IRELAND'S COMPETITIVENESS PERFORMANCE 2013

Forfás

INTRODUCTION

In 2012 the Irish economy grew for the second consecutive year, with preliminary estimates indicating a 0.9 per cent increase in GDP and a 3.4 per cent increase in GNP[1], despite a difficult trading environment for Irish exporters. Even though it has declined since 2006, Ireland's GDP per capita remains well above the euro area average (Figure 1). Notwithstanding recent growth and the return of a greater degree of economic stability, Ireland's road to recovery remains challenging. It is essential that we continue to check economic vital signs and monitor our competitiveness to ensure weaknesses are identified and competitiveness challenges are addressed. Using a range of indicators to build an accurate and up to date profile of performance, this report outlines the results of Ireland's competitiveness health check.

Competitiveness encompasses all those factors which impact on the ability of firms in Ireland to compete in international markets in a way which provides our people with the opportunity to improve their quality of life.

This paper begins by outlining the international context, looking particularly at the economic outlook for Ireland's key trading partners before assessing recent export performance. The review of cost competitiveness includes analysis of general cost trends as well as some detail regarding labour and non-pay costs. This is followed by a summary of Ireland's recent productivity trends relative to our main competitors. The determinants of productivity - human capital, investment and physical infrastructure, and the business environment - are then each discussed in turn. The review of Ireland's competitiveness performance concludes with an overview of sustainability and quality of life.

The indicators that are used to inform the analysis and referenced throughout the report are illustrated in chart format in the Competitiveness Indicators section.

1 CSO, Quarterly National Accounts, Quarter 2 2012 and Year 2012 (Preliminary), 2013

METHODOLOGY

This Forfás report uses internationally comparable metrics, primarily sourced from international organisations such as the OECD, the EU, the UN, IMF and the WTO. Indicators from specialist international competitiveness bodies (e.g. from the World Bank's Doing Business report, the World Economic Forum's Global Competitiveness Report and IMD World Competitiveness Yearbook) are also used. Where greater depth is required, national sources such as the Central Bank, the CSO, and the ESRI are included in the analysis.

Subject to data availability, Ireland's performance is benchmarked against 18 other countries. Countries have been chosen to provide a mix of euro area members (Finland, France, Germany, Italy, the Netherlands and Spain), other non-euro area European countries (Denmark, Sweden, Switzerland and the UK), and two newer EU member states (Hungary and Poland). Six non-European countries which are global leaders or are of a similar size or pace of development to Ireland are also included. These countries are China (limited data availability), Japan, South Korea, New Zealand, Singapore, and the US. This allows for a detailed comparison between Ireland and many of its closest trading partners and competitors. Ireland is also compared to a relevant peer group average – either the OECD or the euro area[2].

Benchmarking competitiveness is useful but it does have limitations. Firstly, due to the nature of the data, there is often an unavoidable time lag which affects the timeliness of some indicators. It is also challenging to capture complex concepts in a limited number of charts. It should also be noted that competition between countries is not a zero-sum game; economic advances by other countries can, in aggregate terms, lead to improvements in Irish living standards. It is also not realistic for any country to seek to outperform other countries on all measures. Choices must be made.

2 Where the sample is incomplete for the comparator group due to data availability, the countries omitted are detailed in the footnotes. OECD rankings and averages are based on a maximum of 32 countries. The OECD-32 countries are as follows: Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, UK and the US. Turkey and Mexico are not included.

INTERNATIONAL CONTEXT

Given Ireland's reliance on exports as the primary driver of economic growth, our future economic prospects, depend to a large degree on the time it takes for our trading partners to recuperate from the economic crisis. A recent IMF working paper[3] highlighted Ireland's exposure to global developments and found that demand from trading partners is an important driver of exports and is also the single most important driver of Ireland's GDP and tax revenue performance.

Global Outlook

Despite subdued forecasts at the outset, global economic growth in 2012 fell short of expectations. In November 2012, the IMF revised its projections for world output growth for the year to 3.3 per cent, a 0.7 per cent decline on their September 2011 forecast. Most advanced economies failed to achieve forecast growth levels and the euro area's relapse into recession created a significant drag on global performance[4]. The continued expansion of emerging economies, albeit at a slower pace than in 2011, remained the driving force behind world output growth in 2012. The BRICs and other developing economies will continue to provide the engine for increased levels of world output growth over the next two years.

3 IMF, Boosting Competitiveness to Grow Out of Debt – Can Ireland Find a Way Back to Its Future?, 2013

4 IMF, World Economic Outlook 2013 II, November, 2013.

UK

Overall growth in the UK, our largest trading partner, was flat but volatile during 2012 with three quarters of negative growth. The UK is particularly important for indigenously owned firms. A projected increase in unemployment for 2013, and more importantly, the on-going weakness of sterling will place Irish exporters under considerable pressure in the domestic, UK and third country markets.

US

In the US, economic growth accelerated to 3.1 per cent in the third quarter of 2012. Much of this growth was driven by federal spending which is not expected to be sustained in 2013. The US labour market and private consumption remained muted throughout 2012. Failure to resolve the "fiscal cliff" issue and the deferment of the debt ceiling debate until May 2013 have resulted in uncertainty which may depress demand during the first part of 2013 in Ireland's second largest goods export market.

Euro area

With negative growth in several member states, stagnation in France and significant deceleration in Germany, the euro area returned to recession in 2012 as fiscal tightening measures were applied across a large number of member states. Conditions within the euro area have improved recently as the perceived risks of EMU break-up have receded since their peak in summer 2012 and following the introduction of new policy initiatives, including the Outright Monetary Transactions (OMT) programme and steps towards greater fiscal integration and regulatory coordination.

In addition, a number of Member States are implementing deeper reforms to rebuild competitiveness, paving the way towards a more sustainable path of prosperity[5]. However, the European Commission believes that domestic demand will remain weak throughout 2013 as the deflationary impacts of contractions in public spending, increased taxation and general uncertainty continue to be felt. In May 2013, the Commission forecast that GDP levels would fall by -0.4 per cent in 2013[6] before returning to modest growth of 1.2 per cent in 2014.

This is the challenging international environment which Ireland finds itself operating in. Domestically, in the six years since the global economic crisis first emerged, Ireland has undertaken significant reforms designed to facilitate a return to growth and employment creation. Reform efforts to date have focused primarily on banking reform, exchequer deficit reduction and rebuilding our borrowing credentials. In line with the EU/IMF agreement, a range of targeted structural reforms have been undertaken. Further action, however, is required to maximise competitiveness and address the labour market crisis.

5 Rebuilding Europe's Competitiveness, WEF in cooperation with Roland Berger Strategy Consultants, 2013

6 European Commission, European Economic Forecast, Spring 2013

TRADE AND EXPORTS

Addressing the competitiveness weaknesses that contributed to Ireland's economic crisis is a slow and painful process. While necessary, some of the actions taken have impacted negatively upon employment, incomes and living standards. However, raising competitiveness is crucial to sustaining economic and social progress. Unfortunately, there is still some way to go if Ireland is to emerge from this crisis with a stronger, more dynamic economy that supports sustainable growth.

Following a period of unsustainably high levels of domestic consumption and property-focussed investment, net exports[7] have been driving economic activity in Ireland since 2008 (Figure 2). This is reflected in a return to a current account surplus in 2010, a trend which is forecast to continue through 2014[8].

With weak external demand forecast for the medium term, Ireland must bolster its export growth by focussing on national competitiveness. We must strive to grow our market share in the stagnant markets of our existing trading partners, and ensure that we are well placed to take advantage of the upswing in demand when it occurs. This necessitates an open, cost effective, productive economy, as well as a diversification of the products and services we produce and the markets into which we sell.

While Ireland is one of the most open countries in the EU in terms of international trade (Figure 3), our exports are concentrated in a small number of sectors and segments within their value chains which presents challenges (Figure 4). For example, the reduction in ICT manufacturing in Ireland in recent years illustrates the adverse consequences that occur when competitiveness is lost and new competitors emerge. A relatively small pool of firms is responsible for a very large proportion of Ireland's exports, with foreign-owned firms dominating Ireland's three largest exporting sectors (computer services, pharmaceuticals

7 Net exports measure the value of a country's total exports minus the value of its total imports.

8 ESRI, Quarterly Economic Commentary, Winter, 2012

and computer hardware)[9]. The food and drinks sector, which has a large concentration of Irish-owned firms, accounted for 9.4 per cent of total goods exports from Ireland in 2012. However, it should be noted that the value of goods or services exported from each sector does not correlate with the value of direct expenditure by the sector in the Irish economy. For example in 2010, amongst enterprise agency assisted companies, the food and drink sector was the sector with the highest level of direct expenditure in the economy while the chemical sector's direct expenditure in Ireland accounted for 7.9 per cent of the value of its exports (Figure 5)[10].

The majority of Irish merchandise exports in 2011 were to the EU-27, amounting to 32.8 per cent of GDP and 41 per cent of GNP. Ireland has significant trading links with non-euro area countries (particularly the UK and US) – a significant challenge given recent fluctuations in the value of the euro. Ireland has a low level of exports to emerging economies relative to the euro area average (Figure 6). It is projected that 90 per cent of world economic growth will be generated outside of Europe by 2015[11]. Given the strong economic outlook forecasted for the BRIC countries, there is significant potential for Ireland to grow its exports by targeting these markets.

Ireland's share of world markets is a key measure of our international competitiveness. In recent years, Ireland has had been successful in expanding its share of the world's services market, reaching 2.6 per cent in 2011, more than double its share at the start of the century. However, Ireland's share of the merchandise and total world markets has declined since their 2002 peak. In 2011 Ireland's market share stood at 0.7 per cent and 1 per cent of merchandise and world trade respectively (Figure 7).

9 Forfás, Annual Business Survey of Economic Impact , 2010.

10 Forfás, Annual Business Survey of Economic Impact, 2010. Direct expenditure includes total payroll costs, Irish-sourced raw materials and services purchased in Ireland.

11 Commission Staff Working Document External Sources of Growth. Progress Report on EU Trade and Investment Relationships with Key Economic Partners. July 17, 2012

In the absence of a currency devaluation policy lever to manage short term cost competitiveness pressures, the policy focus needs to be on achieving enhanced competitiveness through a combination of cost reductions in key business inputs and enhanced productivity growth.

COSTS

Costs are a headline element of national competitiveness. During the last decade, fuelled by cheap credit and high levels of consumption, Ireland's cost competitiveness was severely eroded. Restoring cost competitiveness is a prerequisite for enhancing Ireland's attractiveness as a place to do business. Improving our cost competitiveness will also be essential to delivering economic growth and employment.

While Ireland has had considerable success in reducing a range of costs since 2008, it remains a relatively high cost location. Following a brief period of deflation during 2009 and 2010, consumer prices have been rising annually in Ireland, albeit at a much lower rate than the euro area average. Since 2011, annual inflation in Ireland has averaged 1.6 per cent compared to a euro area average of 2.6 per cent, representing a competitiveness gain for Ireland. However, Ireland remains the 7th most expensive country in the euro area (Figure 8), as measured by Eurostat's Price Level Indices.

The harmonised competitiveness indicators[12] (HCIs) illustrate the change in Ireland's cost competitiveness in recent years (Figure 9). Ireland experienced a 7.2 per cent loss in cost competitiveness (real HCI) between January 2005 and April 2008 reflecting the appreciation of the euro against the currencies of our trading partners (nominal HCI) and higher price inflation.

12 The nominal Harmonised Competitiveness Index (HCI) is a nominal effective exchange rate for the Irish economy that reflects, on a trade weighted basis, movements in the exchange rate vis-à-vis 56 trading partners. The real HCI (deflated by consumer prices) takes into account relative price changes along with exchange rate movements.

Since then Ireland has regained some of its competitiveness as a result of falls in relative prices and favourable exchange rate movements: from April 2008 to January 2013, the nominal HCI fell by 7 per cent and the real HCI fell by almost 16.1 per cent.

When looking at improvements in cost competitiveness, it is important not to overstate the impact on the cost base for existing businesses. Many firms are, for example, tied to existing contracts and leases and are not in a position to immediately benefit from decreases in prices. In many instances, the benefits of cost improvement accrue to new and expanding firms.

It should also be noted that the full benefits of recent cost competitiveness gains may not have been realised yet. Recent research from the IMF found that exports from Ireland continue to increase for up to thirty-six months after Irish cost competitiveness improvements. Exports could, therefore, still grow as a lagged response to post-crisis depreciation[13].

13 IMF, Boosting Competitiveness to Grow Out of Debt – Can Ireland Find a Way Back to Its Future?, 2013

Labour Costs

Looking at location sensitive business costs, (i.e. those that are determined locally and therefore more open to influence by domestic policy), labour costs represent the single largest component across key exporting sectors[14]. In 2011, the most recent year for which data is available, Ireland had the 11th highest net labour costs level in the OECD[15] (Figure 10). In the same year, Ireland had the twelfth highest hourly compensation costs for manufacturing (Figure 11).

Irish labour costs grew more quickly than the euro area average for much of the 2000s, a clear erosion of Ireland's cost competitiveness. While these costs fell marginally during the recession, they are now increasing at a rate close to the EU average – despite a continuation of exceptionally high unemployment. As the euro area is set to remain in recession during 2013 providing a downward pressure on wages, retaining recent Irish competitiveness gains will require significant effort (Figure 12).

Analysis of unit labour costs (ULC)[16] shows an improvement in competitiveness terms for Ireland in recent years (Figure 13). Prior to 2009, higher annual increases in ULCs were recorded in Ireland than in the EU and euro area. Conversely, real Irish ULCs fell (-4.4% and -4.7%) by more than the euro area average (-1.5% and -0.2%) in 2010 and 2011. Ireland's ULCs continued to fall in 2012, while there was an increase in euro area ULCs. The European Commission has noted that Ireland has recorded "a rather steep fall in ULC and this is expected to continue through 2014"[17]. By comparison, smaller decreases are forecast for the EU and euro area.

14 KPMG, Competitive Alternatives Report, 2012. Forfás, Costs of Doing Business 2012

15 Data is not available for Cyprus or Malta.

16 Unit labour costs measure the cost of labour per unit of output.

17 European Commission, European Economic Forecast, Spring 2013, European Economy 2/2013.

As outlined in the productivity section, improvements in overall ULCs are primarily driven by a small number of high productivity exporting sectors. Further, the real improvement in Irish ULCs is likely to be weaker than those reported due to sectoral changes in the economy (i.e. as lower productivity sectors contract as a result of the impact of the recession). A number of sectors experienced decreases in ULCs from 2009 to Q1 2011 (the most up-to-date data available) with decreases in manufacturing the most significant. However, ULCs in both the construction and financial services sectors increased during this period indicating a loss of competitiveness.

It is worth noting that previous Forfás analysis found that that Irish salary levels in internationally trading businesses were broadly in line with the euro area average across a range of benchmarked occupations[18]. We also know that firms that are active in foreign direct investment are more productive than either firms that outsource overseas or are purely domestic. Likewise, exporting firms tend to be more productive than non-exporting companies[19].

Non Pay Costs

There have also been significant cost competitiveness improvements in some non-pay costs. Unsurprisingly property costs for those signing new contracts have reduced dramatically – both in terms of construction costs and rental costs. For example, the cost of renting prime office space in Dublin fell by almost 47 per cent between the peak in 2007 and 2012[20] (Figure 14).

18 Forfás, Review of Labour Cost Competitiveness, October 2010

19 National Competitiveness Council, Ireland's Productivity Performance 1980-2011, Forfás, April 2012

20 Cushman and Wakefield, Office Space around the World, 2013.

The cost of a range of services to businesses has also declined with the CSO's Services Producer Price Index (Experimental) showing that costs at the end of 2012 were just 1.6 per cent above their 2006 level. The cost of solicitor services, however, is the exception with costs 11.6 per cent above 2006 levels.

During the first six months of 2012, the cost of electricity for large energy users was 6.2 per cent below the euro area average[21]. However, the cost of electricity to Irish SME's was 6.2 per cent above the euro area average[22].

While reductions in business costs are difficult and sometimes painful to achieve, such reductions are essential to boost competitiveness, and can deliver significant opportunities for enterprise. Improved cost competitiveness makes Ireland more attractive to foreign investors to base and develop their operations here, and allows Irish firms to compete better in foreign markets and in our home market. More broadly, a reduced cost base can lower the costs of living in Ireland – stimulating a virtuous circle between the costs of living, wage expectations and cost competitiveness.

21 Electricity prices for large energy users are based on an annual consumption of 2,000 to 20,000 kilowatt hours.

22 Electricity prices for SMEs are based on an annual consumption of 500 to 2,000 kilowatt hours.

PRODUCTIVITY AND INNOVATION

Ireland's aggregate productivity levels improved considerably between 2006 and 2012 with a 16.5 per cent increase in output per hour worked, measured in terms of GDP. In GNP terms (which is a more realistic measure for Ireland given the prevalence of multinational corporations), productivity levels in Ireland have moved slightly above the OECD average, following an improvement of 12.5 per cent over the period (Figure 16).

At first glance, Ireland's average annual productivity growth performance over the 2006 to 2012 period appears strong (Figure 17). Irish productivity levels grew by 2.6 per cent per annum in GDP terms, while in GNP terms Ireland's productivity grew by 1.8 per cent, compared to an OECD-32 average of just 0.8 per cent per annum. However, similar to Ireland's performance on unit labour costs, much of Ireland's performance during this period arose from changes in the composition of employment in Ireland during the recession (for example a collapse in the numbers employed in the labour intensive construction sector), rather than broad based productivity growth. Hence, the reported improvements in productivity are likely to overstate Ireland's competitiveness gain during this period. It is imperative that more sustainable means to grow productivity are applied going forward such as providing a supportive environment for investment in high growth sectors which will have the dual effect of both increasing productivity and expanding employment.

Innovation enables a virtuous cycle of competitiveness which improves productivity, boosts demand, reduces cost and ultimately enhances revenues and provides resources for reinvestment. Of 24 OECD countries measured, Ireland ranks 16th in terms of expenditure on R&D as a percentage of GDP. Irish businesses (1.8% of GDP), higher education institutions (0.5% of GDP) and Government (0.8% of GDP) all spend less on R&D relative to their average OECD-24 counterparts[23] (Figure 18).

23 Within the group of 24 OECD countries business invests 2 per cent, high institutions 0.6 per cent and Government 0.3 per cent of GDP in R&D.

An EU survey found that Irish SME's were more likely to be innovative (45.5% of SME population) than their average EU counterparts (38.4% of SME population) but the growth in sales of new to market and new to firm innovations (9.3%) were below that of the euro area average (14.4%)[24]. According to the EU's Innovation Scoreboard, Ireland is an 'innovation follower' – ranking 10th in the EU 27 in terms of innovation performance[25]. The survey found Ireland's innovation strengths are in human resources and economic effects while our weaknesses relate to finance and support, and firm investments. Ireland's innovation performance score has improved by 0.7 per cent per annum, below average growth rates of 1.9 per cent amongst other innovation followers.

24 European Commission, Innovation Union Scoreboard, 2013.

25 'Human resources' indicators capture new doctorate graduates, those aged 30-34 with completed tertiary education and those aged 20-24 having completed at least upper secondary education. 'Economic effects' captures the economic success of innovation in employment in knowledge-intensive activities, the contribution of medium and high-tech product exports to the trade balance, exports of knowledge-intensive services, sales due to innovation activities and license and patent revenues from selling technologies abroad. 'Finance and support' measures the availability of finance for innovation projects by venture capital investments and the support of governments for research and innovation activities by R&D expenditures by universities and government research organisations. 'Firm investments' includes 2 indicators of both R&D and non-R&D investments that firms make in order to generate innovations. See European Commission, Innovation Union Scoreboard 2013

LABOUR MARKET AND SKILLS

Ireland's labour market trends have closely mapped economic trends in recent years and there are signs now that unemployment levels are stabilising following a prolonged period of increase (Figure 19). Employment levels in Ireland peaked in Q3 2007 but began to fall quickly from Q3 2008 before levelling off during 2011. As the full extent of the economic crisis unveiled itself, unemployment grew rapidly during the period, peaking at 328,000 people in Q3 2011.

Despite international and domestic difficulties, employment levels in Ireland have stabilised with almost 1.85 million in employment in Q4 2012, an increase of 1,300 on the same period in the previous year. Data from the CSO's QNHS show that between Q4 2011 and Q4 2012 a number of sectors continued to shed jobs, including industry (-10.6%), construction (-3.9%) and public administration and defence (-1.2%).The steadying of employment levels has been driven by growth in key services sectors such as information and communication services (5.6%), wholesale and retail (2.9%) and professional technical and scientific (2.7%). Agriculture, farming and forestry employment also grew significantly (7.3%) during the period.

Ireland's harmonised unemployment rate[26] stood at 14.3 per cent at the end of 2012, compared to 11.8 per cent in the euro area and OECD-32 average of 9 per cent (Figure 20). Given the continuing uncertainty around the euro and the impact upon European growth prospects, euro area unemployment is forecast to increase by 0.8 per cent in 2013 compared with a slight decline (-0.5%) in Ireland[27].

While the stabilisation of the unemployment rate is welcome it is important to understand what is causing the current levelling out. Unemployment fell by 19,300 during 2012.

26 The harmonised unemployment rates give the numbers of unemployed persons as a percentage of the labour force. The labour force consists of employees, the self-employed, unpaid family workers and the unemployed

27 European Commission, European Economic Forecast, Spring 2013

Employment, however, increased by just 1,300, primarily as a result of increases in part time employment. These figures suggest that 18,000 people ceased to participate in the labour market during this period (i.e. either as a result of leaving the labour force – some of whom are likely to have returned to full-time education or training or through emigration).

According to CSO data, labour force participation declined significantly from 64.7 per cent in Q3 2007 to 59.6 per cent in Q4 2012 (Figure 21). During 2012, the number of adults resident in Ireland but not participating in the workforce increased by 19,800[28].

Ireland's unemployment figures would be significantly higher were it not for the number of people emigrating from the country. An eight per cent rise in the year to April 2012, brought emigration figures to 87,100, the highest level since records began in 1987 (Figure 22). Immigration figures remained steady for the year (52,700) resulting in net outward migration of 34,400, an increase of 25.5 per cent compared with the previous twelve months. Irish citizens accounted for 53 per cent (46,500) of total emigration and 75 per cent (26,000) of net migration. While, the number of Irish citizens emigrating continues to grow year-on-year (up 10.7 per cent in the year, to April 2012) the growth rate has slowed significantly. In addition to the personal consequences, a prolonged period of high level emigration poses a threat to Ireland's recovery in the medium to long term as highly educated and skilled individuals take their experience elsewhere.

Long term unemployment became an increasingly noticeable feature of the labour market from Q4 2008 and peaked in the first quarter of 2012 at 204,300. This figure fell by 13.6 per cent by Q4 2012 (Figure 19), however, given the slow level of employment growth, some of this decrease is likely to be as a result of labour market exits (Figure 21).

In general, Ireland's employers' skills demands are being met by appropriately qualified graduates. However, while Ireland's high unemployment rate is predominantly a result of weak demand, it is important to note that there are a small number of skills shortages in some niche sectors of the labour market for highly qualified individuals with significant

28 CSO, Quarterly National Household Survey Quarter 4 2012, February 2012

experience in specific areas (e.g. science and engineering professionals, and IT associate professionals). The level of excess demand is, however, unlikely to be greater than several hundred (in terms of headcount) for the overall economy, except for IT skills where the demand is greater especially for experienced personnel who are in demand and short supply globally[29]. There is however a continued need to align the output of the core education and training sectors to enterprise areas with future employment potential.

It is important to ensure that the labour market is operating efficiently. Replacement rates measure the ratio between the income a person receives when unemployed and the income they would receive if employed. Higher replacement rates act as disincentives to avail of employment opportunities. In Ireland, replacement rates tend to be lower for single people compared with married couples – for example a couple with two children and one earner on the average industrial wage has a replacement rate of 66 per cent compared to a replacement rate of just 37 per cent for a single individual earning the same amount (Figure 23).

Since the last recession in the 1980s, educational attainment levels in Ireland have improved significantly, with 37 per cent of the population aged between 25 and 64 possessing third level qualifications in 2010, compared to an OECD-32 average of 32 per cent (Figure 24). However, the percentage of people of working age with less than an upper secondary qualification in Ireland (26%) is considerably higher than the OECD-32 average (21%). Those without qualifications are at a much higher risk of being unemployed and long term unemployed.

World class literacy, mathematical and scientific skills are essential for an economy realigning itself towards knowledge-based industries. The OECD's Programme for International Student Assessment (PISA) in 2009 found that in maths and reading, Irish 15 year olds performed poorly, and that their proficiency in both subjects declined sharply compared with results from 2006 (Figure 25). Ireland had a lower percentage of

29 Expert Group on Future Skills Needs, National Skills Bulletin 2012, Forfás

high scoring students in the PISA mathematical literacy tests than the OECD average (Figure 26). However, Irish students scored above the OECD average in terms of science literacy. Ensuring that Irish students have the necessary knowledge and competencies to successfully complete third level education is essential if we are to continue to develop the knowledge economy and to meet the needs of enterprise.

At third level Ireland had 20.1 maths, science and computing graduates per 1,000 of the population aged 20-29, which compares favourably with other euro area states in 2010, (although the numbers have declined since 2006) (Figure 27).

In recent years, there has been an increase in applications to science related courses through the CAO system, while applications to property-related disciplines such as construction, architecture and built environment have declined significantly. In 2013 the largest increase in applications was to agriculture courses (up 6.7%) followed by science and business courses which were both up by four per cent.

The World Bank's Knowledge Economy Index uses four sub-indices (economic incentive and institutional regime, innovation and technological adoption, education and training and information and communication technology infrastructure) to calculate the most Knowledge Economy-ready countries in the world. Ireland ranks eleventh overall out of over 140 countries, scoring particularly well with regard to having a supportive taxation and regulatory regime but relatively poorly with regard to ICT infrastructure[30].

30 http://info.worldbank.org/etools/kam2/KAM_page5.asp

INVESTMENT AND INFRASTRUCTURE

Sustainable public and private investment which supports the development and maintenance of an export-friendly environment by utilising world-class technology and infrastructure to create and deliver goods and services efficiently to customers is an important determinant of competitiveness.

In 2006, driven by a property boom and low interest rates, Ireland's investment levels were unsustainably high (27.1% of GDP) and used to support economic activities with relatively low productivity yields (Figure 28). However, Ireland now has the lowest level of investment within the euro area (9.7% of GDP). The dramatic decline is largely due to a collapse in private investment from over 20 per cent to 9.6 per cent. 2012 saw Irish public investment levels (2.0% of GDP) fall below the euro area average (2.1% of GDP) as the effects of budgetary constraints further impacted government spending. Ireland's economic recovery will require a return to viable levels of investment into more productive sectors of the economy.

The value of the stock of fixed assets increased by over 60 per cent between 2000 and 2009 in line with Ireland's high levels of investment at this time (Figure 29). However, annual average growth rates have fallen from 5.5 per cent during that period to 0.3 per cent between 2009 and 2011.

High debt levels continue to depress domestic demand across the economy, with household, enterprise and Government debt significantly above euro area levels (Figure 30). The challenges to investment growth are further compounded by difficulties in accessing affordable finance. However, the ESRI has forecast that overall investment will grow by three per cent in 2013 due in part to foreign direct investment announcements and the roll out of a number of major public infrastructure projects[31]. Funding for indigenous enterprise remains a key competitiveness issue.

31 ESRI, Quarterly Economic Commentary, Winter, 2012

Ireland's stock of inward investment, relative to GDP, remains amongst the highest in the OECD, illustrating the significant underpinning provided by foreign direct investment to the Irish economy (Figure 31). Applying a proxy for rate of return, the income of US companies as a proportion of the amount invested in a particular country, shows that despite declining from 20.7 per cent in 2006 to 15.8 per cent in 2012, Ireland continues to be the most attractive investment location within the euro area (Figure 32).

In terms of investment in infrastructure, according to a survey undertaken by the World Economic Forum, Ireland's scores 5.4 on a seven point scale (seven being the best possible score). This indicates that despite the significantly high level of investment undertaken in Ireland in the years prior to the economic crisis, perceptions of overall infrastructure quality remain below many other developed economies with Ireland ranking 24th out of the 32 OECD countries benchmarked (Figure 33). However, when respondents were asked about the quality of specific infrastructures such as electricity, air transport and roads Ireland received higher scores (6.5, 5.7 and 5.4 respectively).

While the contribution of service exports to the economy has increased significantly in recent years, it will be important that advanced broadband services are quickly made available in Irish cities and towns to support the growth of emerging high value information-intensive industries such as digital media, cloud computing, e-games, healthcare and education[32]. It is, therefore, worrying that Ireland has one of the lowest fibre broadband connection rates in the OECD-28[33], and that it fell two places in the rankings between June 2011 and 2012 to 25th (Figure 34).

32 Forfás, Ireland's Advanced Broadband Performance and Policy Priorities, 2012

33 As a percentage of total broadband connections. Data is not available for Chile, Estonia, Israel or Slovenia.

BUSINESS ENVIRONMENT

For enterprises to succeed in international markets, the business environment must be as competitive as possible, ensure certainty, and should not impose unnecessary restrictions or costs on firms.

The regulatory environment of a country has a significant impact on the ease of doing business in that location. The World Bank monitors national regulatory environments and compiles an annual global ranking of their competitiveness[34]. In 2012 Ireland ranked fifteenth out of 185 countries. Ireland was ranked in the top ten in terms of the ease of starting a business, paying taxes, protecting investors and resolving insolvency (Figure 35). However, the country performed very poorly with regard to the ease of dealing with construction permits, getting electricity, enforcing contracts and registering property.

One of the key attractions of Ireland's business environment to foreign direct investment is the competitive corporation tax of 12.5 per cent compared to an OECD-32 average of 23.4 per cent (Figure 36).

Labour taxes also present significant costs for enterprise. As a result of increased taxes on labour, the gap between labour costs and net pay has risen considerably since 2008[35] (Figure 37 and 38). The gap is wider for higher income workers – a challenge for firms seeking to attract and retain highly skilled, internationally mobile talent. As a result of changes in taxes, both average and marginal rates on income have also been increasing which can reduce incentives to work and increase the cost of labour for employers. Reductions in net take home pay are also likely to lead to demands for offsetting pay rises.

34 World Bank, Doing Business, 2012

35 For a married couple with two children on a combined income of 100 per cent of the average wage, the difference is 11.4 per cent, up from 6.7 per cent in 2008. For a married couple with two children on a combined income of 167 per cent of the average wage (i.e. a two earner family), the difference is 19 per cent, up from 14 per cent in 2008.

Difficulties in accessing affordable credit acts as a downward pressure on economies and can significantly prolong the time it takes to recover from recession and recoup foregone output levels. While the global financial crisis resulted in an international tightening of access to credit, the severity of economic conditions in Ireland has placed additional pressures on firms seeking to access credit here. Annual growth rates in the stock of credit in Ireland have been negative since June 2009, reflecting in part the scale of debt repayment (Figure 39). Between January 2011 and March 2013 the rate of decline in the stock of credit eased considerably in Ireland (to -3.7%) and is now approaching convergence with the euro area (-2.4%) as the EMU faces into a second consecutive year of recession. It is important to note also that interest rates in Ireland remain higher than the euro area average across a range of credit types (Figure 40).

QUALITY OF LIFE AND SUSTAINABILITY

As noted in the introduction, the primary objective of being competitive is to provide our people with the opportunity to improve their quality of life. To be truly sustainable, development must provide positive outcomes for the economy, the environment, and society.

While Ireland's GDP per capita is ninth highest in the OECD-32, 30 per cent of the population was considered to be at risk of dropping below the poverty line in 2010 compared to an EU average of 21.6 per cent (Figure 41)[36]. In Ireland, older cohorts were less at risk of poverty than both their euro area counterparts and younger cohorts, while 37.4 per cent of Ireland's population under the age of 16 are at risk of poverty compared to 26.7 per cent for the euro area. In a group of 29 countries, Ireland was ranked tenth best place to be a child in a recent UNICEF report. While Ireland's child poverty rate was relatively low (8.5%), Ireland ranked 17th in terms of the material well-being of children[37].

The essence of environmental sustainability is a stable relationship between human activities and the natural world. According to the 2012 Environmental Performance Index, a composite indicator based on measures that assess environmental health and ecosystem vitality, Ireland lags the OECD average (Figure 42).

36 At-risk-of-poverty is the percentage of the population with disposable incomes (after social transfers) that is less than 60 per cent of the national average disposable income.

37 UNICEF, Child Well-being in Rich Countries – A Comparative Assessment, 2013.

The OECD Better Life Index compares well-being in countries across a range of topics including housing, community, education, life satisfaction and work-life balance. Ireland scores consistently well across many of the Better Life metrics and scores particularly highly in areas related to work-life balance, life satisfaction, and health (Figure 43). The UN's City Prosperity Index[38] uses productivity, infrastructure, quality of life, equity and environmental sustainability to determine the prosperity of international cities (Figure 44). Dublin ranks fourth overall, performing particularly well with regard to the productivity, environment and equity elements.

38 UN Habitat, State of the World's Cities 2012/2013, 2012

CONCLUSION

Ireland's international competitiveness has improved significantly in recent years. It is still unclear, however, the extent to which these gains are a result of a cyclical response to the recession or whether they have arisen as a result of recent policy initiatives – it takes some time for reforms to have a visible, quantifiable impact. As economic growth improves there is a significant risk, however, that some of these gains will be eroded. Raising competitiveness through structural reforms is crucial to building sustainable economic and social progress.

While the recent improvement in Ireland's competitiveness performance is significant, we cannot afford to become complacent. Many firms are still confronted by high costs which make it difficult to compete internationally. Others are dealing with legacy issues that make accessing credit for investment extremely challenging. Still others lack the capabilities (e.g. innovative capacity, language and international sales skills) to take advantage of growth opportunities. Creating a competitive business environment which supports an increase in exports from these firms is essential to ensuring Ireland achieves sustainable economic growth and high levels of employment growth.

Who and what we compete for is changing as consumer markets in emerging countries grow rapidly and as firms in these countries increasingly compete across the value chain in their home market, the EU and in third markets. As the global economic outlook remains challenging, it is more important than ever that Ireland seeks to grow world market share, to enhance the share of national exports from indigenously owned firms and to diversify exports in terms of products produced and markets served.

It is essential that we continue to pursue cost efficiencies in all sectors of the economy. It is also vital that we continue to develop the exporting capabilities of high value, complex sectors and their supply base. To support this, it is essential that Ireland continues to make progress in upgrading its skills, ICT and research, development and innovation capacity. This review highlights our strengths and weaknesses in these areas.

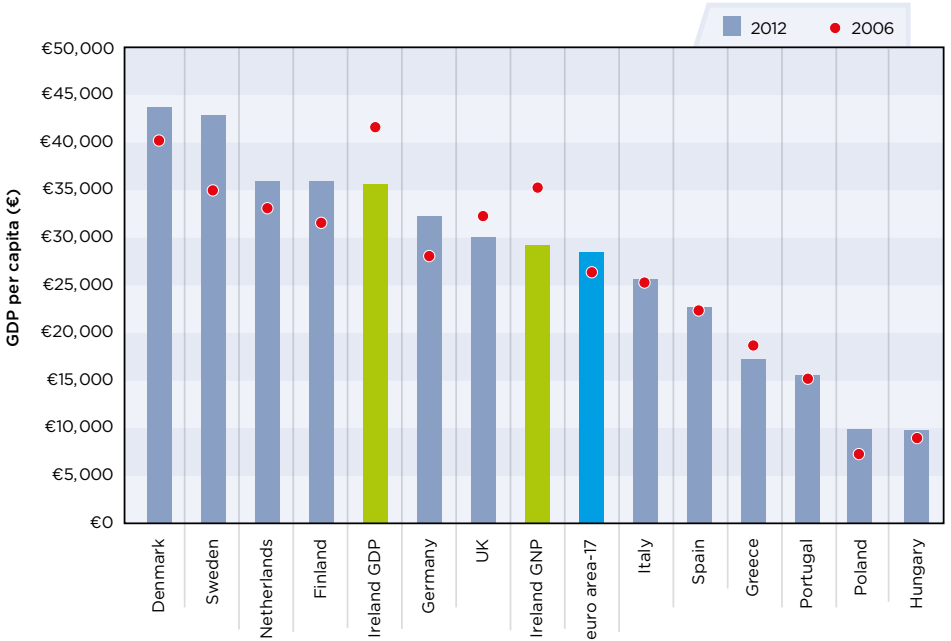
While the apparent levelling out of the unemployment rate is welcome, significant employment growth is essential to prevent further contraction of the labour force, relieve financial pressure both on households and the State and return to sustainable consumption levels within the economy. Given Ireland's unacceptably high level of unemployment, the recent increase in labour costs is a significant concern.

With regard to the financial environment, the high debt levels across all sectors of the economy must be brought under control. At the same time, however, it will be important that viable businesses can access the required affordable finance to invest and succeed in international markets.

This paper has analysed Ireland's competitiveness performance across a range of metrics and is intended to assist in the development of policy which will make Ireland a more competitive location in which to do business. It should not be forgotten that the pursuit of competitiveness is not as an end in itself, but is the means of achieving sustainable improvements in Irish living standards and improving the quality of life for all members of society. In this regard, Ireland still ranks well – both in terms of living standards and broader measures of quality of life.

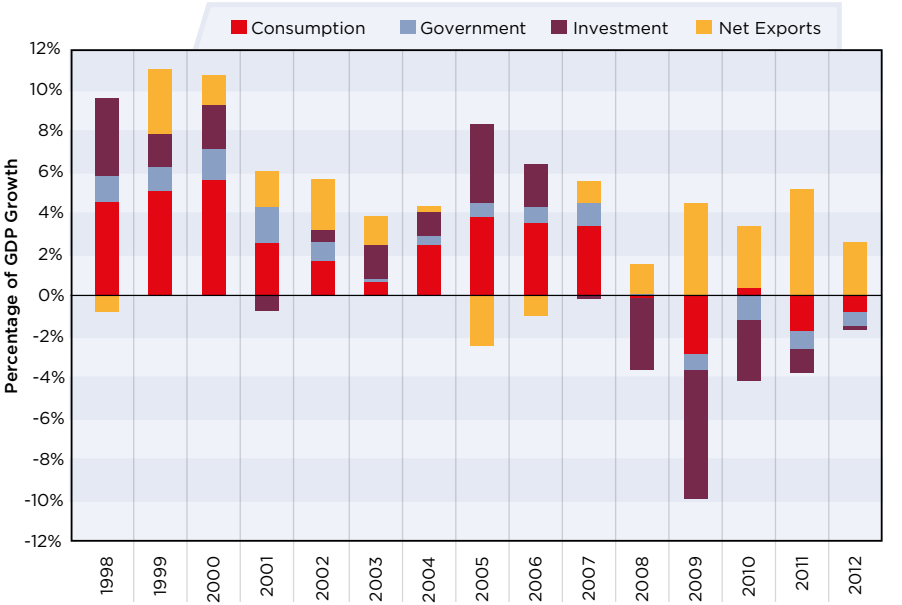
COMPETITIVENESS INDICATORS

Figure 1:
GDP per capita, current prices (€), 2011



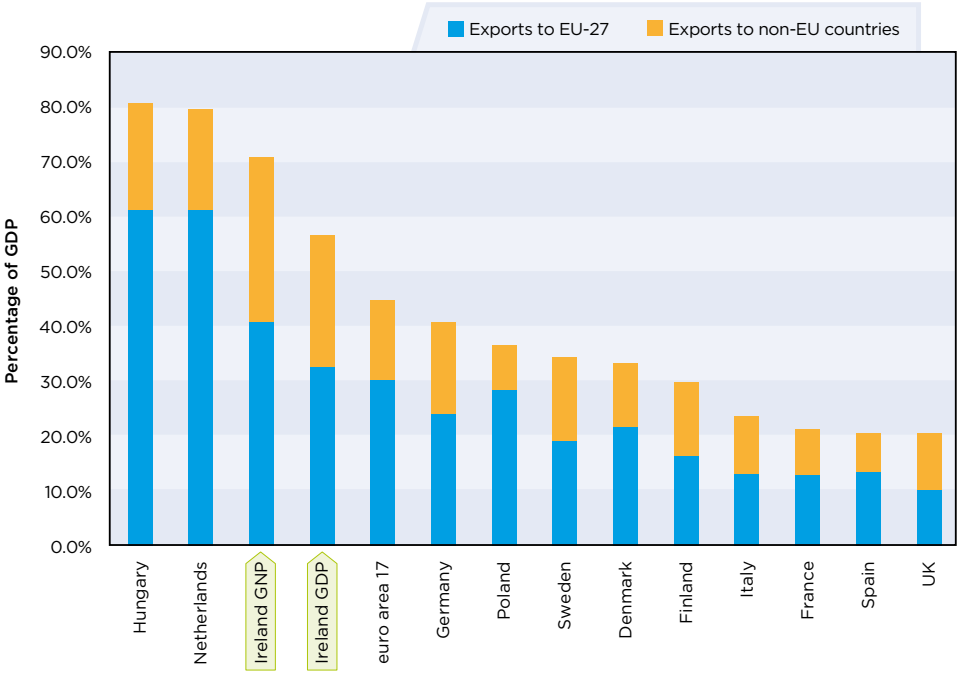
Source: Eurostat, Economy and Finance

Figure 2:
Components of Irish Economic Growth (GDP), 1998-2012



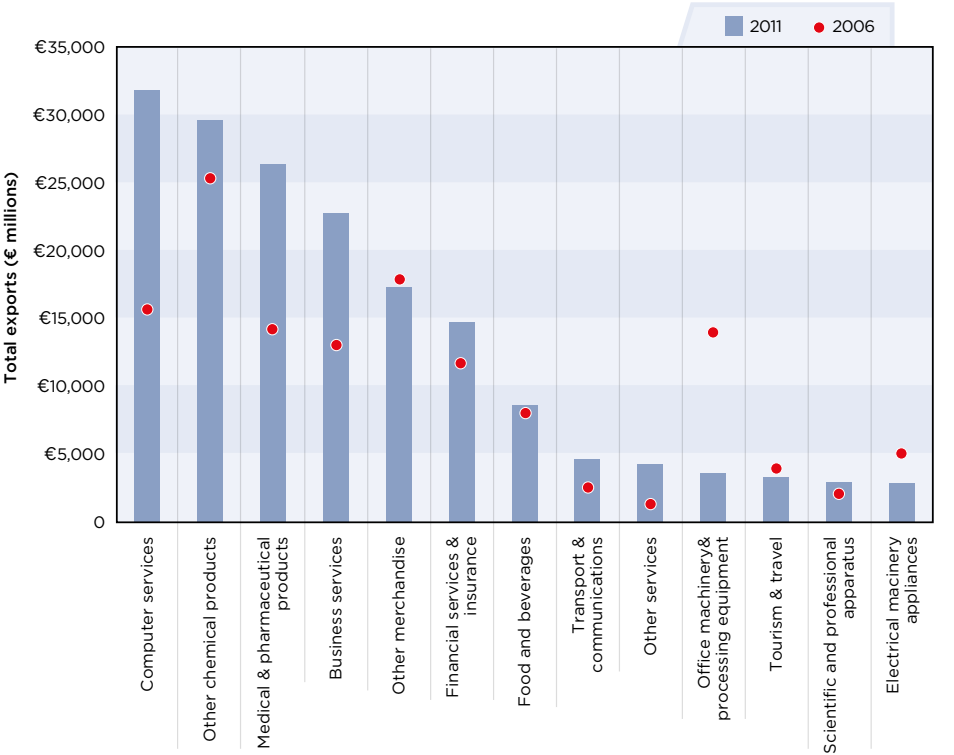
Source: CSO, National Accounts

Figure 3:
Exports of Goods, intra-EU and extra-EU (% GDP), 2011



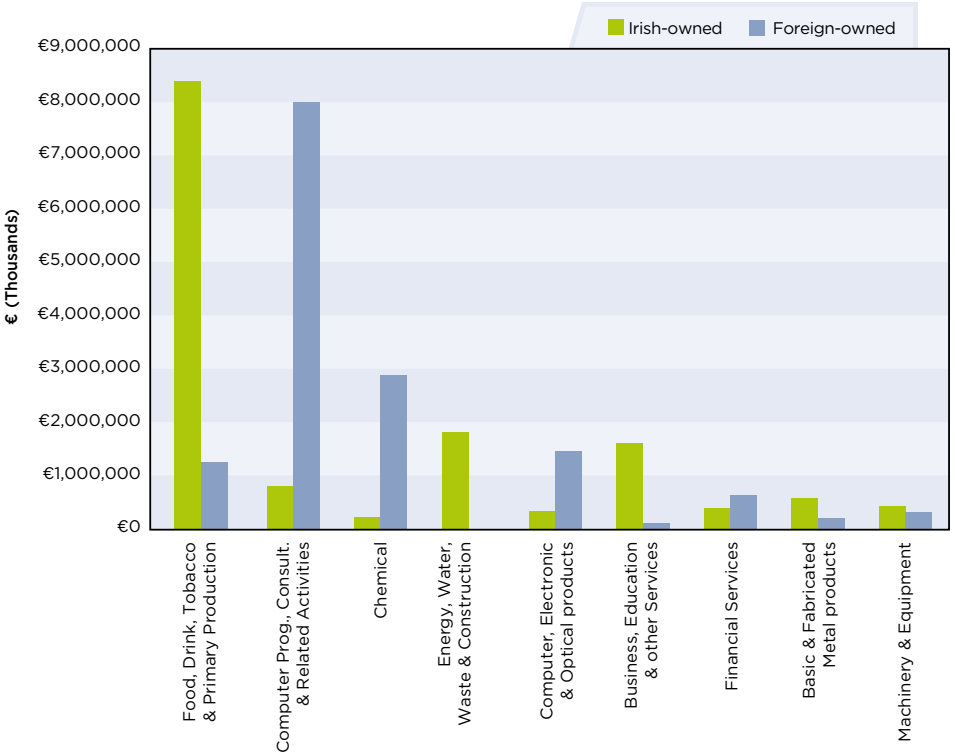
Source: Eurostat, External Trade

Figure 4:
Total Goods and Services exports by Sector from Ireland (€million), 2011



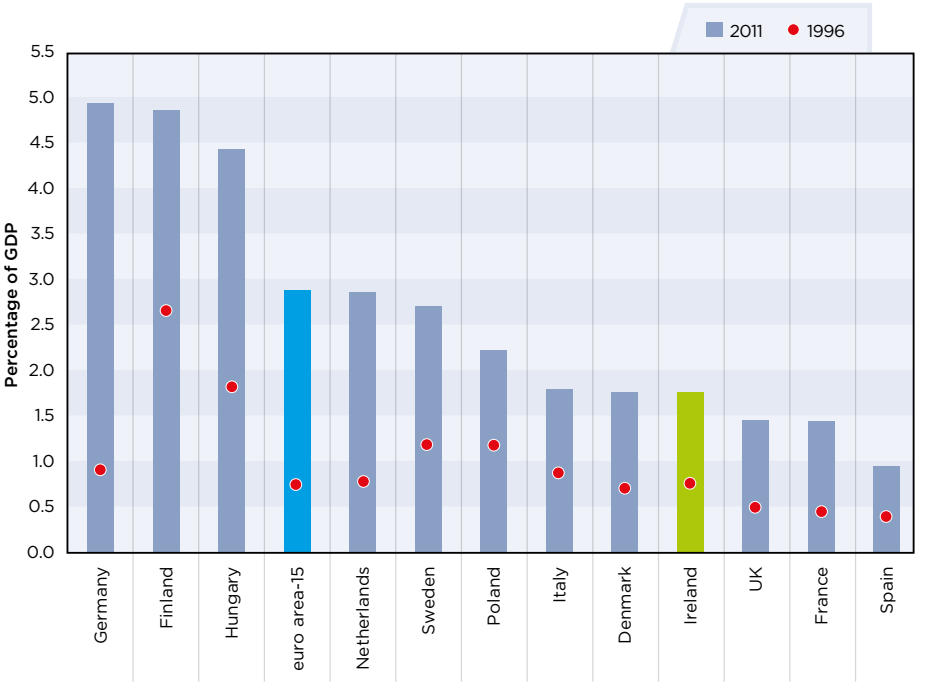
Source: CSO, External Trade

Figure 5:
Direct Expenditure in the Economy by Sector, 2010



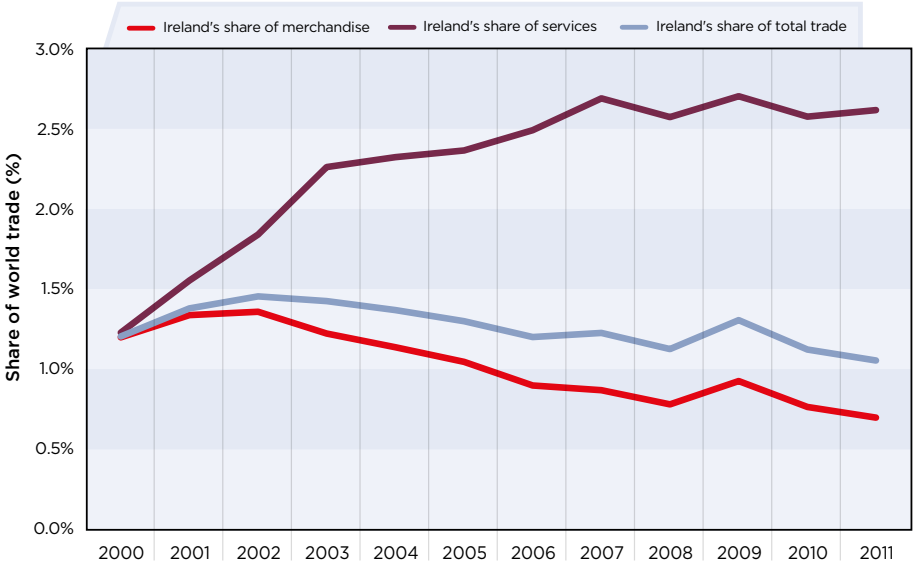
Source: Eurostat, External Trade

Figure 6:
Exports to Emerging Markets as a Percentage of Exporting Country GDP, 2011



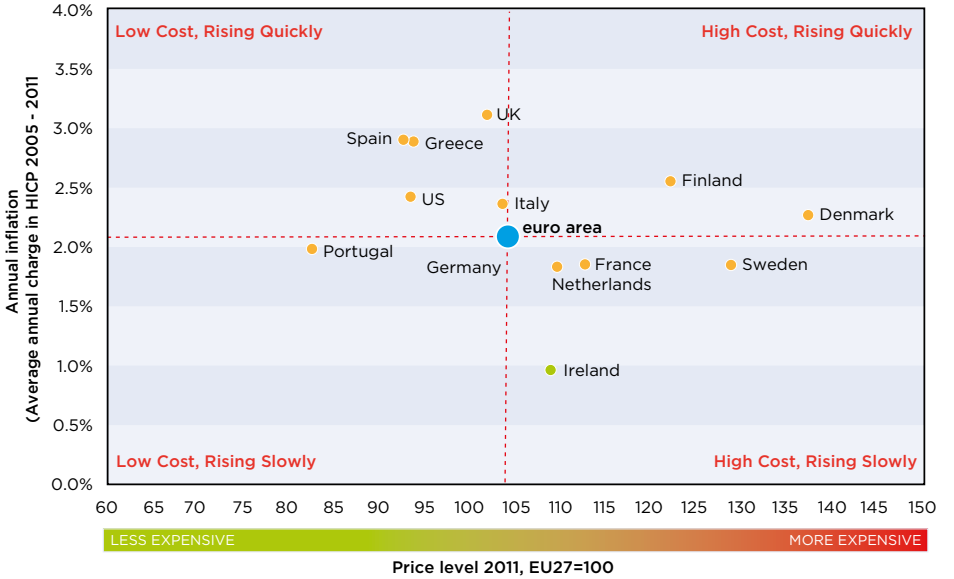
Source: Eurostat, External Trade

Figure 7:
Ireland's Share of World Trade, 2011



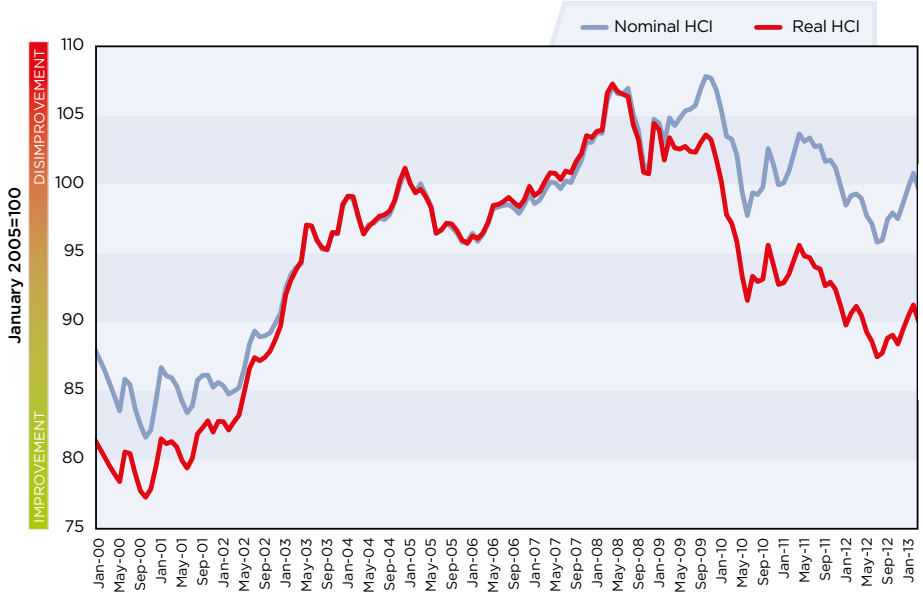
Source: World Trade Organisation, Online

Figure 8:
Consumer Price Levels (2011) and Inflation (2006-2011)



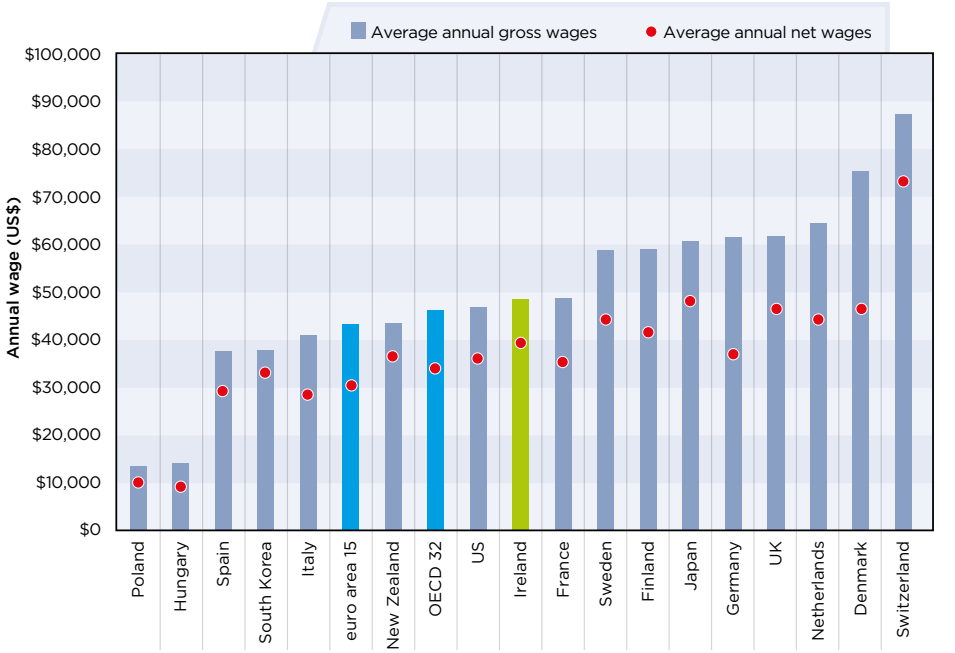
Source: Eurostat, Prices

Figure 9:
Harmonised Competitiveness Indicators for Ireland, January 2000-March 2013



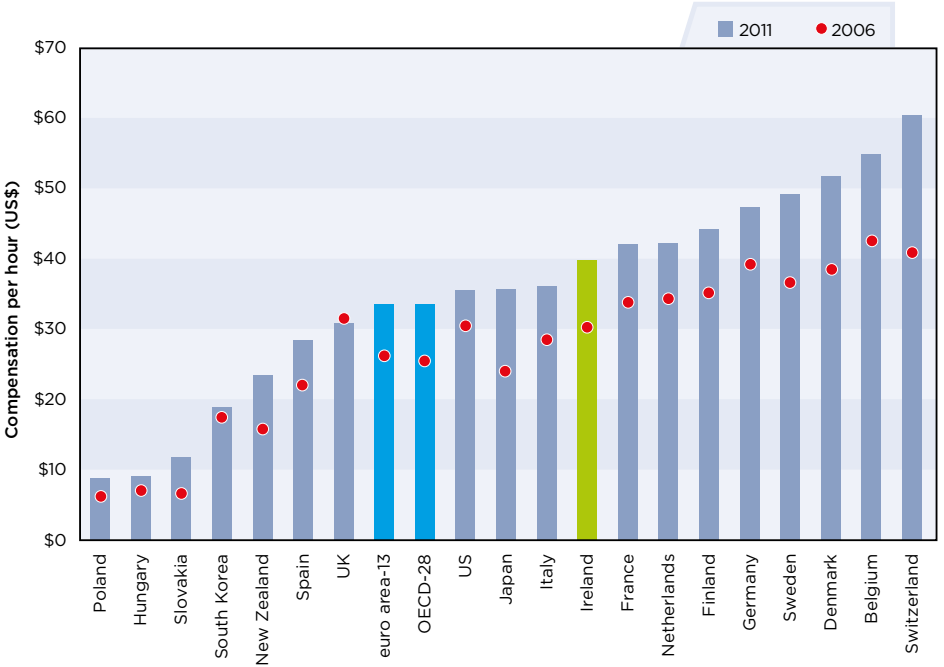
Source: Central Bank of Ireland, Forfás Calculations

Figure 10:
Average Total Labour Costs and Net Wages, 2011



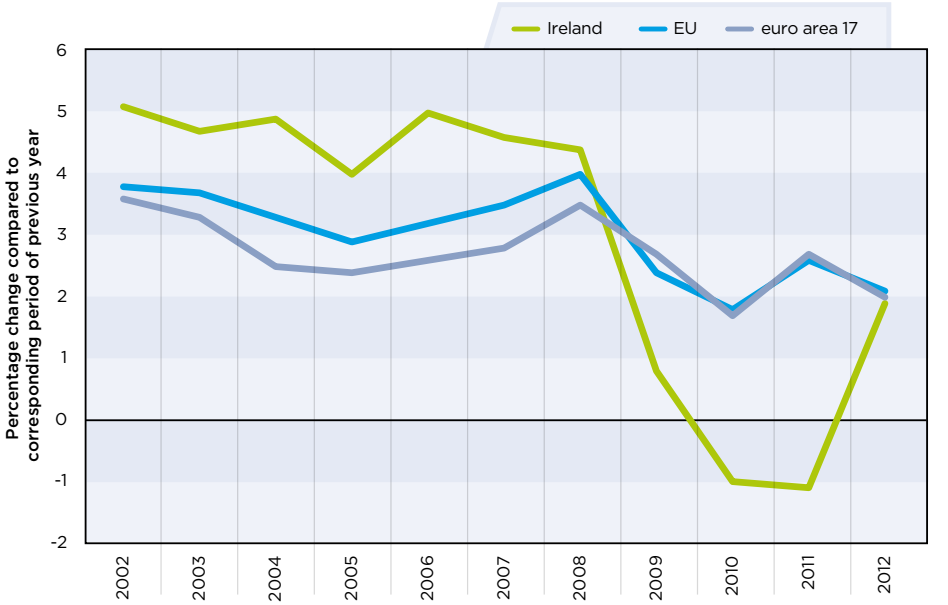
Source: OECD Taxing Wages 2011, OECD Comparative Price levels 2012, Forfás Calculations

Figure 11:
Hourly Compensation Costs in Manufacturing (US$), 2011



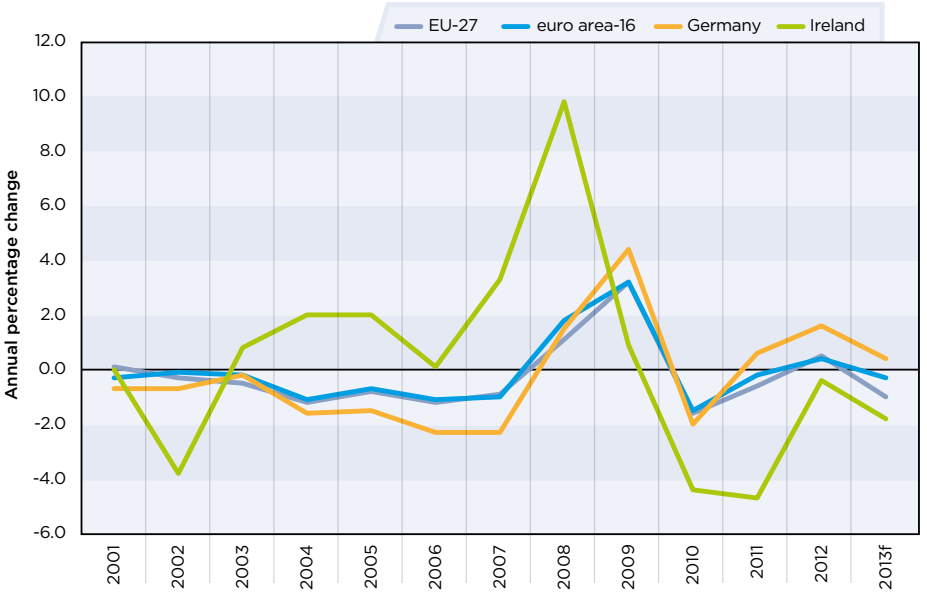
Source: U.S. Bureau of Labour Statistics

Figure 12:
Average Growth Rates in Labour Costs, 2001-2012



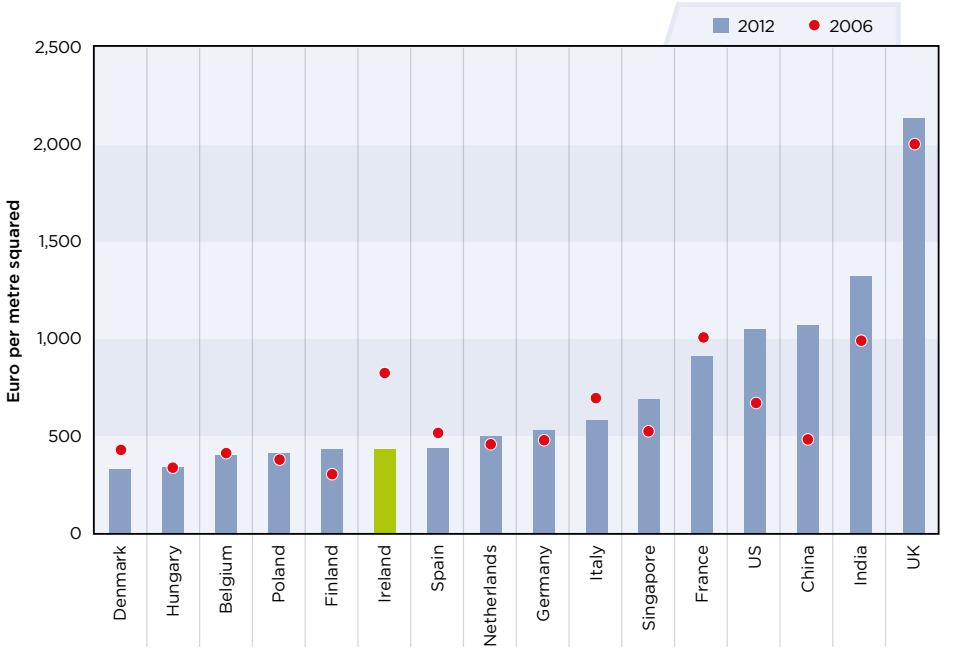
Source: Eurostat, Labour Cost index Annual and Quarterly Data

Figure 13:
Annual Change in Real Unit Labour Costs, (2000-2013f)



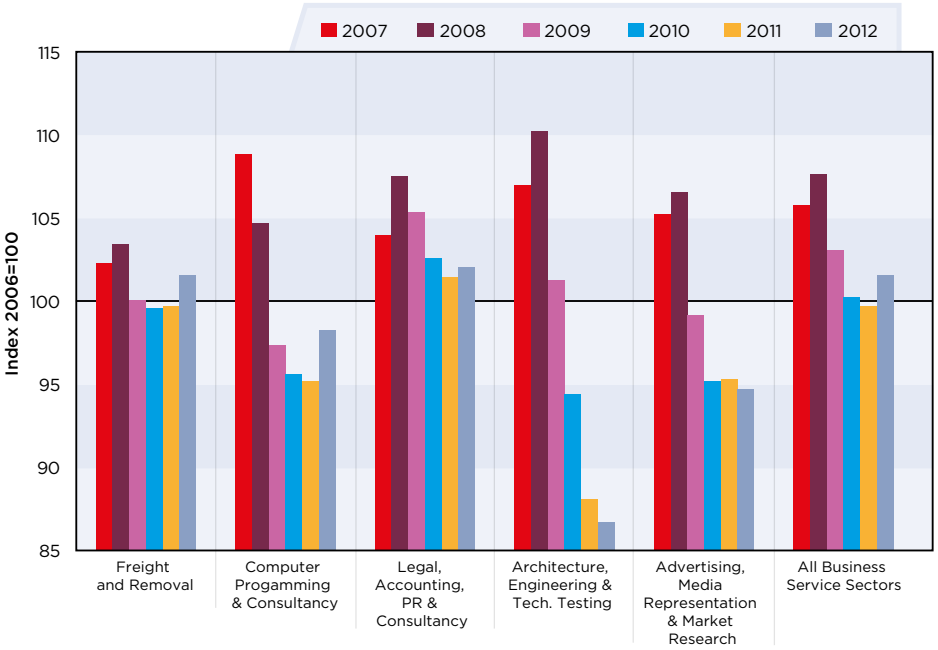
Source: Eurostat

Figure 14:
Cost per m² to Rent a Prime Office Space, 2007-2012



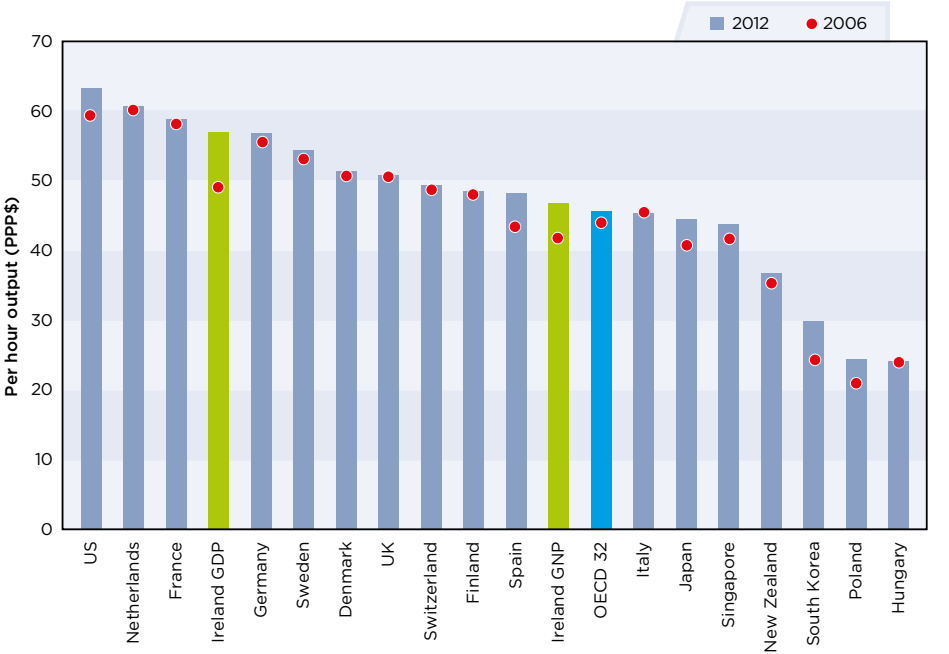
Source: Cushman and Wakefield, Office Space around the World, 2013

Figure 15:
Services Producer Price Index, 2006 –2012



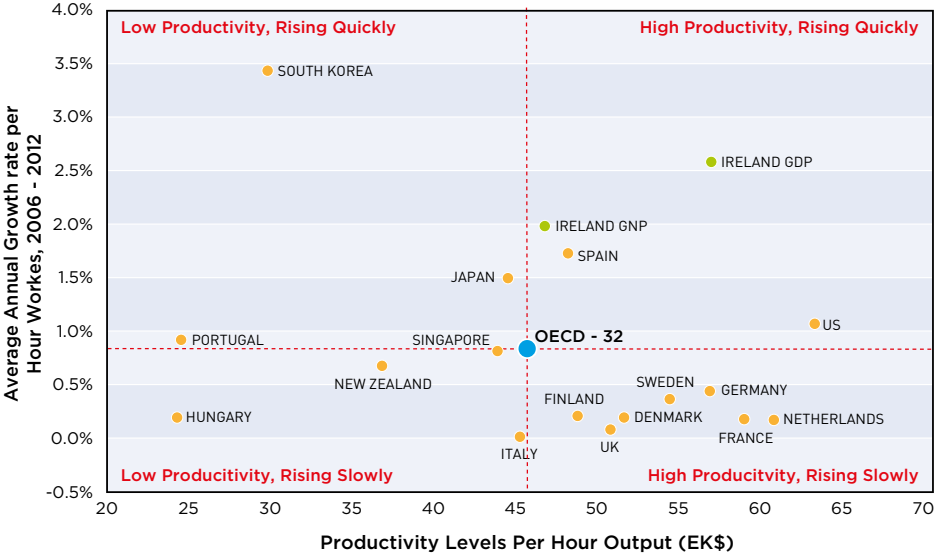
Source: CSO, Services Produce Price Index

Figure 16:
Productivity Per-hour Output (EKS$), 2012



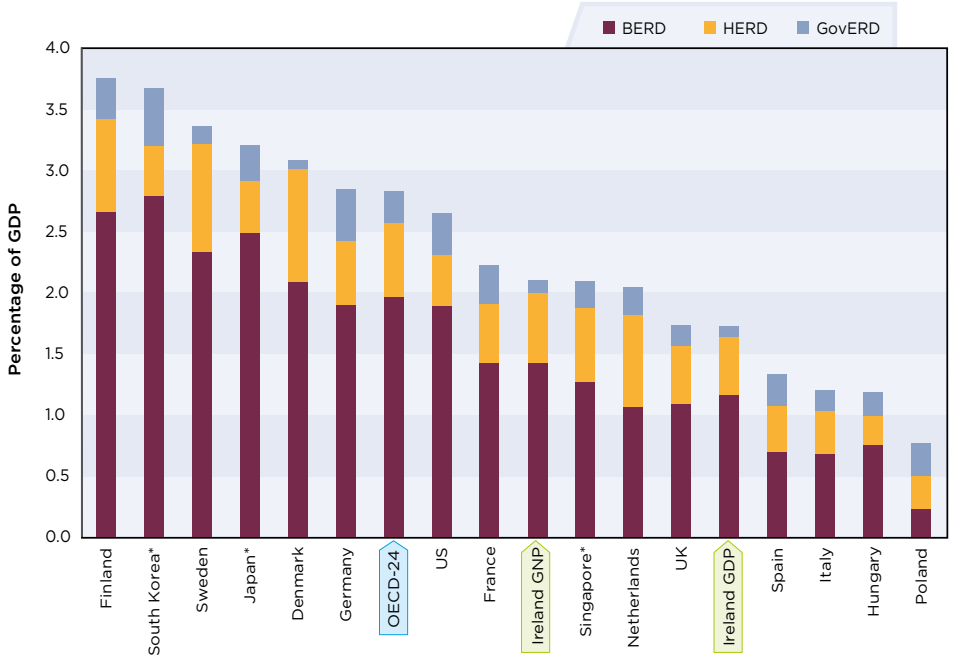
Source: The Conference Board, Total Economy Database

Figure 17:
Productivity Levels per-hour (2012) and Average Annual Growth Rates, 2006 -2012



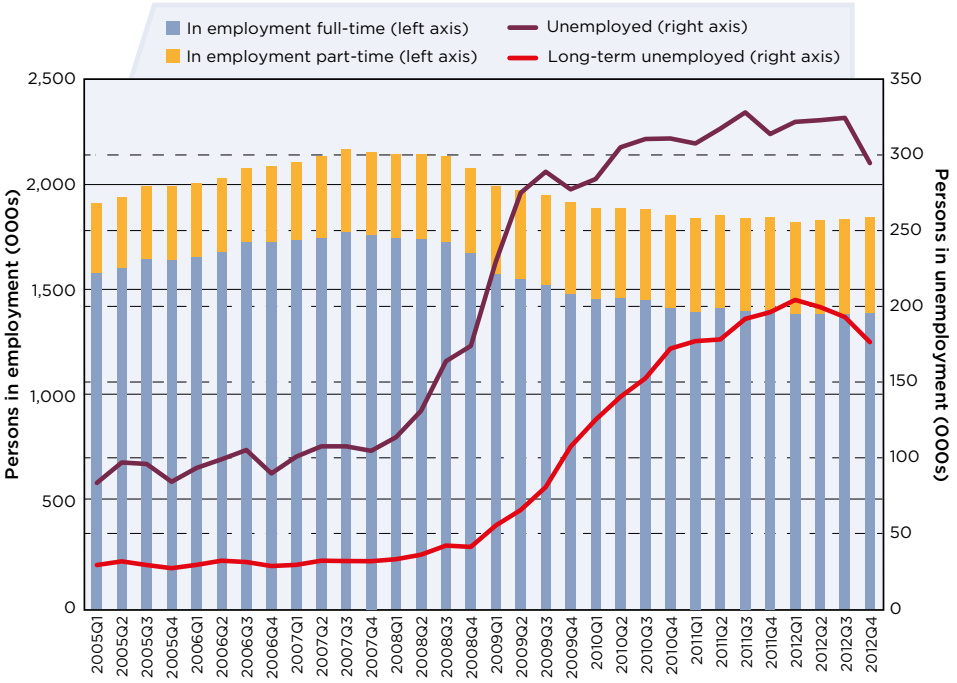
Source: The Conference Board, Total Economy Database

Figure 18:
Expenditure on R&D as a % of GDP,
(Business, Higher education & Government), 2011



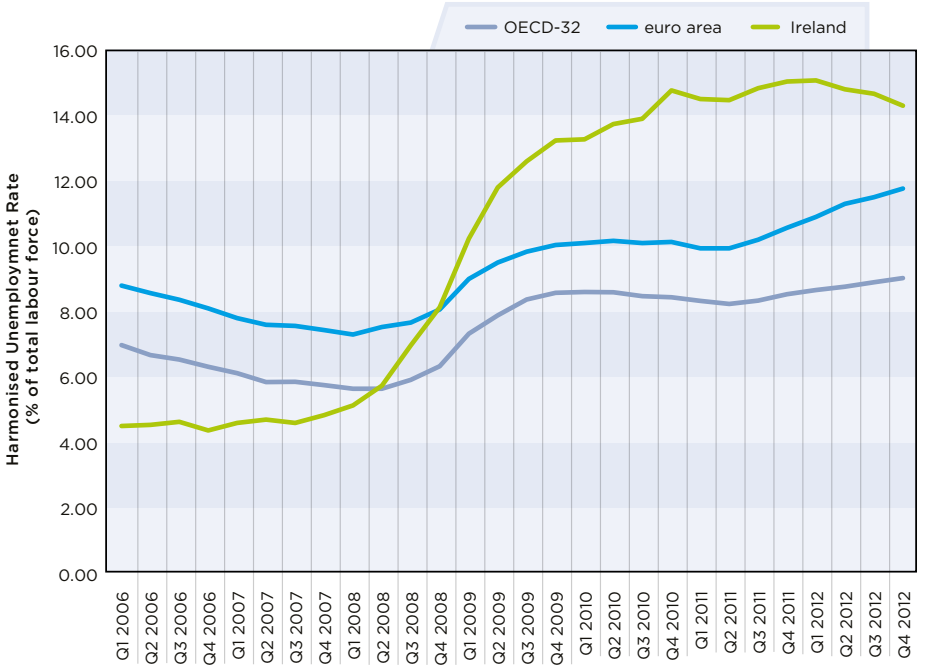
Source: OECD, Stat. Extracts. * denotes data refers to 2010

Figure 19:
Employment and Unemployment in Ireland, Q1 2005 – Q4 2012



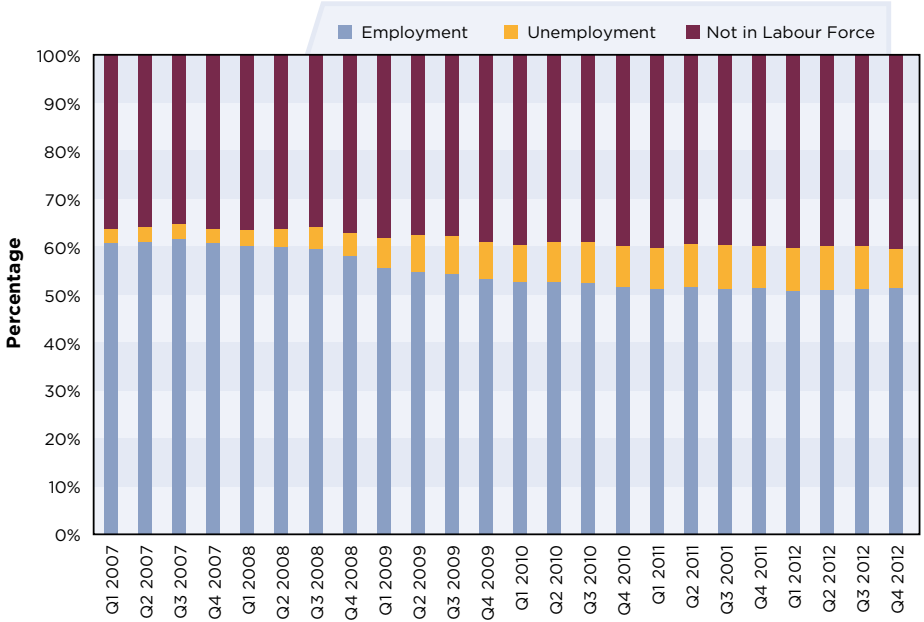
Source: CSO, Quarterly National Household Survey

Figure 20:
Unemployment, Harmonised Rate, Q1 2006 –Q4 2012



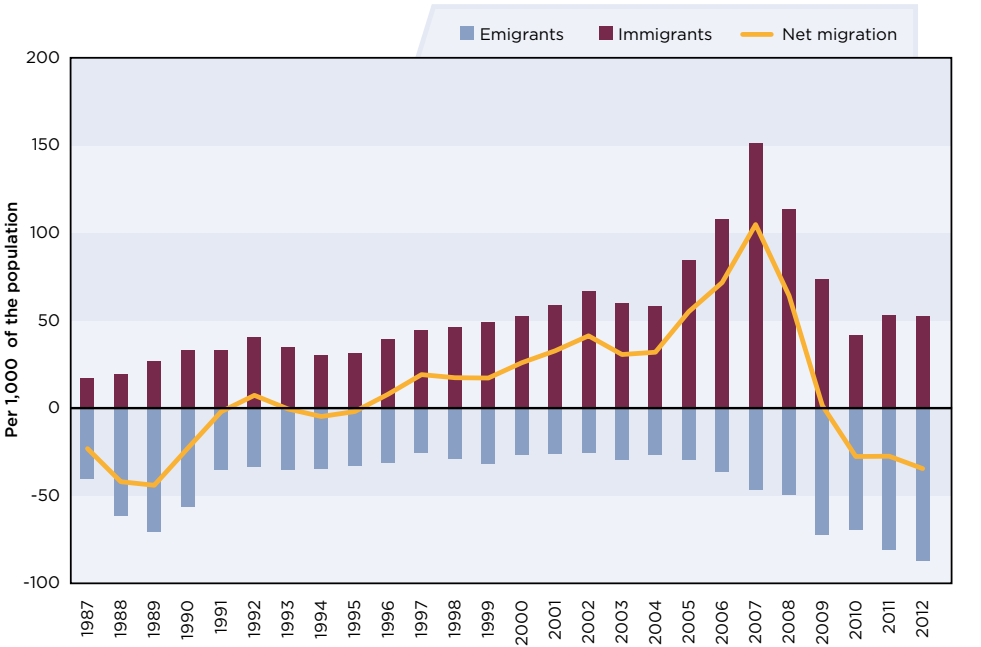
Source: OECD, Short Term Labour Market Statistics

Figure 21:
Labour Market Participation Rates, Q1 2007 – Q4 2012



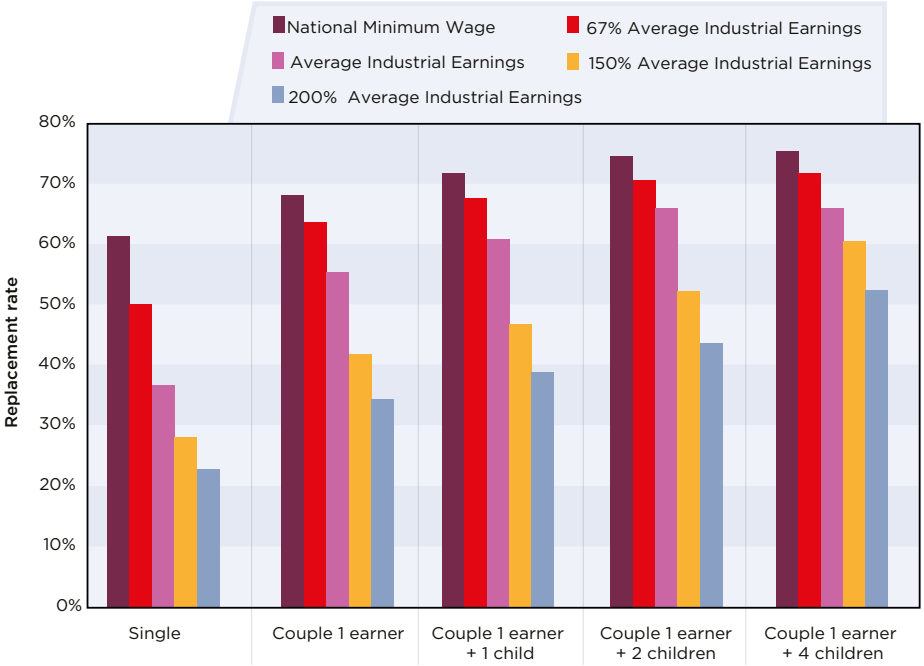
Source: CSO, Quarterly National Household Survey

Figure 22:
Net Migrants per 1,000 of Total Population, 1987 - 2012



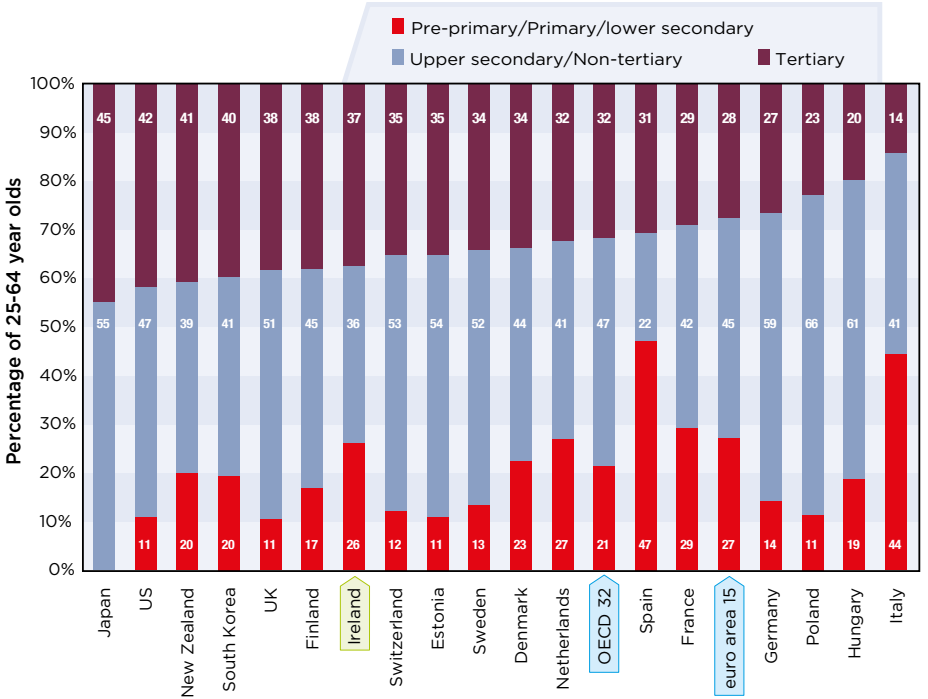
Source: CSO, Population Estimates

Figure 23:
Replacement rates, February 2012



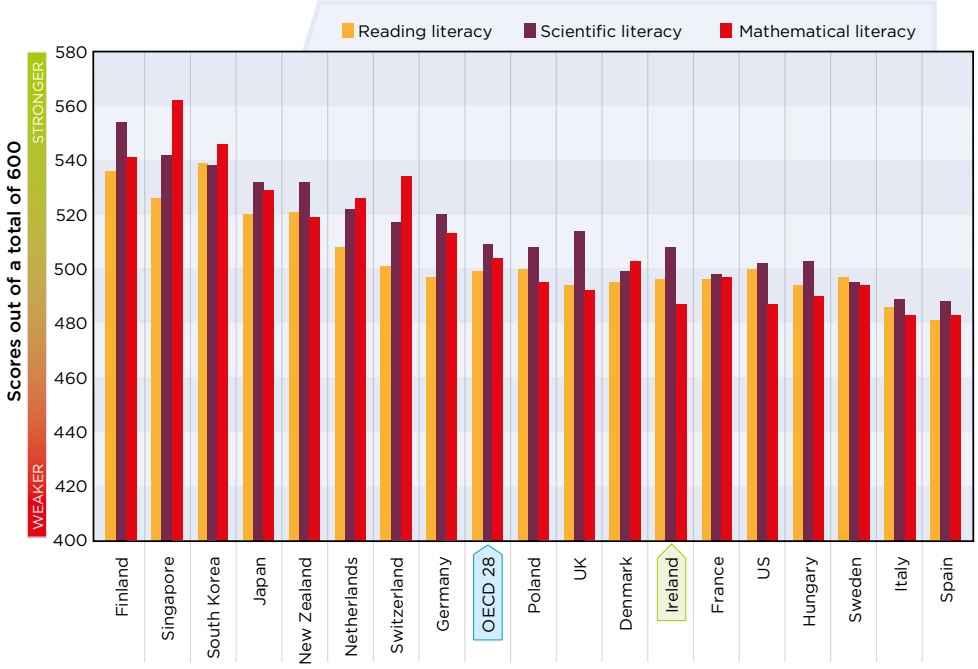
Source: Department of Social Protection

Figure 24:
Educational Attainment of Population aged 25-64 by Highest Level of Education, 2010



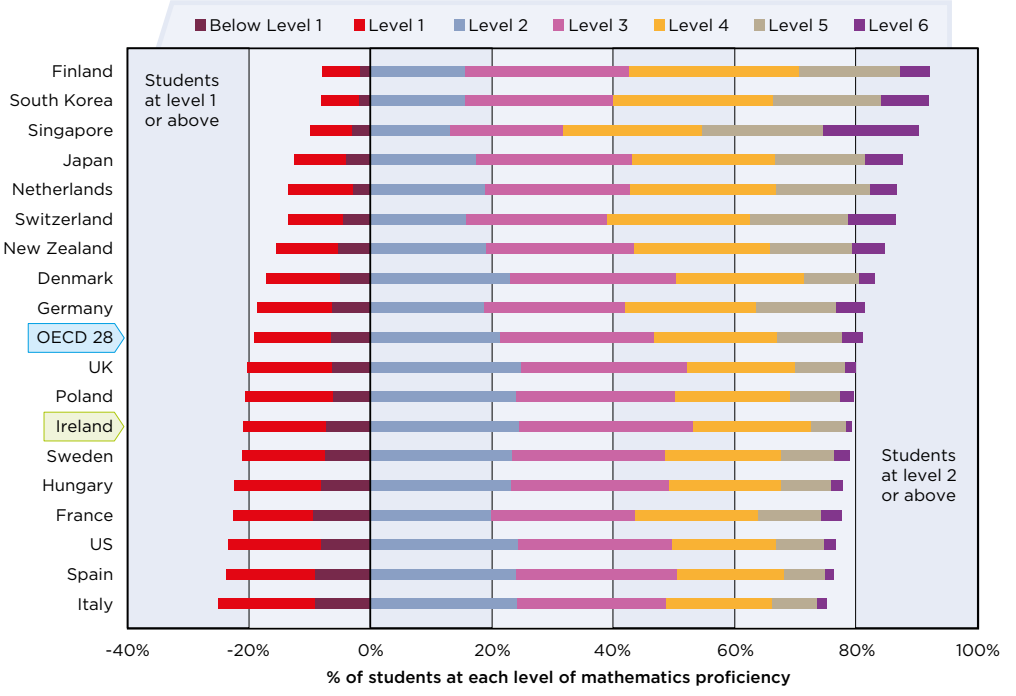
Source: OECD, Education at a Glance, 2012

Figure 25:
Scientific, Mathematical and Reading Literacy of 15 Year Olds, 2009



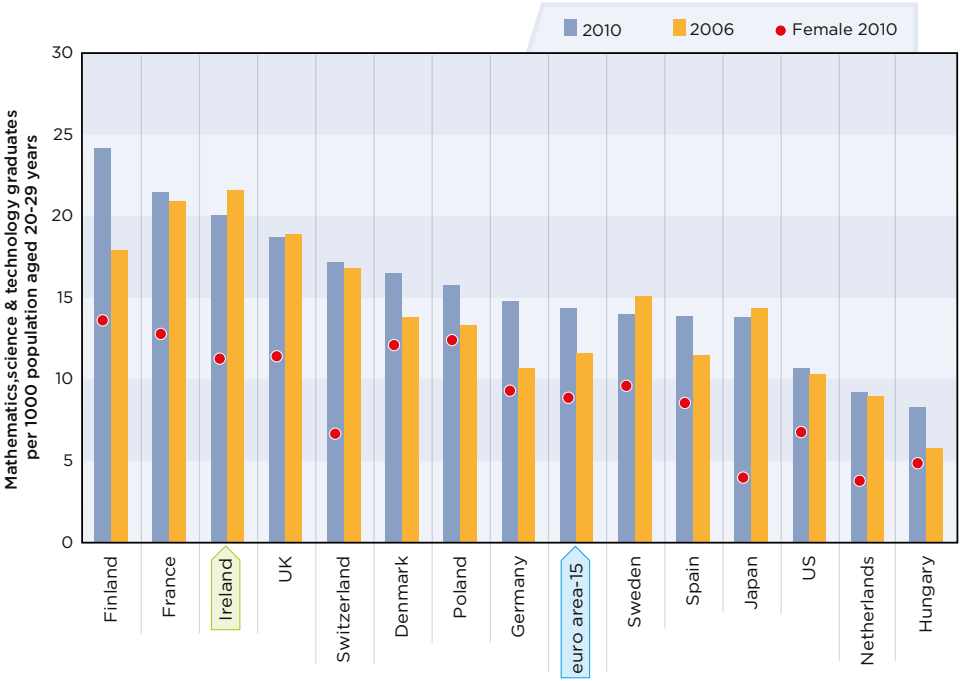
Source: OECD, PISA 2009 Results

Figure 26:
Percentage of Students at each Proficiency Level on the Mathematics Scale



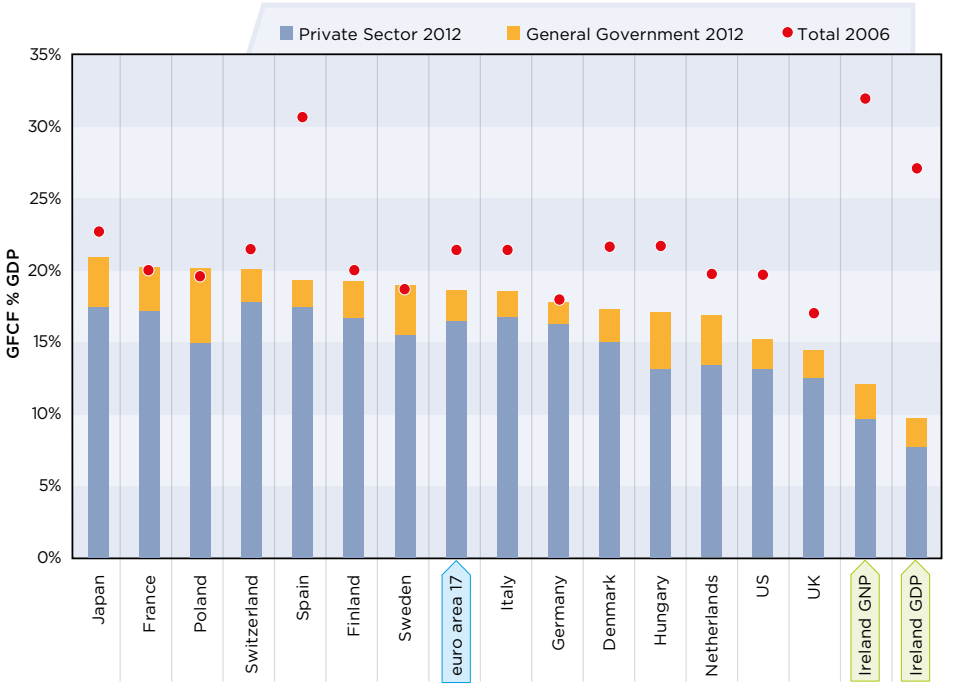
Source: OECD, PISA 2009 Results

Figure 27:
Maths, Science and Technology Graduates (per 1,000 aged 20-29 years), 2010



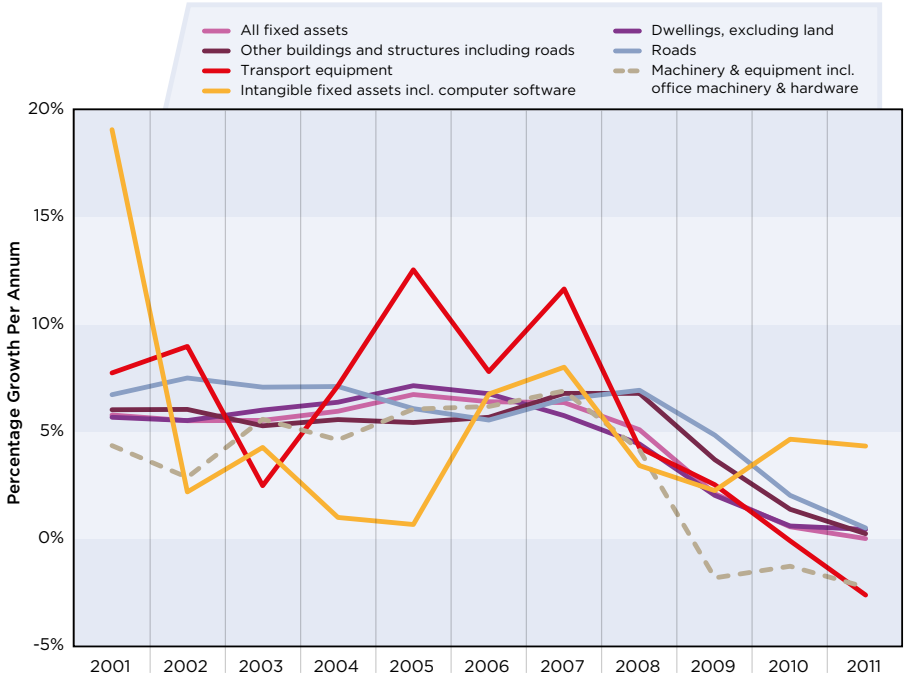
Source: Eurostat

Figure 28:
Economy-wide Gross Fixed Capital Formation, at Current Prices (% GDP), 2012



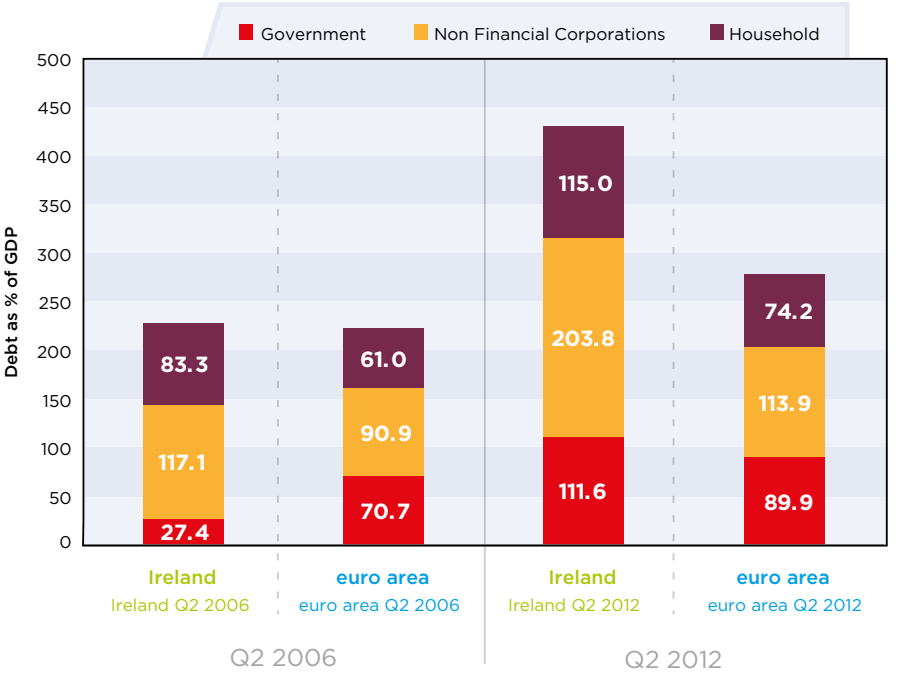
Source: European Commission, AMECO Database

Figure 29:
Annual Growth in Net Capital Stock in Ireland, 2001-2011



Source: CSO, Estimates of the Capital Stock of Fixed Assets

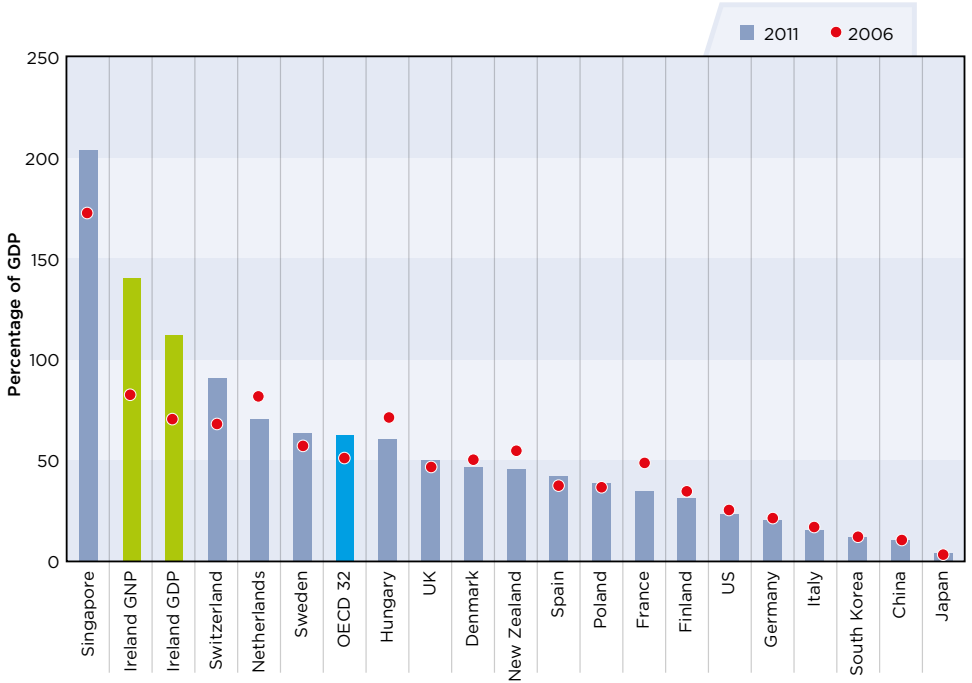
Figure 30:
Debt Levels, (%GDP), Q4 2012[39]



Source: Central Bank, Macro Financial Review, 2012.2

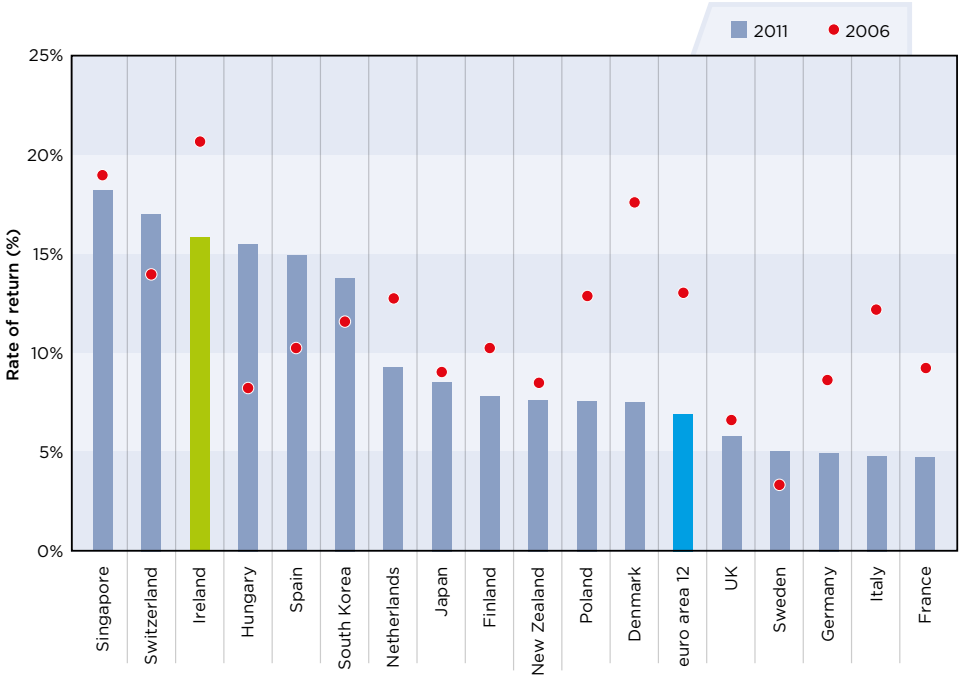
39 Latest data for Household Debt refers to Q4 2011.

Figure 31:
FDI Inward Stock (%GDP), 2011



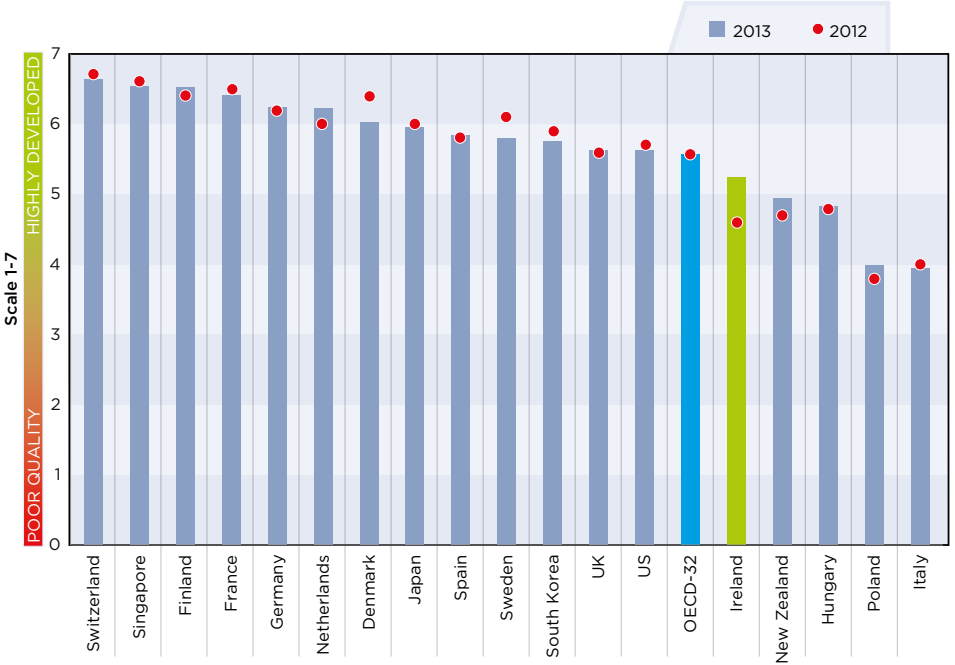
Source: UNCTAD, World Investment Report, 2012

Figure 32:
Rate of Return to US-owned Companies on Investment in Foreign Countries, 2011



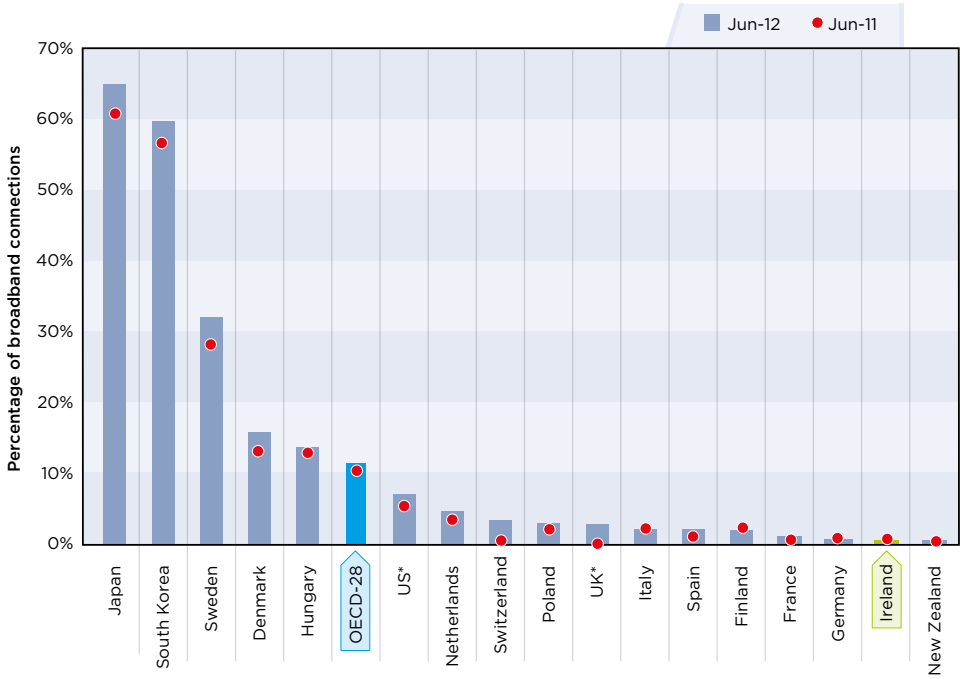
Source: US Bureau of Economic Analysis, Forfás calculations

Figure 33:
Perception of Overall Infrastructure (Scale 1-7), 2012



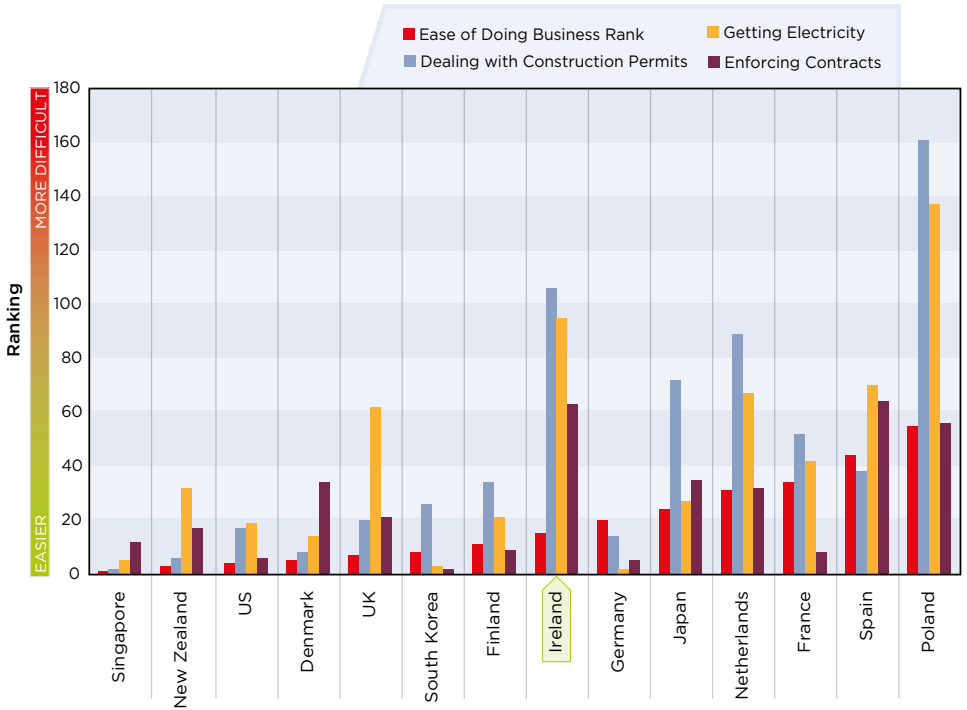
Source: World Economic Forum, 2012/2013

Figure 34:
Fibre Connections as a Percentage of Total Broadband Connections, June 2012



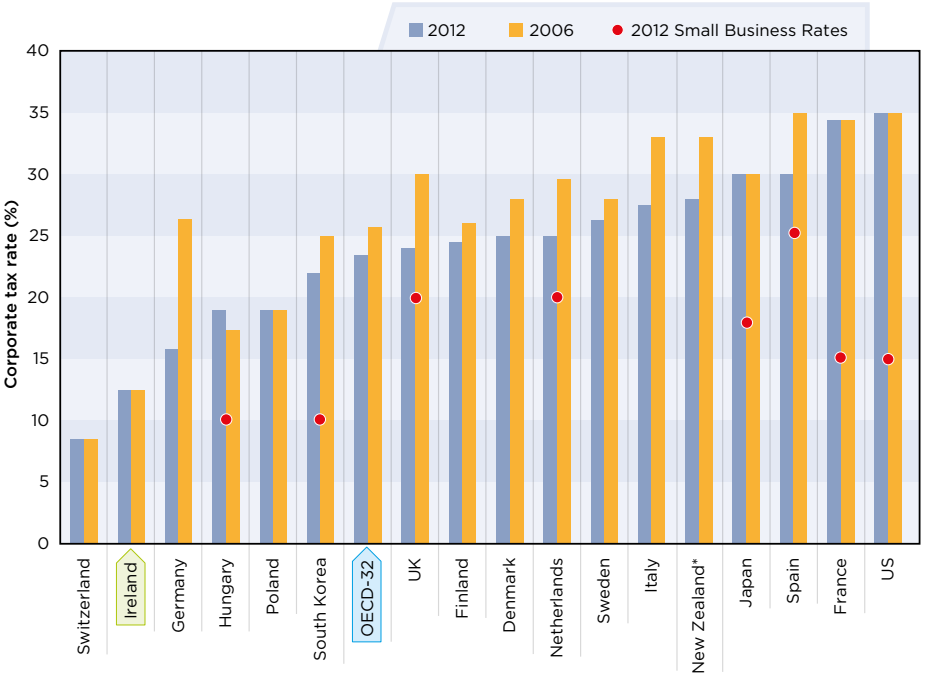
Source: OECD, Broadband Statistics

Figure 35:
Ease of Doing Business, 2012



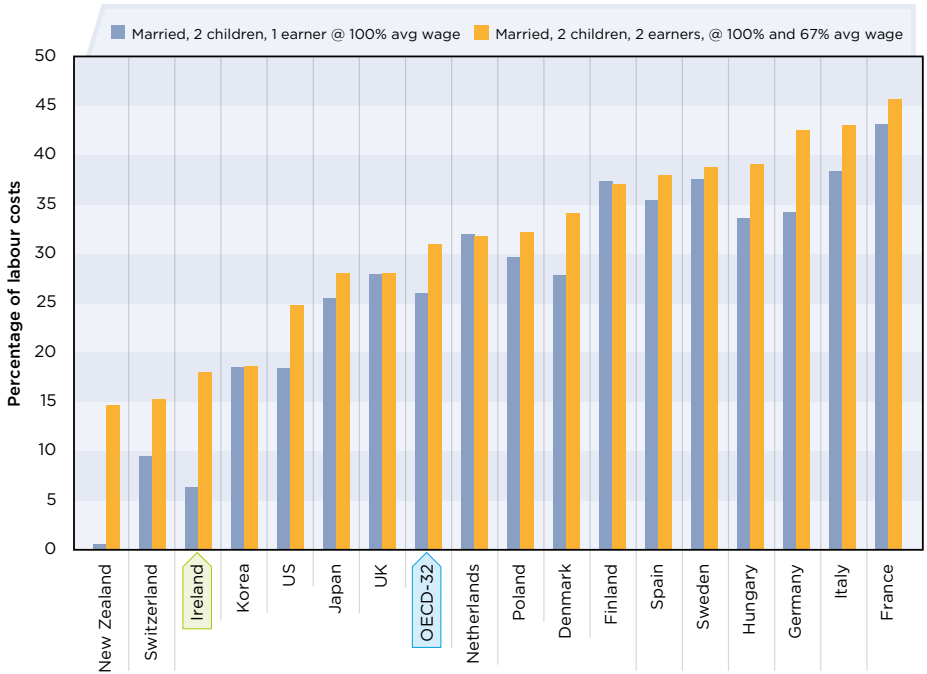
Source: World Bank, Doing Business 2012

Figure 36:
Central Government Corporate Income Tax Rate, 2012



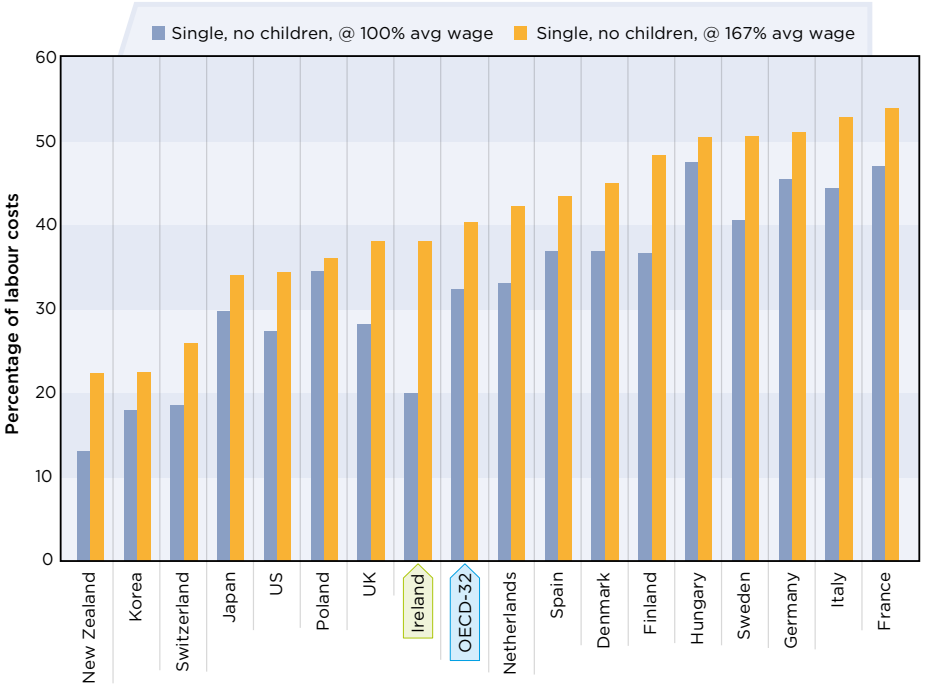
Source: OECD Tax Database 2013

Figure 37:
Income tax plus Employee & Employer Contributions (% of Labour Costs), 2011 Married



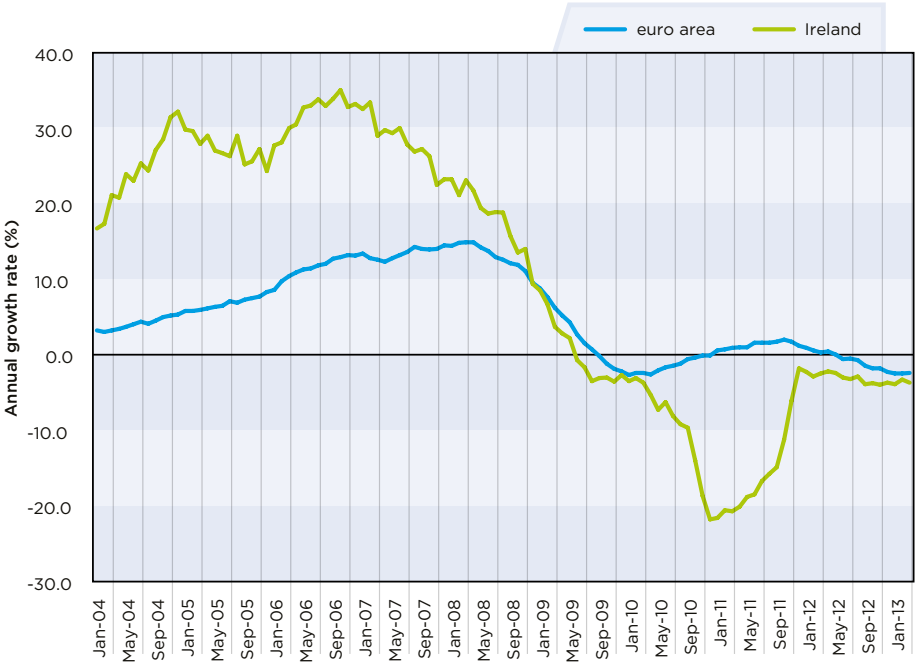
Source: OECD Tax Database 2013

Figure 38:
Income tax plus Employee & Employer Contributions (% of Labour Costs), 2011 Single



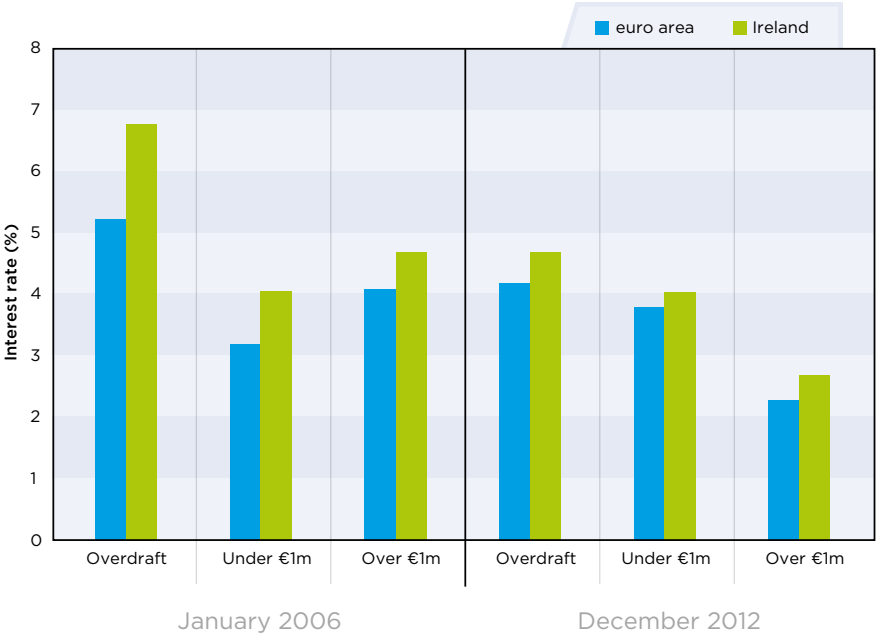
Source: OECD Tax Database 2013

Figure 39:
Annual Growth in Outstanding Credit to Non-Financial Corporations, Jan 2004- Mar 2013



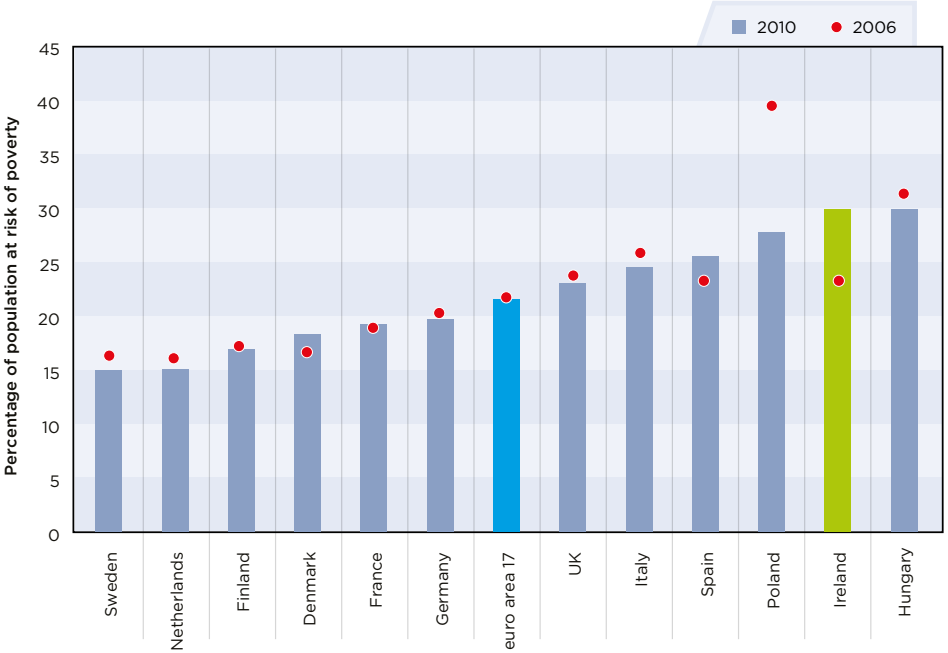
Source: European Central Bank

Figure 40:
Interest Rates Available to Non-Financial Corporations, 2006 and 2012



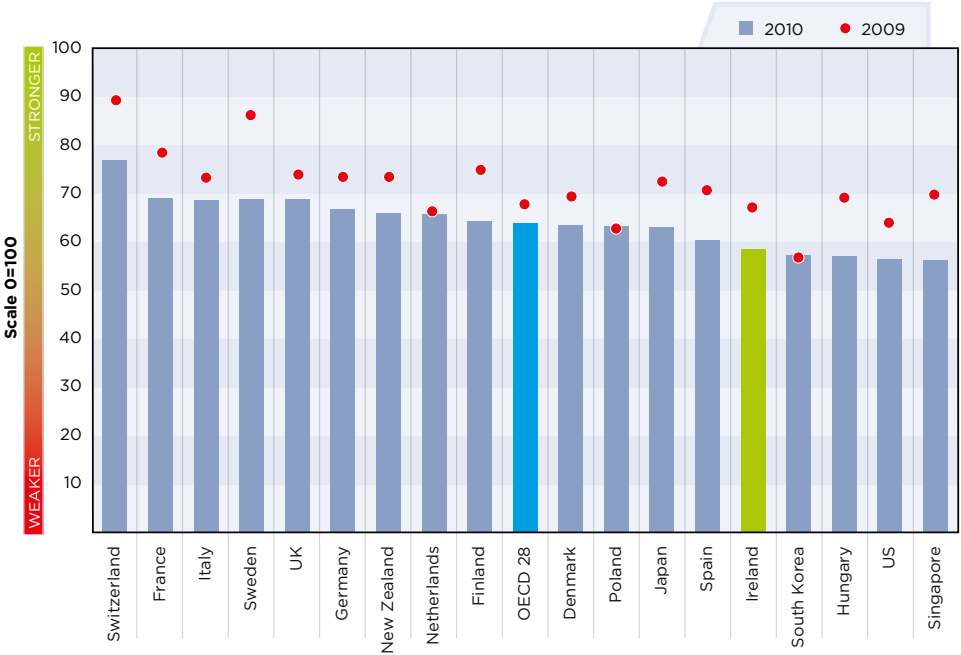
Source: European Central Bank

Figure 41:
At-risk of Poverty, 2011



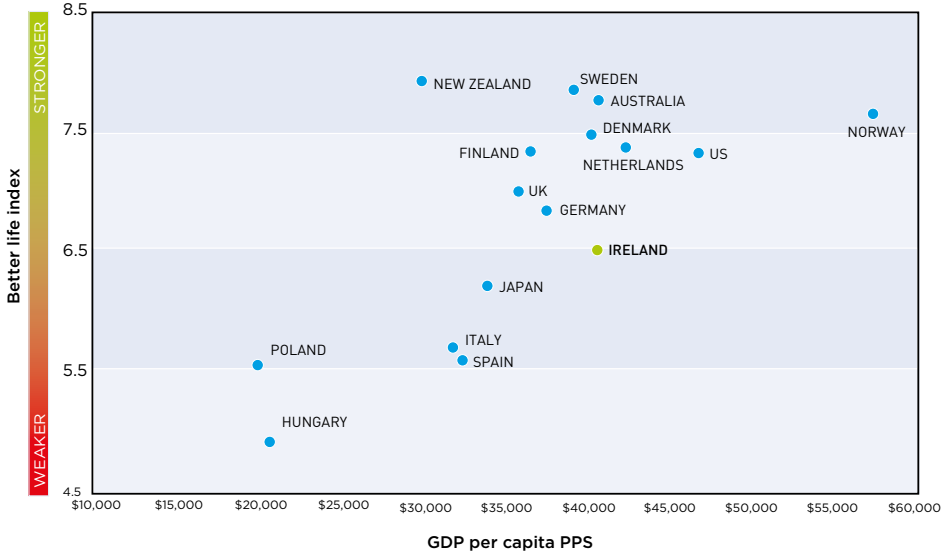
Source: Eurostat, Population and Conditions

Figure 42:
Environmental Performance Index (EPI),2010, (Scale 0-100)



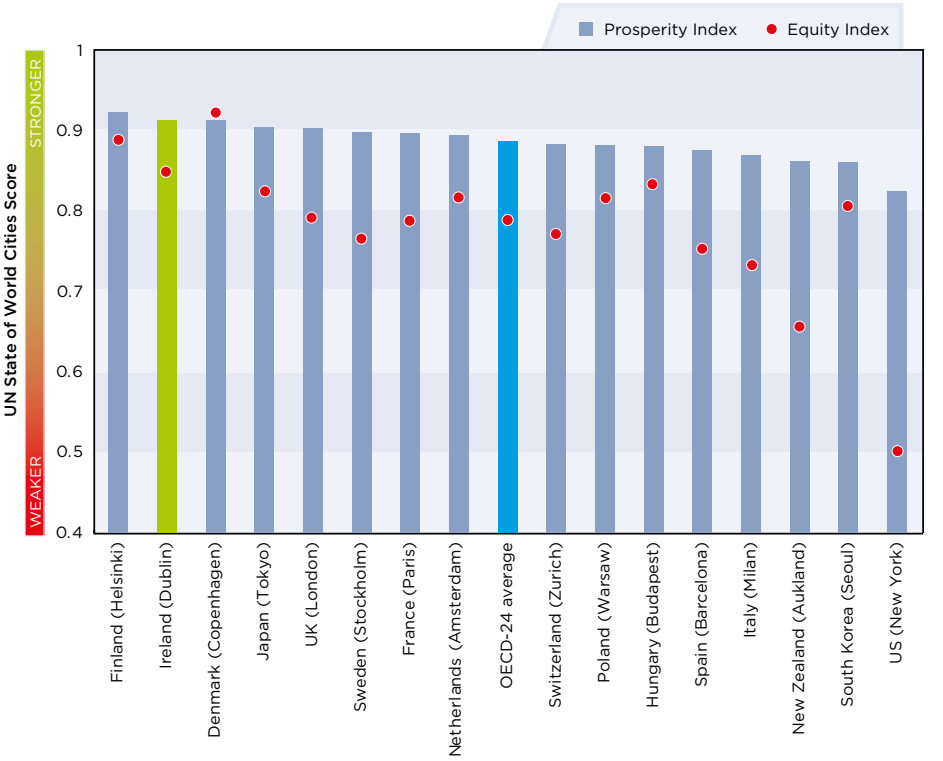
Source: Yale Centre for Environmental Law and Policy, 2012

Figure 43:
OECD Better Life Index and GDP per Capita PPP, 2011



Source: OECD Better Life Index, OECD Stat Extracts National Indicators

Figure 44:
UN City Prosperity Index



Source: UN Habitat, State of the World's Cities, 2012/2012

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Forfás
Wilton Park House
Wilton Place
Dublin 2
Tel: +353 1 607 3000
Fax: +353 1 607 3030
Website: www.forfas.ie
Email: info@forfas.ie

Forfás