.7 | 11.0 | 29.8 |

Source: CSO QNHS

Ireland: Persons aged 65 and over living alone, 2000-2009



- ◆ There were 147,400 persons aged 65 and over living alone in 2009 compared with 139,400 in 2000.

- ◆ There were over twice as many women aged 65 and over living alone in 2009 as there were men.
- ◆ Almost 30% of persons aged 65 and over were living alone in 2009.

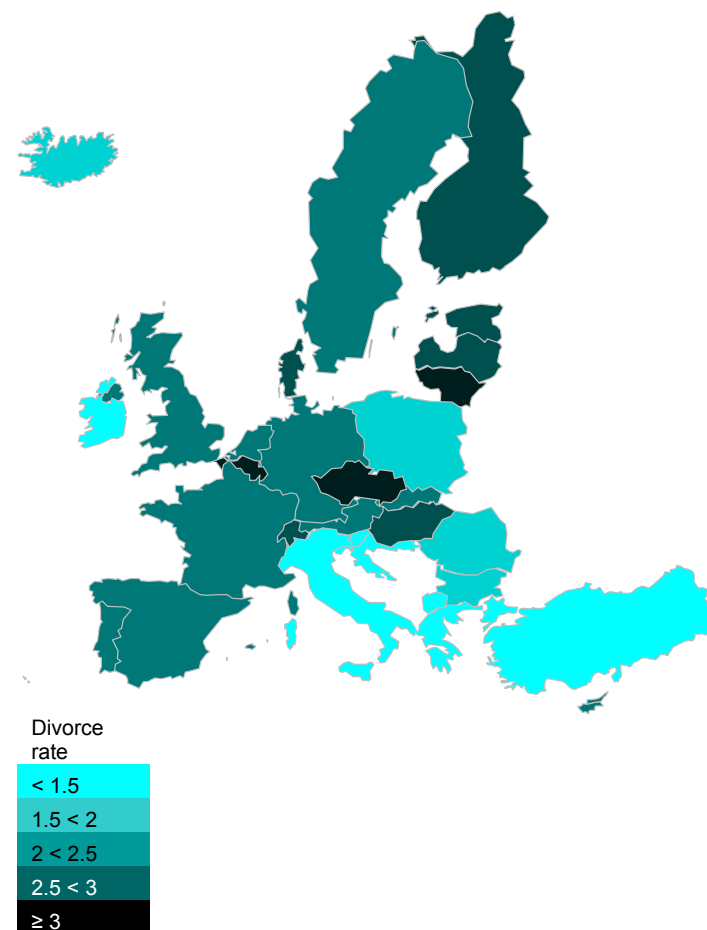
7.14 EU: Divorce rate, 2004–2008

| Country | Divorces per 1,000 population | | | | |
|----------------|-------------------------------|------------|------|------|------|
| | 2004 | 2005 | 2006 | 2007 | 2008 |
| Ireland | 0.8 | 0.8 | 0.9 | 0.8 | : |
| Italy | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 |
| Greece | 1.1 | 1.2 | 1.3 | 1.2 | : |
| Slovenia | 1.2 | 1.3 | 1.2 | 1.3 | 1.1 |
| Romania | 1.6 | 1.5 | 1.5 | 1.7 | 1.7 |
| Spain | 1.2 | 1.7 | : | 2.8 | 2.4 |
| Poland | 1.5 | 1.8 | 1.9 | 1.7 | 1.7 |
| Bulgaria | 1.9 | 1.9 | 1.9 | 2.1 | 1.9 |
| Cyprus | 2.2 | 2.0 | 2.3 | 2.1 | 2.1 |
| Netherlands | 1.9 | 2.0 | 1.9 | 2.0 | 2.0 |
| EU 27 | 2.0 | 2.1 | : | : | : |
| Slovakia | 2.0 | 2.1 | 2.4 | 2.3 | 2.3 |
| Luxembourg | 2.3 | 2.2 | 2.5 | 2.3 | 2.0 |
| Portugal | 2.2 | 2.2 | 2.3 | 2.4 | : |
| Sweden | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 |
| Germany | 2.6 | 2.4 | 2.3 | 2.3 | 2.3 |
| Austria | 2.4 | 2.4 | 2.5 | 2.5 | 2.4 |
| France | 2.2 | 2.5 | 2.2 | : | : |
| Hungary | 2.4 | 2.5 | 2.5 | 2.5 | 2.5 |
| Finland | 2.5 | 2.6 | 2.5 | 2.5 | 2.5 |
| United Kingdom | 2.8 | 2.6 | 2.4 | 2.4 | : |
| Denmark | 2.9 | 2.8 | 2.6 | 2.6 | 2.7 |
| Latvia | 2.3 | 2.8 | 3.2 | 3.3 | 2.7 |
| Belgium | 3.0 | 2.9 | 2.8 | 2.8 | 3.3 |
| Estonia | 3.1 | 3.0 | 2.8 | 2.8 | 2.6 |
| Czech Republic | 3.2 | 3.1 | 3.1 | 3.0 | 3.0 |
| Lithuania | 3.2 | 3.3 | 3.3 | 3.4 | 3.1 |
| Macedonia | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 |
| Croatia | 1.1 | 1.1 | 1 | 1.1 | 1.1 |
| Turkey | 1.3 | 1.3 | 1.3 | 1.3 | 1.4 |
| Iceland | 1.9 | 1.9 | 1.6 | 1.7 | 1.7 |
| Norway | 2.4 | 2.4 | 2.3 | 2.2 | 2.1 |
| Switzerland | 2.4 | 2.9 | 2.8 | 2.6 | 2.6 |

Source: Eurostat

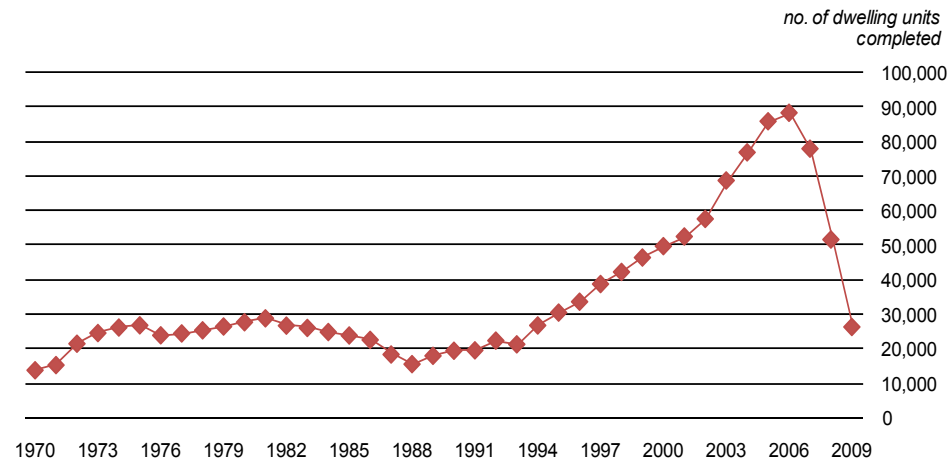
- ◆ The divorce rates in Ireland and Italy, at 0.8 divorces per 1,000 population, were the joint lowest in the EU in 2005, the most recent year for which data is available for all EU countries with divorce, (Malta has no divorce laws).
- ◆ The EU average in 2005 was 2.1 divorces per 1,000 population. Lithuania, at 3.3, had the highest divorce rate in 2005.

EU: Divorce rate⁴⁶, 2008



⁴⁶ 2007 data used for Ireland, Greece, Portugal and United Kingdom, 2006 data used for France.

8.1 Ireland: Dwelling unit completions, 1970–2009



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

8.2 Ireland: Nature of occupancy⁴⁷ of private households, 1961–2006

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

Source: CSO Census of Population

- ◆ There were 13,887 dwelling unit completions in 1970. This figure gradually rose to 28,917 in 1981 before falling to 15,654 in 1988 and then increasing sharply to peak at almost 90,000 in 2006. However by 2009 the number of completions has declined sharply to 26,420, back to the levels of the mid 1990s.
- ◆ 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.

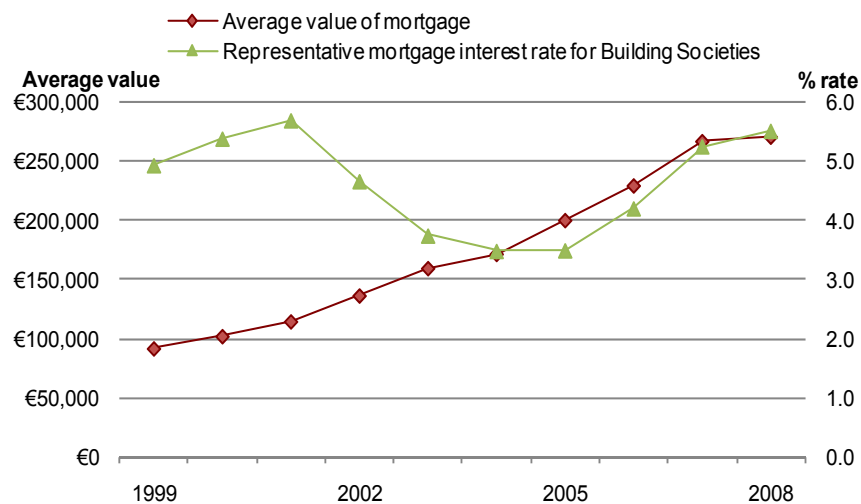
⁴⁷ 'Not stated' replies excluded.

8.3 Ireland: Housing loans paid, 1999–2008

| Year | New Houses | Other houses | Total | Average value of mortgage (€m) | Representative mortgage interest rate for building societies (%) |
|------|------------|--------------|---------|--------------------------------|--|
| 1999 | 31,359 | 39,458 | 70,817 | 6,517 | 4.93 |
| 2000 | 31,533 | 42,725 | 74,258 | 7,598 | 5.38 |
| 2001 | 29,431 | 37,355 | 66,786 | 7,664 | 5.69 |
| 2002 | 32,298 | 46,994 | 79,292 | 10,825 | 4.66 |
| 2003 | 35,292 | 49,457 | 84,749 | 13,524 | 3.74 |
| 2004 | 44,231 | 54,478 | 98,709 | 16,933 | 3.48 |
| 2005 | 53,758 | 53,922 | 107,680 | 21,536 | 3.49 |
| 2006 | 55,737 | 55,516 | 111,253 | 25,495 | 4.20 |
| 2007 | 46,588 | 37,698 | 84,286 | 22,457 | 5.25 |
| 2008 | 24,467 | 29,224 | 53,691 | 14,508 | 5.51 |

Source: Department of the Environment, Heritage and Local Government

Ireland: Housing loans paid 1999-2008



8.4 Eurozone: Interest rates for household mortgages (new business), 2005–2009

| Country | interest rate | | | | |
|-----------------|---------------|-------------|-------------|-------------|-------------|
| | 2005 | 2006 | 2007 | 2008 | 2009 |
| Finland | 3.22 | 4.15 | 4.92 | 4.07 | 1.92 |
| Luxembourg | 3.62 | 4.51 | 4.83 | 4.22 | 2.03 |
| Portugal | 3.50 | 4.40 | 5.18 | 4.96 | 2.22 |
| Italy | 3.60 | 4.71 | 5.48 | 4.91 | 2.25 |
| Spain | 3.29 | 4.53 | 5.35 | 5.63 | 2.45 |
| Ireland | 3.48 | 4.55 | 5.07 | 4.33 | 2.61 |
| Eurozone | 3.49 | 4.56 | 5.32 | 5.09 | 2.71 |
| Austria | 3.99 | 4.79 | 5.73 | 5.61 | 2.91 |
| Belgium | 3.18 | 4.47 | 5.26 | 4.87 | 2.92 |
| Greece | 3.86 | 4.36 | 4.76 | 4.92 | 3.08 |
| Germany | 4.44 | 5.23 | 5.97 | 5.38 | 3.36 |
| Slovenia | 4.98 | 5.93 | 6.45 | 6.28 | 3.36 |
| France | 3.37 | 4.22 | 5.01 | 5.52 | 3.38 |
| Malta | : | : | : | 3.81 | 3.48 |
| Netherlands | 3.44 | 4.51 | 5.41 | 5.32 | 3.84 |
| Cyprus | : | : | : | 6.47 | 5.01 |
| Slovakia | : | : | : | 6.59 | 5.26 |

Source: European Central Bank

- ◆ The average value of a new housing loan in Ireland rose from €92,000 in 1999 to €270,200 in 2008. The mortgage interest rate rose from 4.93% in 1999 to 5.69% by 2001, before falling to 3.48% in 2004. Since then, rates have risen to 5.51% in 2008.
- ◆ The number of loans taken out for housing rose from 70,817 in 1999 to a peak of 111,253 in 2006 before falling back sharply to 53,691 in 2008.
- ◆ Interest rates for new mortgages in Ireland were the sixth lowest rate in the Eurozone at the end of 2009.

9.1 Ireland: Recorded crimes by type of offence, 2004 and 2008

| Offence group | 2004 | 2008 | % change |
|---|---------|---------|----------|
| Homicide offences | 98 | 89 | -9.2 |
| Sexual offences | 1,752 | 1,407 | -19.7 |
| Attempts/threats to murder, assaults, harassment and related offences | 13,277 | 19,152 | 44.2 |
| Dangerous or negligent acts | 210,047 | 238,300 | 13.5 |
| Kidnapping and related offences | 74 | 77 | 4.1 |
| Robbery, extortion and hijacking offences | 2,717 | 2,299 | -15.4 |
| Burglary and related offences | 24,913 | 24,684 | -0.9 |
| Theft and related offences | 72,201 | 76,863 | 6.5 |
| Fraud, deception and related offences | 3,663 | 5,411 | 47.7 |
| Controlled drug offences | 9,868 | 23,405 | 137.2 |
| Weapons and explosives offences | 2,154 | 4,016 | 86.4 |
| Damage to property and to the environment | 37,047 | 44,626 | 20.5 |
| Public order and other social code offences | 47,791 | 61,822 | 29.4 |
| Road and traffic offences | 185,891 | 332,372 | 78.8 |
| Offences against government, justice procedures and organisation of crime | 6,453 | 13,290 | 106.0 |
| Offences not elsewhere classified | 1,801 | 3,505 | 94.6 |

Source: CSO Crime statistics

- ◆ Controlled drug offences increased by over 137% between 2004 and 2008, rising from 9,868 recorded offences in 2004 to 23,405 in 2008. There were also noticeable increases over the same time period in offences against Government, justice procedures and organisation of crime, which rose from 6,453 to 13,290, and in weapons and explosives offences, which rose from 2,154 to 4,016.
- ◆ The number of sexual offences fell by nearly one fifth between 2004 and 2008, falling from 1,752 to 1,407. There was also a decrease in robbery, extortion and hijacking offences over the same time period, falling from 2,717 to 2,299.
- ◆ The largest single category of offences in 2008 was road and traffic which recorded a third of a million cases.

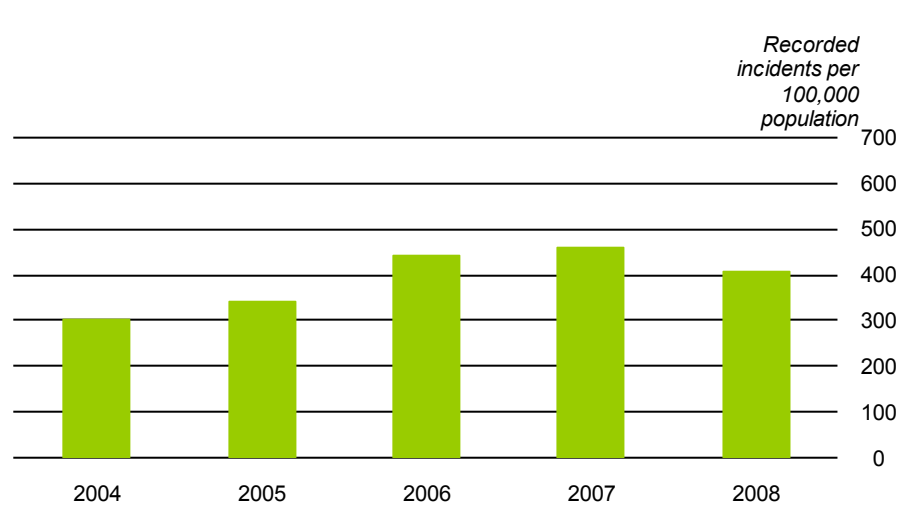
9.2 Ireland: Detection rates, 2004 and 2008

| Offence group | 2004 | 2008 | % change |
|---|------|------|----------|
| Homicide offences | 94.9 | 83.1 | -12.4 |
| Sexual offences | 56.3 | 56.5 | 0.4 |
| Attempts/threats to murder, assaults, harassment and related offences | 63.1 | 59.1 | -6.3 |
| Dangerous or negligent acts | 99.3 | 99.4 | 0.1 |
| Kidnapping and related offences | 54.1 | 57.1 | 5.7 |
| Robbery, extortion and hijacking offences | 36.8 | 50.2 | 36.6 |
| Burglary and related offences | 17.0 | 26.3 | 55.1 |
| Theft and related offences | 30.7 | 30.7 | 0.3 |
| Fraud, deception and related offences | 68.8 | 53.3 | -22.5 |
| Controlled drug offences | 95.5 | 99.0 | 3.6 |
| Weapons and explosives offences | 82.2 | 90.8 | 10.5 |
| Damage to property and to the environment | 18.9 | 22.1 | 17.2 |
| Public order and other social code offences | 86.0 | 93.4 | 8.6 |
| Road and traffic offences | 98.9 | 99.2 | 0.2 |
| Offences against government, justice procedures and organisation of crime | 97.4 | 98.2 | 0.8 |
| Offences not elsewhere classified | 65.3 | 69.0 | 5.7 |

Source: CSO Crime statistics

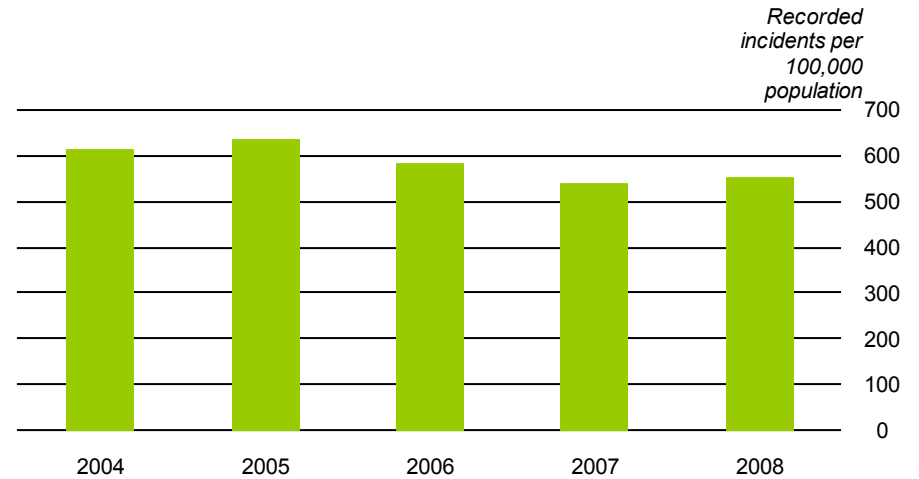
- ◆ The detection rate for burglary and related offences increased by more than half between 2004 and 2008, up from 17% to 26.3%. The detection rate for robbery, extortion and hijacking offences also increased over the same period, from 36.8% to 50.2%. Certain crimes, by their nature, are detected more frequently than others, such as road and traffic offences and drug offences.

9.3 Ireland: Recorded incidents of driving/in charge of a vehicle while over legal alcohol limit per 100,000 population, 2004-2008



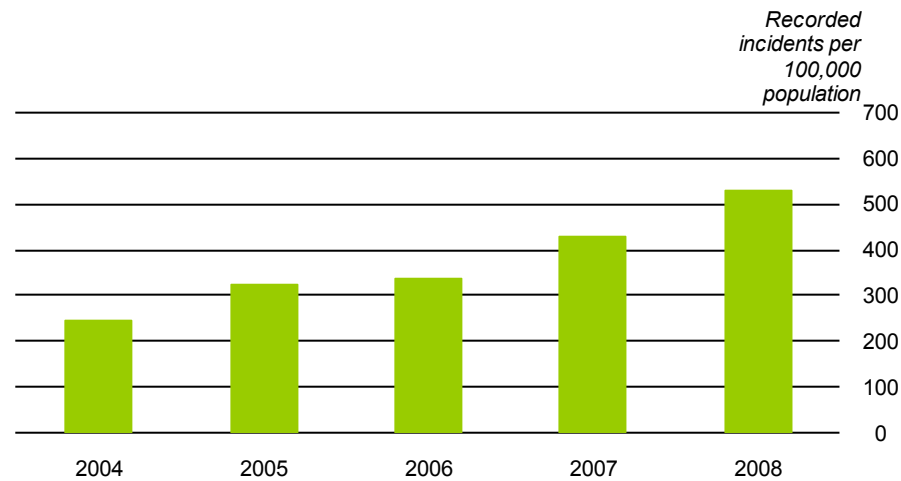
- ◆ The recorded incidents of driving/in charge of a vehicle while over legal alcohol limit rose gradually between 2004 and 2007, from 301 to 457 incidents per 100,000 of the population before falling back to 406 incidents per 100,000 of the population in 2008.

9.4 Ireland: Recorded incidents of burglary per 100,000 population, 2004-2008



- ◆ The recorded incidents of burglary increased slightly from 610 to 633 incidents per 100,000 of the population between 2004 and 2005, before falling back slightly to stand at 549 incidents per 100,000 by 2008.

9.5 Ireland: Recorded incidents of controlled drug offences per 100,000 population, 2004-2008



- ◆ The recorded incidents of controlled drug offences has increased steadily over the period 2004 to 2008, rising from 244 to 529 incidents per 100,000 of the population.

9.6 Ireland: Recorded victims of murder/manslaughter, 1999– 2008

| Year | number of murders/manslaughters | | | % male |
|------|---------------------------------|-------|---------|--------|
| | Persons | Males | Females | |
| 1999 | 54 | 43 | 11 | 80 |
| 2000 | 56 | 44 | 12 | 79 |
| 2001 | 59 | 47 | 12 | 80 |
| 2002 | 66 | 56 | 10 | 85 |
| 2003 | 51 | 42 | 9 | 82 |
| 2004 | 45 | 37 | 8 | 82 |
| 2005 | 65 | 56 | 9 | 86 |
| 2006 | 70 | 57 | 13 | 81 |
| 2007 | 84 | 68 | 16 | 81 |
| 2008 | 55 | 45 | 10 | 82 |

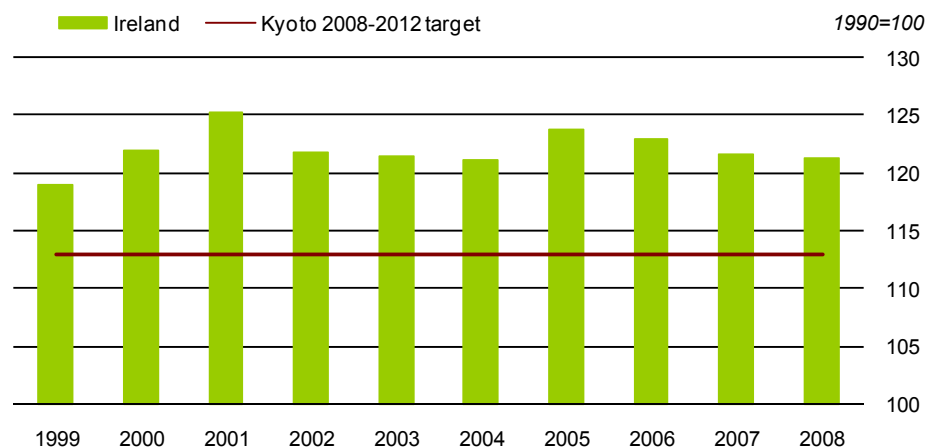
Source: CSO Crime statistics

Ireland: Recorded victims of murder/manslaughter, 1999-2008



- ◆ The number of victims of murder/manslaughter recorded in Ireland was 55 in 2008 and over 80% of the victims were men. The number of male victims of murder/manslaughter rose steadily from 1999, when 43 cases were recorded to reach 56 cases in 2002 before falling back to 37 in 2004. Since then the number of male victims increased sharply to 68 in 2007 before decreasing to 45 in 2008.
- ◆ The number of female victims of murder/manslaughter has remained more stable over the period.

10.1 Ireland: Total net greenhouse gas emissions, 1999–2008



Source: Eurostat, Environmental Protection Agency

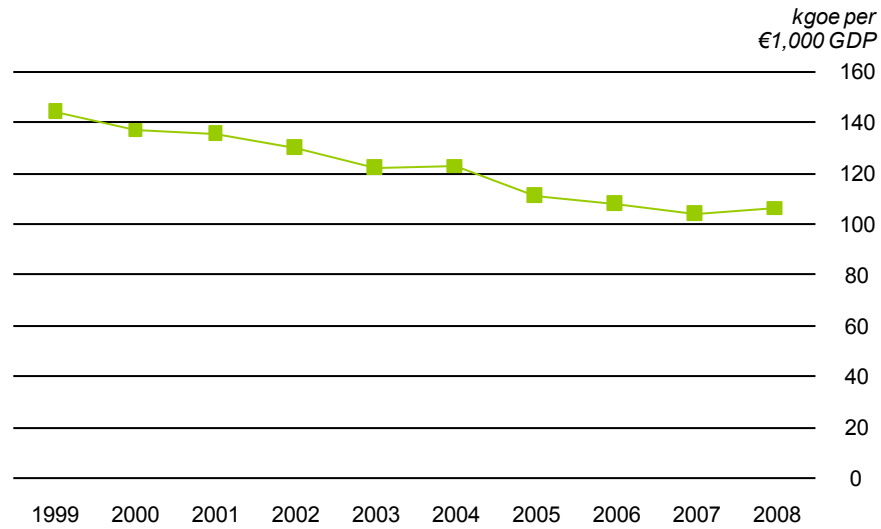
- ◆ Under the Kyoto protocol, EU countries agreed to reduce total greenhouse gas emissions in the EU to 8% below 1990 levels for the period 2008-2012. Ireland's Kyoto burden-sharing target is to ensure that average levels in the 2008-2012 period are no more than 13% above the 1990 emissions.
- ◆ However, Ireland exceeded the 2008-2012 Kyoto target of 113 for greenhouse gas emissions in 1999 and reached 125.2% of the 1990 level in 2001. The situation slightly improved between 2002 and 2004, but the 2005 level increased again to 123.8% of the 1990 level before falling again to 121.3% of the 1990 level in 2008.
- ◆ Ireland's level of emissions of 121.7% was considerably higher than the EU 27 average of 90.7% of 1990 levels in 2007 and was the sixth highest in the EU.
- ◆ With the exceptions of Cyprus, Malta and Slovenia, the new EU member states had lower than average levels of emissions in 2007.

10.2 EU: Net greenhouse gas emissions, 2007, and Kyoto 2008–2012 target

| Country | 1990=100 | | % |
|----------------|--------------|------------------------|--------------|
| | 2007 | 2008-2012 Kyoto target | |
| Latvia | 46.6 | 92.0 | 50.7 |
| Lithuania | 50.1 | 92.0 | 54.5 |
| Estonia | 51.7 | 92.0 | 56.2 |
| Romania | 54.7 | 92.0 | 59.5 |
| Bulgaria | 57.2 | 92.0 | 62.2 |
| Slovakia | 65.2 | 92.0 | 70.9 |
| Hungary | 65.8 | 94.0 | 70.0 |
| Poland | 70.8 | 94.0 | 75.3 |
| Czech Republic | 77.6 | 92.0 | 84.3 |
| Germany | 77.6 | 79.0 | 98.2 |
| United Kingdom | 82.0 | 87.5 | 93.7 |
| Belgium | 90.1 | 92.5 | 97.4 |
| EU 27 | 90.7 | : | : |
| Sweden | 90.7 | 104.0 | 87.2 |
| France | 94.2 | 100.0 | 94.2 |
| EU 15 | 95.0 | 92.0 | 103.3 |
| Denmark | 96.1 | 79.0 | 121.6 |
| Netherlands | 97.4 | 94.0 | 103.6 |
| Luxembourg | 98.1 | 72.0 | 136.3 |
| Slovenia | 101.8 | 92.0 | 110.7 |
| Italy | 106.9 | 93.5 | 114.3 |
| Finland | 110.3 | 100.0 | 110.3 |
| Austria | 111.3 | 87.0 | 127.9 |
| Ireland | 121.7 | 113.0 | 107.7 |
| Greece | 123.2 | 125.0 | 98.6 |
| Portugal | 136.1 | 127.0 | 107.2 |
| Malta | 149.0 | : | : |
| Spain | 152.6 | 115.0 | 132.7 |
| Cyprus | 185.3 | : | : |
| Croatia | 103.2 | 95.0 | 108.6 |
| Norway | 110.9 | 101.0 | 109.8 |
| Iceland | 134.9 | 110.0 | 122.6 |
| Turkey | 219.1 | : | : |

Source: Eurostat, Environmental Protection Agency

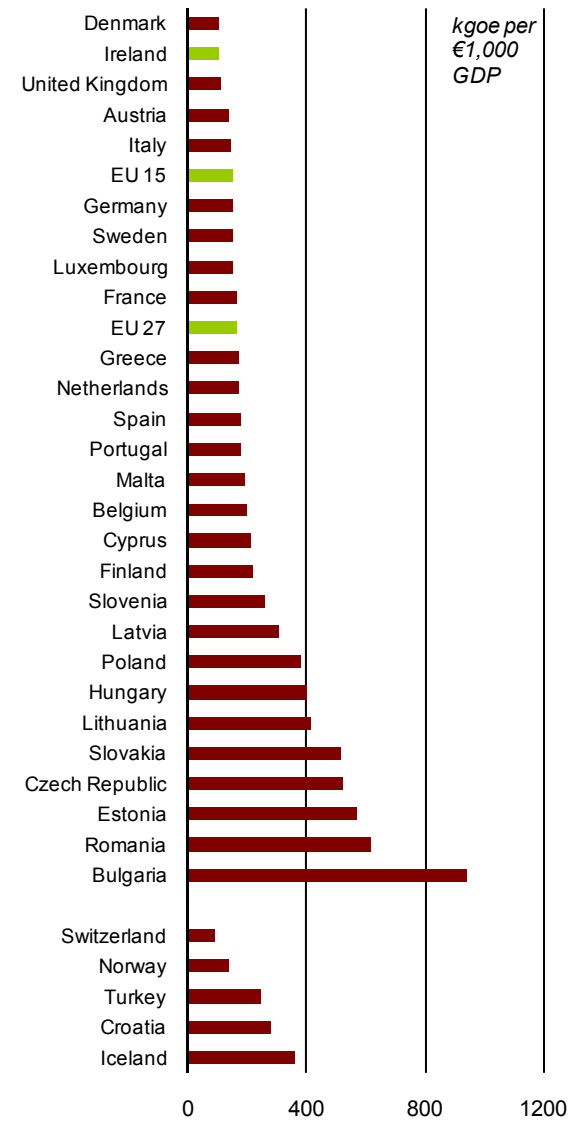
10.3 Ireland: Gross inland consumption of energy divided by GDP, 1999–2008



Source: Eurostat

- ◆ Ireland's energy intensity ratio improved from 143.5 in 1999 to 106.5 in 2008. This ratio is calculated by dividing total usage of coal, electricity, oil, natural gas and renewable energy by GDP.
- ◆ Ireland had the second lowest ratio of the EU 27 countries in 2008, while the ten countries with the highest ratios were all new member states.

10.4 EU: Gross inland consumption of energy divided by GDP, 2008⁴⁸



Source: Eurostat

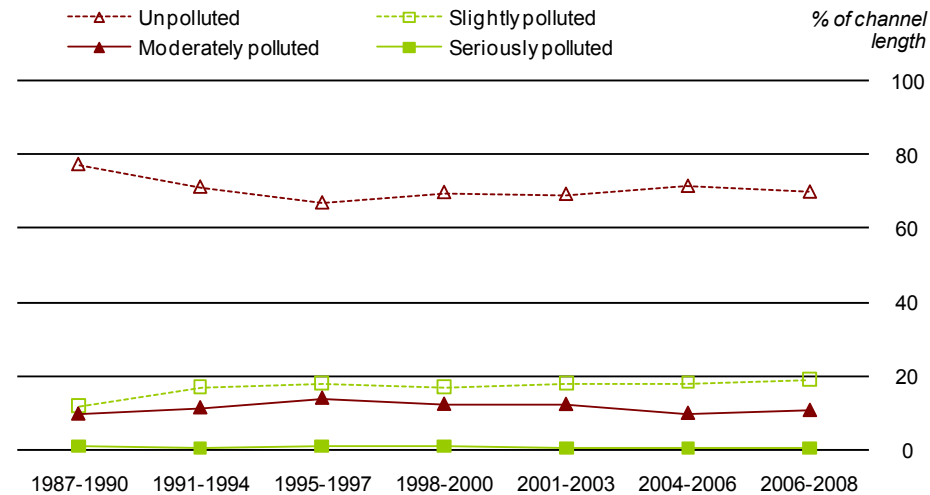
⁴⁸ 2006 data used for Iceland.

10.5 Ireland: River water quality, 1987–2008

| Quality | % of channel length | | | | Total |
|-----------|---------------------|-------------------|---------------------|--------------------|-------|
| | Unpolluted | Slightly polluted | Moderately polluted | Seriously polluted | |
| 1987-1990 | 77.3 | 12.0 | 9.7 | 0.9 | 100 |
| 1991-1994 | 71.2 | 16.8 | 11.4 | 0.6 | 100 |
| 1995-1997 | 66.9 | 18.2 | 14.0 | 0.9 | 100 |
| 1998-2000 | 69.7 | 17.1 | 12.4 | 0.8 | 100 |
| 2001-2003 | 69.3 | 17.9 | 12.3 | 0.6 | 100 |
| 2004-2006 | 71.4 | 18.2 | 9.9 | 0.5 | 100 |
| 2006-2008 | 69.9 | 19.0 | 10.7 | 0.5 | 100 |

Source: Environmental Protection Agency

Ireland: River water quality, 1987-2008



- ◆ The percentage of unpolluted river water in Ireland decreased from 77.3% in the period 1987-1990 to 66.9% in 1995-1997. There was an improvement to 71.4% by 2004-2006 followed by a decrease to 69.9% in the period 2006-2008.
- ◆ The percentage of slightly polluted river water has increased steadily from 12% in 1987-1990 to 19% in the period 2006-2008.
- ◆ The percentage of seriously polluted water has remained below 1% throughout the 1987-2008 period.

10.6 Ireland: Particulate matter⁴⁹ in urban areas, 1998–2008

| Year | $\mu\text{g per m}^3$ | | | | | |
|------|--------------------------|--|--------------------------|--|--------------------------|--|
| | Dublin | | Cork | | Other towns | |
| | 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 |
| 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 |
| 2008 | 17 | 7 | 16 | 1 | 18 | 5 |

Source: Environmental Protection Agency

Ireland: Particulate matter⁷⁸ in urban areas, 1998-2008



⁴⁹The nature, source, health and environmental effects of Particulate matter (PM₁₀) are described in Appendix 1.

- ◆ The average readings for Particulate Matter (PM₁₀) in Dublin have fallen from 38 $\mu\text{g}/\text{m}^3$ in 1998 to 17 in 2008. There has been a decrease in average readings for PM₁₀ in Cork also, falling from 23 $\mu\text{g}/\text{m}^3$ to 16 $\mu\text{g}/\text{m}^3$ between 2000 and 2008. Average readings for PM₁₀ in other towns in Ireland have been more variable, falling from 24 $\mu\text{g}/\text{m}^3$ in 2000 to a value of 6 $\mu\text{g}/\text{m}^3$ in 2001 before rising to values in the range 18 to 32 $\mu\text{g}/\text{m}^3$ between 2002 and 2008.
- ◆ European legislation contains limit values which permit PM₁₀ to exceed 50 $\mu\text{g}/\text{m}^3$ on not more than 35 days per annum from 2005. This limit was broken in Dublin in 1998 and 1999 but has not been broken since then anywhere in Ireland.

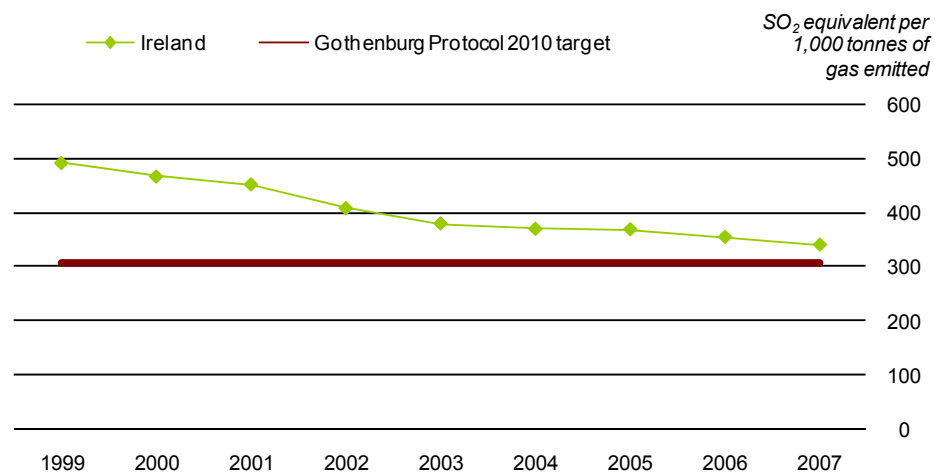
10.7 Ireland: Acid rain precursor emissions, 1999–2007

SO₂ equivalent per 1,000 tonnes of gas emitted

| Year | Sulphur dioxide (SO ₂) | Nitrogen oxides (NO _x) | Ammonia (NH ₃) | Total |
|------|------------------------------------|------------------------------------|----------------------------|--------------|
| 1999 | 159.5 | 97.5 | 236.3 | 493.4 |
| 2000 | 140.5 | 98.8 | 228.7 | 468.0 |
| 2001 | 135.5 | 100.1 | 217.6 | 453.2 |
| 2002 | 102.2 | 93.2 | 213.1 | 408.5 |
| 2003 | 79.4 | 89.9 | 210.7 | 380.0 |
| 2004 | 71.7 | 89.6 | 208.4 | 369.8 |
| 2005 | 70.4 | 90.9 | 207.7 | 369.0 |
| 2006 | 60.3 | 87.5 | 206.8 | 354.7 |
| 2007 | 54.7 | 86.7 | 198.7 | 340.1 |

Source: Environmental Protection Agency, CSO

Ireland: Acid rain precursor emissions, 1999-2007



Source: Environmental Protection Agency, CSO

- ◆ The level of acid rain precursor emissions in Ireland has been decreasing since 1999, from 493.4 SO₂ equivalent per 1,000 tonnes of gas emitted to 340.1 in 2007. The decrease is mainly due to lower levels of sulphur dioxide emissions.
- ◆ The Gothenburg Protocol 2010 target emissions level is 306. In 1999, Ireland's emissions were 61% above this target, but by 2007 the levels had reduced to 11% above the target.

10.8 Ireland: Total municipal waste generated, recovered and landfilled 2003-2008

| Year | 000 tonnes | | | % of waste generated | |
|------|-----------------|-----------------|------------------|----------------------|------------------|
| | Waste generated | Waste recovered | Waste landfilled | Waste re-covered | Waste landfilled |
| 2003 | 3,001.0 | 726.8 | 1,832.6 | 24.2 | 61.1 |
| 2004 | 3,034.6 | 919.0 | 1,818.5 | 30.3 | 59.9 |
| 2005 | 3,050.1 | 964.4 | 1,824.1 | 31.6 | 59.8 |
| 2006 | 3,384.6 | 1,119.7 | 1,980.6 | 33.1 | 58.5 |
| 2007 | 3,397.7 | 1,159.8 | 2,014.8 | 34.1 | 59.3 |
| 2008 | 3,224.3 | 1,165.1 | 1,938.7 | 36.1 | 60.1 |

Source: Environmental Protection Agency, National Waste Report series

- ◆ There was an increase of 7.4% in the quantity of waste generated in Ireland between 2003 and 2008. The quantity of waste recovered increased by over 60% over the same time period, while the quantity of waste landfilled increased by nearly 6%.
- ◆ Waste recovered as a percentage of waste generated rose from 24.2% to 36.1% between 2003 and 2008, while waste landfilled as a percentage of waste generated was close to 60% over the same time period.
- ◆ The proportion of municipal waste landfilled in Ireland in 2008 was 60.1%, which was considerably above the EU 27 average of 39.5%. Germany had the lowest proportion of landfilled waste at 0.5% in 2008.

10.9 EU: Municipal waste collected and landfilled, 2008⁵⁰

| Country | kg per person | | % of municipal waste |
|----------------|---------------|------------|----------------------|
| | Generated | Landfilled | % Landfilled |
| Germany | 581 | 3 | 0.5 |
| Netherlands | 622 | 7 | 1.1 |
| Sweden | 515 | 15 | 2.9 |
| Austria | 601 | 19 | 3.2 |
| Denmark | 802 | 35 | 4.4 |
| Belgium | 493 | 25 | 5.1 |
| Luxembourg | 701 | 131 | 18.7 |
| France | 543 | 193 | 35.5 |
| EU 27 | 524 | 207 | 39.5 |
| Estonia | 515 | 248 | 48.2 |
| Italy | 561 | 276 | 49.2 |
| Finland | 522 | 265 | 50.8 |
| United Kingdom | 565 | 308 | 54.5 |
| Spain | 575 | 327 | 56.9 |
| Ireland | 733 | 440 | 60.1 |
| Portugal | 477 | 307 | 64.4 |
| Czech Republic | 306 | 218 | 71.2 |
| Poland | 320 | 228 | 71.3 |
| Hungary | 453 | 333 | 73.5 |
| Slovenia | 459 | 341 | 74.3 |
| Romania | 382 | 287 | 75.1 |
| Slovakia | 332 | 254 | 76.5 |
| Greece | 453 | 347 | 76.6 |
| Cyprus | 770 | 672 | 87.3 |
| Lithuania | 407 | 367 | 90.2 |
| Malta | 696 | 648 | 93.1 |
| Latvia | 331 | 310 | 93.7 |
| Bulgaria | 467 | 440 | 94.2 |
| Switzerland | 741 | 0 | 0.0 |
| Norway | 490 | 88 | 18.0 |
| Iceland | 555 | 380 | 68.5 |
| Turkey | 428 | 356 | 83.2 |

Source: Eurostat

⁵⁰ Data between countries are in general not comparable as the definition of municipal waste generation differs from country to country.

10.10 Ireland: Private cars under current licence, 1999–2008

| 000s | | |
|------|------------------------------------|--|
| Year | Private cars under current licence | Private cars per 1,000 population aged 15 and over |
| 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 | 494 |
| 2005 | 1,662.2 | 507 |
| 2006 | 1,778.9 | 528 |
| 2007 | 1,882.9 | 545 |
| 2008 | 1,924.3 | 548 |

Source: Department of Transport

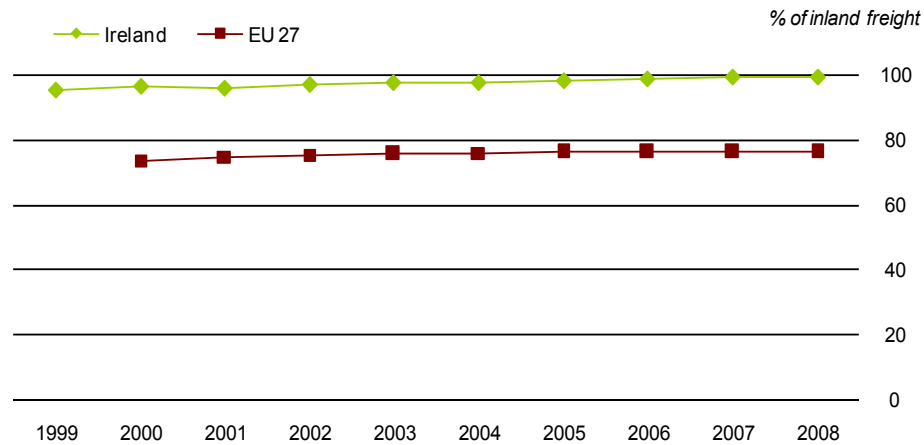
- ◆ The number of private cars per 1,000 population aged 15 and over in Ireland has risen from 436 in 1999 to 548 in 2008.
- ◆ In 2008, the number of cars per 1,000 population aged 15 and over varied from 828 in Luxembourg to 221 in Romania. Of the 26 EU countries for which data was available in 2008, Ireland had the 11th lowest number of passenger cars per 1,000 population aged 15 and over.

10.11 EU: Passenger cars per 1,000 population aged 15 and over, 2004–2008

| Country | cars per 1,000 population aged 15 and over | | | | |
|----------------|--|------------|------------|------------|------------|
| | 2004 | 2005 | 2006 | 2007 | 2008 |
| Luxembourg | 793 | 799 | 818 | 823 | 828 |
| Italy | 683 | 690 | 699 | 702 | 704 |
| Cyprus | 574 | 587 | 596 | 643 | 681 |
| Malta | 647 | 641 | 651 | 662 | 667 |
| Finland | 546 | 562 | 576 | 587 | 613 |
| Austria | 603 | 604 | 606 | 608 | 609 |
| Slovenia | 548 | 561 | 570 | 586 | 604 |
| France | 603 | 597 | 602 | 606 | 596 |
| Lithuania | 464 | 512 | 560 | 558 | 586 |
| Germany | 640 | 643 | 651 | 657 | 581 |
| Belgium | 567 | 569 | 571 | 575 | 579 |
| Spain | 540 | 550 | 563 | 572 | 573 |
| Sweden | 558 | 559 | 561 | 563 | 560 |
| Netherlands | 528 | 533 | 542 | 552 | 560 |
| United Kingdom | 569 | 565 | 564 | 567 | 552 |
| Ireland | 494 | 507 | 528 | 545 | 548 |
| Greece | 431 | 454 | 477 | 501 | 523 |
| Poland | 379 | 388 | 419 | 454 | 499 |
| Czech Republic | 441 | 455 | 470 | 486 | 497 |
| Estonia | 415 | 433 | 485 | 458 | 483 |
| Latvia | 349 | 377 | 418 | 460 | 475 |
| Denmark | 437 | : | 458 | 467 | 470 |
| Hungary | 332 | 339 | 347 | 353 | 358 |
| Bulgaria | 364 | 380 | 265 | 313 | 358 |
| Slovakia | 270 | 292 | 297 | 317 | 340 |
| Romania | 178 | 185 | 176 | 195 | 221 |
| Switzerland | 620 | 622 | 622 | 625 | 622 |
| Norway | 539 | 548 | 558 | 570 | 573 |
| Croatia | 359 | 371 | 384 | 398 | 412 |
| Turkey | 108 | 113 | 118 | : | 131 |

Source: Eurostat

10.12 Ireland and EU: Share of road transport in total inland freight transport⁵¹, 1999–2008



Source: Eurostat

- ◆ Road transport accounted for 95.1% of total inland freight transport in Ireland in 1999. This share has gradually increased to reach 99.4% in 2008, compared with an EU 27 average of 76.4%.
- ◆ Ireland's use of road in inland freight transport in 2008 was among the highest in the EU with only Cyprus and Malta having higher proportions of freight transported by road. Neither of these islands have a rail network.

⁵¹ Road, rail and inland waterways, measured in tonne-km.

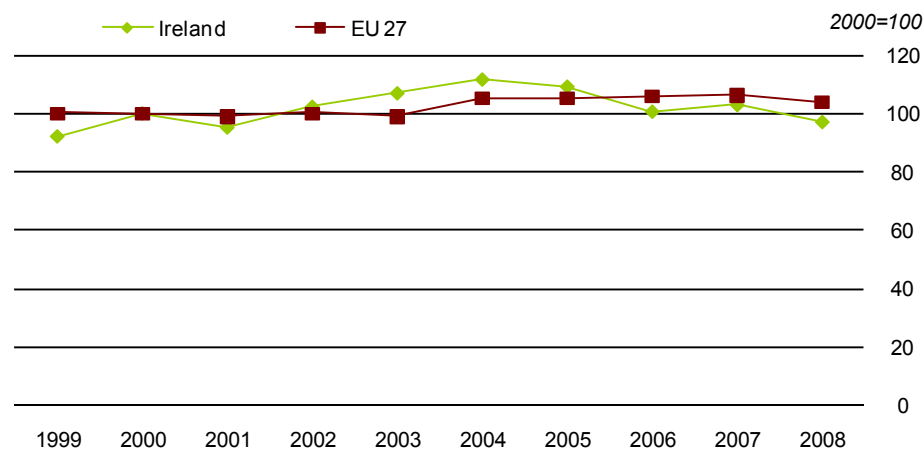
10.13 EU: Share of road transport in total inland freight transport, 2004–2008⁵²

| Country | % of inland freight | | | | |
|----------------|---------------------|-------------|-------------|-------------|-------------|
| | 2004 | 2005 | 2006 | 2007 | 2008 |
| Latvia | 28.4 | 29.8 | 39.0 | 41.9 | 38.7 |
| Lithuania | 51.3 | 56.1 | 58.4 | 58.5 | 41.9 |
| Estonia | 32.7 | 35.4 | 34.7 | 43.2 | 55.3 |
| Austria | 65.6 | 64.1 | 63.2 | 60.9 | 58.6 |
| Netherlands | 64.7 | 63.6 | 63.1 | 59.4 | 59.9 |
| Sweden | 63.9 | 64.0 | 64.2 | 63.6 | 64.7 |
| Germany | 66.1 | 66.0 | 65.9 | 65.7 | 65.5 |
| Bulgaria | 66.9 | 70.8 | 69.0 | 70.0 | 66.9 |
| Belgium | 74.9 | 72.4 | 71.1 | 69.7 | 69.1 |
| Romania | 60.8 | 67.3 | 70.5 | 71.3 | 70.2 |
| Finland | 76.0 | 76.5 | 72.8 | 73.9 | 73.3 |
| Slovakia | 65.4 | 70.3 | 68.8 | 71.8 | 73.8 |
| Hungary | 65.9 | 69.2 | 71.6 | 74.5 | 74.7 |
| Poland | 66.1 | 69.0 | 70.4 | 73.5 | 75.9 |
| EU 27 | 76.0 | 76.4 | 76.2 | 76.2 | 76.4 |
| Czech Republic | 75.2 | 74.4 | 76.1 | 74.7 | 76.7 |
| France | 79.9 | 80.5 | 80.9 | 80.9 | 80.6 |
| Slovenia | 74.1 | 77.3 | 78.2 | 79.2 | 82.2 |
| Italy | 89.8 | 90.3 | 88.5 | 87.6 | 88.3 |
| United Kingdom | 88.1 | 88.2 | 86.2 | 86.6 | 88.5 |
| Denmark | 90.9 | 92.2 | 91.8 | 92.2 | 91.3 |
| Portugal | 94.7 | 94.6 | 94.9 | 94.7 | 93.9 |
| Luxembourg | 91.2 | 92.3 | 91.5 | 93.8 | 94.2 |
| Spain | 94.9 | 95.2 | 95.4 | 95.9 | 95.9 |
| Greece | : | 97.5 | 98.1 | 97.1 | 97.3 |
| Ireland | 97.7 | 98.3 | 98.8 | 99.3 | 99.4 |
| Cyprus | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Malta | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Croatia | 76.7 | 76.0 | 74.8 | 74.0 | 72.7 |
| Norway | 86.0 | 85.2 | 85.3 | 84.7 | 85.0 |
| Iceland | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Macedonia | 92.6 | 91.3 | 93.1 | 88.5 | : |
| Turkey | 94.4 | 94.8 | 94.9 | 94.9 | : |

Source: Eurostat

⁵² Break in series in 2004 for Austria, Poland, Portugal and Romania and in 2008 in Croatia.

10.14 Ireland and EU: Index of inland freight transport volume⁵³, 1999–2008



Source: Eurostat

- ◆ The volume decrease of freight tonne-kilometres, relative to the volume change in GDP, was 97 in Ireland over the 2000–2008 period. The EU 27 figure increased to 104 over the same period. This indicates that GDP growth in Ireland over the period was accompanied by a lower increase in freight activity on roads when compared with the average for EU 27 countries.
- ◆ Fifteen EU 27 countries had a lower index in 2008 than in 2000.

10.15 EU: Index of inland freight transport volume⁵³ 2004–2008

| Country | 2000=100 | | | | |
|----------------|--------------|--------------|--------------|--------------|--------------|
| | 2004 | 2005 | 2006 | 2007 | 2008 |
| Estonia | 90.1 | 87.0 | 76.7 | 66.5 | 61.8 |
| Belgium | 91.3 | 84.9 | 82.5 | 80.0 | 72.8 |
| Denmark | 93.9 | 91.1 | 80.7 | 77.9 | 73.8 |
| Finland | 91.1 | 86.7 | 81.4 | 76.7 | 76.4 |
| Cyprus | 80.6 | 96.6 | 77.6 | 76.1 | 80.0 |
| France | 92.7 | 87.2 | 87.6 | 88.7 | 83.4 |
| Czech Republic | 98.6 | 88.5 | 94.0 | 86.2 | 86.6 |
| United Kingdom | 93.6 | 91.3 | 93.3 | 90.2 | 87.0 |
| Netherlands | 105.6 | 98.7 | 95.2 | 91.4 | 89.1 |
| Slovakia | 88.2 | 93.7 | 86.9 | 92.0 | 90.9 |
| Austria | 104.3 | 98.5 | 102.2 | 97.7 | 91.4 |
| Italy | 101.7 | 108.2 | 95.5 | 91.2 | 92.0 |
| Luxembourg | 107.1 | 92.2 | 88.2 | 87.7 | 96.1 |
| Ireland | 111.8 | 109.3 | 100.6 | 102.9 | 97.0 |
| Sweden | 94.4 | 95.3 | 94.4 | 94.4 | 97.1 |
| Latvia | 107.2 | 105.0 | 91.6 | 95.2 | 101.0 |
| EU 27 | 105.4 | 105.4 | 106.0 | 106.5 | 104.0 |
| Germany | 104.5 | 106.1 | 109.7 | 111.7 | 110.0 |
| Lithuania | 106.2 | 116.8 | 118.5 | 120.5 | 119.0 |
| Bulgaria | 119.7 | 128.0 | 118.3 | 116.6 | 120.7 |
| Poland | 108.2 | 108.9 | 115.2 | 121.6 | 122.5 |
| Spain | 128.1 | 130.1 | 129.4 | 133.1 | 123.9 |
| Hungary | 93.6 | 105.1 | 118.4 | 132.4 | 131.1 |
| Portugal | 143.5 | 148.6 | 153.8 | 155.9 | 133.0 |
| Romania | 145.1 | 174.2 | 171.4 | 165.6 | 148.5 |
| Slovenia | 114.5 | 128.7 | 132.0 | 138.4 | 152.5 |
| Norway | 103.1 | 105.9 | 109.9 | 107.6 | 111.9 |
| Iceland | 109.6 | 113.1 | 119.2 | : | : |
| Macedonia | 139.0 | 141.5 | 198.5 | 141.2 | : |
| Turkey | 84.2 | 82.2 | 81.7 | 79.8 | : |

Source: Eurostat

⁵³ 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.

Appendices

Appendix 1 Definitions and notes

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 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 1 January 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 to 1.6)

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 (1.7 to 1.10)

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 (1.11 and 1.12)

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 (1.13 and 1.14)

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 ac-

count, 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 (1.15 and 1.16)

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 (1.17 and 1.18)

The European Central Bank publishes a set of **Harmonised Competitive Indicators** (HCIs) based on consumer prices for all euro-area countries. The new indices were first published in the February 2007 ECB Monthly Bulletin. The rationale for publishing HCIs based on consumer prices is to provide a comparable measure of price competitiveness across euro-area countries. For a detailed description of the methodology of the nominal HCI, real HCI (deflated by consumer prices) and real HCI (deflated by producer prices) see the article entitled “Measuring Ireland’s Price and Labour Cost Competitiveness” in the Central Bank of Ireland’s Quarterly Bulletin No 1 of 2010.

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.

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.

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.

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.

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). 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.

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.

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

Each of the following is regarded as one private household:

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

3 Employment and unemployment

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

Persons in **employment** are all persons:

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

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

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

The **labour force** comprises persons in employment plus persons unemployed.

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

Employment rate (3.1 and 3.2)

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

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

Labour productivity (3.3 and 3.4)

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

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

Unemployment rate (3.5 to 3.8)

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

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

Jobless households (3.9 and 3.10)

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

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

Older workers (3.11 and 3.12)

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

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

The small sample sizes in higher ages in some countries makes it necessary to artificially smooth the decline of activity rates linearly from age 65 to age 70 so that 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 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. 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.

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)

The unadjusted **gender pay gap** is published by Eurostat and 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 EU Structure of Earnings Survey (SES) which is carried out with a four-yearly periodicity. In Ireland the SES is known as the National Employment Survey (NES). 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 subsequent 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 in NACE rev.2 aggregate B to S (excluding O). This covers all economic sectors with the exception of Agriculture, forestry and fishing, Public administration and defence, Activities of households as employers and Activities of extraterritorial organisations and bodies.

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 2008. For comparison purposes, the all items CPI index rescaled to base mid-December 2001 is also shown in the table below:

| Year | Price index bases: | |
|------|-----------------------------------|--------------------------|
| | 2008=100 | Mid-December 2001=100 |
| | Government current expenditure | All items CPI index |
| 1999 | 60.9 | 88.7 |
| 2000 | 64.7 | 93.6 |
| 2001 | 69.2 | 98.2 |
| 2002 | 74.2 | 102.7 |
| 2003 | 78.8 | 106.3 |
| 2004 | 84.1 | 108.6 |
| 2005 | 87.5 | 111.3 |
| 2006 | 91.9 | 115.7 |
| 2007 | 95.6 | 121.3 |
| 2008 | 100.0 | 126.3 |

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.

Educational institutions are defined as entities that provide instructional services to individuals or education-related services to individuals and other educational institutions. Second level includes further education (e.g., post-Leaving Certificate programmes). The data for third level student numbers is expressed in full-time equivalents. Incomplete data was available in 2006/2007 for part-time third level students so the average of 2005/2006 and 2007/2008 is used as an estimate.

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. Data per pupil/student is based on full-time equivalents.

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.

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 is centre or school based, 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. It is marked by entry into the nationally designated primary institutions or programmes.

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 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.

The following qualifications regarding the data in Table 5.4 should be borne in mind:

| | |
|---------|---|
| Belgium | Data exclude the German Community. ISCED 4 included in ISCED 3. |
| Denmark | ISCED 2 is included in ISCED 1. |
| Estonia | ISCED 4 is included in ISCED 3, ISCED 2 covers students in general programs only. |

| | |
|----------------|--|
| Finland | ISCED 3 includes ISCED 4. |
| Iceland | ISCED 4 is partly included in ISCED 3. ISCED 2 is included in ISCED 1. |
| Ireland | ISCED 3 includes ISCED 2 and 4. |
| Lithuania | ISCED 3 includes vocational programmes only; general programmes are included in ISCED 2. |
| Luxembourg | Public sector only. ISCED 2 is included in ISCED 3. |
| Macedonia | Teachers in ISCED 4 included in ISCED 3. |
| Netherlands | ISCED 1 includes ISCED 0. ISCED 3 includes ISCED 2 and 4. |
| Norway | Public sector only. ISCED 3 includes ISCED 4. |
| United Kingdom | ISCED 3 includes ISCED 4. |

Third level education (5.6 and 5.7)

Third level education is defined for these tables as ISCED 97 levels 5-6.

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, the standard deviation is 100 so around two-thirds of students achieve between 400 and 600 points. The scales were established in the year in which their respective domain was the major domain, since in that year the framework for the domain was fully developed and the domain was comprehensively assessed.

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. This indicator is based on annual averages of quarterly data.

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). 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.

From November 2009 the Eurostat indicator on early school leavers is based on annual averages of quarterly data instead of one unique reference quarter in spring.

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 2008 (see series under Indicator 5.1 definitions). See notes on Section 1 for details of PPS.

There is a break in the series in Table 6.1 in 2005 as the establishment of the HSE with its own Vote gave rise to changes in the reporting of health expenditure in the Revised Estimates for Public Services from 2005 onwards. Figures from 2005 are therefore not directly comparable with data from earlier years. Income that was previously collected and retained by the then Health Boards and did not form part of the Department of Health and Children's Vote and which accrues direct to the HSE is now part of the Appropriations-in-Aid and is included in the figures.

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 7.4)

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). Data on population are on a de facto basis prior to 2006 and on de jure basis for 2006 and subsequent years. The difference between the two concepts is very small.

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.

Migration (7.5 to 7.6)

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

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

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

EU15 excluding UK & Ireland refers to those EU member states before enlargement on 1 May 2004; namely Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Luxembourg, Netherlands, Spain, Sweden and Portugal.

EU 12 refers to 10 accession countries who joined the EU on 1 May 2004 (Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia) and the two countries who joined on 1 January 2007 (Bulgaria and Romania).

For the years up to 2004 inclusive the data relating to the EU 12 countries are included with the Rest of the World.

Age of population (7.8 and 7.9)

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 (7.10 and 7.11).

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 (7.12)

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 (7.13)

See the household Internet access indicator in Section 2 for a definition of private households.

Divorce rate (7.14)

The divorce rate is the number of divorces in a given year per 1,000 population.

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. The house completions data series is 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. The 2005 and 2006 completion figures have been amended for Table 8.1 accordingly.

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)

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 data in Table 8.3 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).

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 and cover both floating (variable) rates and rates fixed for up to one year.

The Eurozone in Table 8.4 refers to those countries which are members of the Euro in the particular year. 11 countries have been members since 1 January 1999: Austria, Belgium, Finland, France, Germany, Ireland,

Italy, Luxembourg, the Netherlands, Portugal and Spain. Greece joined on 1 January 2001, Slovenia on 1 January 2007, Cyprus and Malta on 1 January 2008 and Slovakia on 1 January 2009.

9 Crime

Recorded crime and detection rates (9.1 to 9.5)

The data on recorded crime and detection rates is supplied by the Crime Unit in the CSO and features data recorded on the Garda PULSE (Police Using Leading Systems Effectively) and the FCPS (Fixed Charge Penalty System) systems which refer only to crime incidents known to An Garda Síochána and recorded as such. The classification used is the Irish Crime Classification System (ICCS), full details of which are available via the CSO homepage at www.cso.ie.

Murders/manslaughters (9.6)

Murder and manslaughter offences are listed under Homicide Offences in the Irish Crime Classification system. Murder refers to intentional killing while manslaughter refers to unintentional killing.

10 Environment

Greenhouse gases (10.1 and 10.2)

This indicator shows trends in anthropogenic emissions of the **greenhouse gases**: carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄) and three halocarbons, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆), weighted by their global warming potentials. The figures are given in CO₂ equivalents.

Under the **Kyoto Protocol**, industrialised countries have a legally binding commitment to reduce their collective greenhouse 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 CO₂ equivalent.

Global warming potentials can be used to convert the emissions of individual gases into CO₂ 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:

| <i>CO₂ equivalents per tonne of gas emitted</i> | |
|--|--|
| Emitted gas | Global warming potential over 100 years |
| Carbon dioxide (CO ₂) | 1 |
| Methane (CH ₄) | 21 |
| Nitrous oxide (N ₂ O) | 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 2000 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 (PM₁₀) and, to a lesser extent, ozone. Information on measurements of PM₁₀ collected by the Environmental Protection Agency are presented in this report.

The main sources of PM₁₀ 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.

PM₁₀ 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 cardiopulmonary disorders. PM₁₀ in the atmosphere can result from direct emissions (primary PM₁₀) or from emissions of gaseous precursors (oxides of nitrogen, sulphur dioxide and ammonia) which are transformed by chemical reaction in the atmosphere (secondary PM₁₀).

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

- ◆ The limit value for PM₁₀ is 50 µg /m³ (24 h average) not to be exceeded on more than 35 days per calendar year, from 2005.

The **PM₁₀ 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 PM₁₀ is 50 µg/m³ (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** (SO₂).

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 (NH₃) emissions arise primarily from animal manure and nitrogen based fertilisers.

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

| <i>SO₂ equivalents per tonne of gas emitted</i> | |
|--|-----------------------------|
| 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 means household waste as well as commercial and other waste that, because of its nature or composition, is similar to household waste. Municipal waste consists of three main elements – household, commercial (including non-process industrial waste), and street cleansing waste (street sweepings, street bins and municipal arks and cemeteries maintenance waste, litter campaign material and fly tipped material). Municipal waste is a part of the overall amount of waste generated (e.g. industrial process waste is not municipal waste).

Recovery of waste means any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy. Recovery operations include material recovery (i.e., recycling), energy recovery (i.e., use as a fuel) and biological recovery (e.g., composting).

Landfill is defined as deposit on, in or under land, or specially engineered landfill, including placement into lined discrete cells which are capped and isolated from one another and the environment, or permanent storage, including emplacement of containers in a mine. 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 in Table 10.9 is measured in kg per person per year using population figures on 1 January 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. The number of private cars in table 10.10 are as at December 31 of the relevant year.

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.

| Domain and sub-domain | Indicator | Data source |
|---|---|--|
| International trade | 1.15 EU: Exports of goods and services | Eurostat Statistics: Economy and Finance\Balance of payments – International transactions\Balance of payments statistics and international investment positions\Balance of payments by country |
| | 1.16 EU: Imports of goods and services | Economy and Finance\National accounts (including GDP)\Annual national accounts\GDP and main aggregates\GDP and main components - current prices Eurostat Statistics: Economy and Finance\Balance of payments – International transactions\Balance of payments statistics and international investment positions\Balance of payments by country |
| Exchange rates | 1.17 International: Bilateral euro exchange rates | Economy and Finance\National accounts (including GDP)\Annual national accounts\GDP and main aggregates\GDP and main components - current prices |
| | 1.18 Ireland: Harmonised competitiveness indicator | European Central Bank, Monthly Bulletin, Table 8.2 Bilateral exchange rates CSO, National Accounts |
| Harmonised Index of Consumer Prices | 1.19 Ireland and EU: Harmonised Index of Consumer Prices | Central Bank, Financial Services Authority of Ireland 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 | 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 | Eurostat Statistics: Europe 2020 indicators\Structural indicators\Economic reform |
| | 1.22 EU: Comparative price levels of final consumption by private households including indirect taxes | Eurostat Statistics: Europe 2020 indicators\Structural indicators\Economic reform |
| Innovation and technology | | |
| Science and technology graduates | 2.1 Ireland: Mathematics, science and technology graduates | Eurostat Statistics: Population and social conditions\Education and training\Education\Education indicators non-finance\Tertiary education graduates |
| | 2.2 EU: Mathematics, science and technology PhDs awarded | CSO, Annual population estimates 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 | Eurostat Statistics: Europe 2020 indicators\Structural indicators\Innovation and research |
| | 2.4 EU: Gross domestic expenditure on R&D | Eurostat Statistics: Europe 2020 indicators\Structural indicators\Innovation and research |
| Patent applications | 2.5 Ireland and EU: European Patent Office applications | Eurostat Statistics: Europe 2020 indicators\Structural indicators\Innovation and research |
| | 2.6 EU: European Patent Office applications | Eurostat Statistics: Europe 2020 indicators\Structural indicators\Innovation and research |
| Household Internet access | 2.7 Ireland: Private households with a computer connected to the Internet | CSO, Information Society and Telecommunications |
| | 2.8 EU: Private households with Internet access | Eurostat Statistics: Science and technology\Information society statistics\Policy indicators\Citizens access to and use of the Internet |

| Domain and sub-domain | Indicator | Data source |
|--|--|--|
| Employment and unemployment | | |
| Employment rate | 3.1 Ireland: Employment rates | CSO, QNHS |
| | 3.2 EU: Employment rates by sex | Eurostat Statistics: Europe 2020 indicators\Structural indicators\Employment CSO, QNHS |
| Labour productivity | 3.3 Ireland: GDP in Purchasing Power Standards per hour worked and per person employed | Eurostat Statistics: Europe 2020 indicators\Structural indicators\General economic background |
| | 3.4 EU: GDP in Purchasing Power Standards per person employed | Eurostat Statistics: Europe 2020 indicators\Structural indicators\General economic background |
| Unemployment rate | 3.5 Ireland and EU: Unemployment rates | Eurostat Statistics: Europe 2020 indicators\Structural indicators\Employment |
| | 3.6 EU: Unemployment rates by sex | Eurostat Statistics: Europe 2020 indicators\Structural indicators\Employment |
| Jobless households | 3.7 Ireland and EU: Long-term unemployment rates | Eurostat Statistics: Europe 2020 indicators\Structural indicators\Social cohesion |
| | 3.8 EU: Long-term unemployment rates by sex | Eurostat Statistics: Europe 2020 indicators\Structural indicators\Social cohesion |
| Older workers | 3.9 Ireland: Population aged 18-59 living in jobless households | Eurostat Statistics: Europe 2020 indicators\Structural indicators\Social cohesion |
| | 3.10 EU: Population aged 18-59 living in jobless households | Eurostat Statistics: Europe 2020 indicators\Structural indicators\Social cohesion |
| Social cohesion | 3.11 EU: Employment rate of persons aged 55-64 by sex | Eurostat Statistics: Europe 2020 indicators\Structural indicators\Employment |
| | 3.12 EU: Average exit age from the labour force by sex | Eurostat Statistics: Europe 2020 indicators\Structural indicators\Employment |
| Social protection expenditure | | |
| Social protection expenditure | 4.1 Ireland and EU: Social protection expenditure | 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 | Eurostat Statistics: Population and social conditions\Living conditions and social protection\Social protection\Social protection expenditure\Expenditure-main results |
| Risk of poverty | 4.3 EU: Social protection expenditure by type | Eurostat Statistics: Population and social conditions\Living conditions and social protection\Social protection\Social protection expenditure\Expenditure-main results |
| | 4.4 EU: At risk of poverty rates | Eurostat Statistics: Population and social conditions\Living conditions and social protection\Social protection\Social protection expenditure\Expenditure-main results |
| Gender pay gap | 4.5 Ireland: At risk of poverty rates by age and sex | Population and social conditions\Living conditions and social protection\Income and living conditions\Monetary (income) poverty\Low income |
| | 4.6 Ireland: Persons in consistent poverty by age and sex | CSO, EU Survey on Income and Living Conditions |
| Voter turnout | 4.7 Ireland: Persons in consistent poverty by principal economic status | CSO, EU Survey on Income and Living Conditions |
| | 4.8 EU: Gender pay gap | Eurostat Statistics: Europe 2020 indicators\Structural indicators\Employment |
| Official development assistance | 4.9 Ireland: Numbers voting in Dáil elections | Department of the Environment, Heritage and Local Government, Franchise Section |
| | 4.10 EU: Votes recorded at national parliamentary elections | International Institute 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 | Irish Aid Annual Report, Department of Foreign Affairs, Annex 1, Ireland's Official Development Assistance |
| | 4.12 EU: Net official development assistance | OECD, Development Co-operation Report, 2007, Statistical Annex, Table 4 |

| Domain and sub-domain | Indicator | Data source |
|--------------------------------|-----------|--|
| Education | | |
| Education expenditure | 5.1 | Ireland: Real non-capital public expenditure on education |
| | 5.2 | Ireland: Student numbers by level |
| | 5.3 | EU: Public expenditure on education |
| Pupil-teacher ratio | 5.4 | EU: Ratio of students to teachers |
| | 5.5 | EU: Average class size at ISCED levels 1 and 2 |
| Third level education | 5.6 | Ireland: Persons aged 25-34 with third-level education |
| | 5.7 | EU: Persons aged 25-34 with third-level education by sex |
| Literacy | 5.8 | Ireland: Student performance on the combined reading, mathematical and scientific literacy scales by sex |
| | 5.9 | EU: Student performance on the combined reading, mathematical and scientific literacy scales |
| Early school leavers | 5.10 | Ireland: Early school leavers by labour force status and sex |
| | 5.11 | Ireland: Proportion of the population aged 20-64 with at least upper secondary education |
| | 5.12 | EU: Early school leavers |
| Health | | |
| Health care expenditure | 6.1 | Ireland: Non-capital public expenditure on health care |
| | 6.2 | EU: Total expenditure on health as percentage of GDP |
| Life expectancy | 6.3 | Ireland: Life expectancy at birth and at age 65 by sex |
| | 6.4 | EU: Life expectancy at birth by sex |
| Population | | |
| Population distribution | 7.1 | Ireland: Population distribution by age group |

| Domain and sub-domain | Indicator | Data source |
|-----------------------------|-----------|--|
| | 7.2 | Ireland: Household composition |
| | 7.3 | EU: Population |
| | 7.4 | EU: Population change |
| Migration | 7.5 | Ireland: Migration and natural increase |
| | 7.6 | Ireland: Immigration by country of origin |
| | 7.7 | Ireland and EU: Rate of natural increase of population |
| Age of population | 7.8 | Ireland: Age dependency ratio |
| | 7.9 | EU: Young and old as proportion of population aged 15-64 |
| Fertility | 7.10 | Ireland and EU: Total fertility rate |
| | 7.11 | EU: Total fertility rate |
| Lone parent families | 7.12 | Ireland: Lone parent families with children aged under 20 by sex of parent |
| Living alone | 7.13 | Ireland: Persons aged 65 and over living alone by sex |
| Divorce | 7.14 | EU Divorce rate |
| Housing | | |
| Dwelling completions | 8.1 | Ireland: Dwelling unit completions |
| Mortgages | 8.2 | Ireland: Nature of occupancy of private households |
| | 8.3 | Ireland: Housing loans paid |
| | 8.4 | Eurozone: Interest rates for household mortgages (new business) |
| Crime | | |
| Recorded crimes | 9.1 | Ireland: Recorded crimes by type of offence |

| Domain and sub-domain | Indicator | Data source |
|------------------------------------|-----------|--|
| Detection rate | 9.2 | Ireland: Detection rates |
| Recorded incidents | 9.3 | Ireland: Recorded incidents of driving /in charge of a vehicle while over legal alcohol limit per 100,000 population |
| | 9.4 | Ireland: Recorded incidents of burglary per 100,000 population |
| | 9.5 | Ireland: Recorded incidents of controlled drug offences per 100,000 population |
| Murder/manslaughter | 9.6 | Ireland: Recorded victims of murder/manslaughter |
| Environment | | |
| Greenhouse gases | 10.1 | Ireland: Total net greenhouse gas emissions |
| | 10.2 | EU: Net greenhouse gas emissions and Kyoto 2008-2012 target |
| Energy intensity of economy | 10.3 | Ireland: Gross inland consumption of energy divided by GDP |
| | 10.4 | EU: Gross inland consumption of energy divided by GDP |
| River water quality | 10.5 | Ireland: River water quality |
| Urban air quality | 10.6 | Ireland: Particulate matter in urban areas |
| Acid rain precursors | 10.7 | Ireland: Acid rain precursor emissions |
| Waste management | 10.8 | Ireland: Total waste collected and percentage landfilled by type |
| | 10.9 | EU: Municipal waste collected and landfilled |
| Transport | 10.10 | Ireland: Private cars under current licence |
| | 10.11 | EU: Passenger cars per 1,000 population aged 15 and over |
| | 10.12 | Ireland and EU: Share of road transport in total inland freight transport |
| | 10.13 | EU: Share of road transport in total inland freight transport |
| | 10.14 | Ireland and EU: Index of inland freight transport volume |
| | 10.15 | EU: Index of inland freight transport volume |