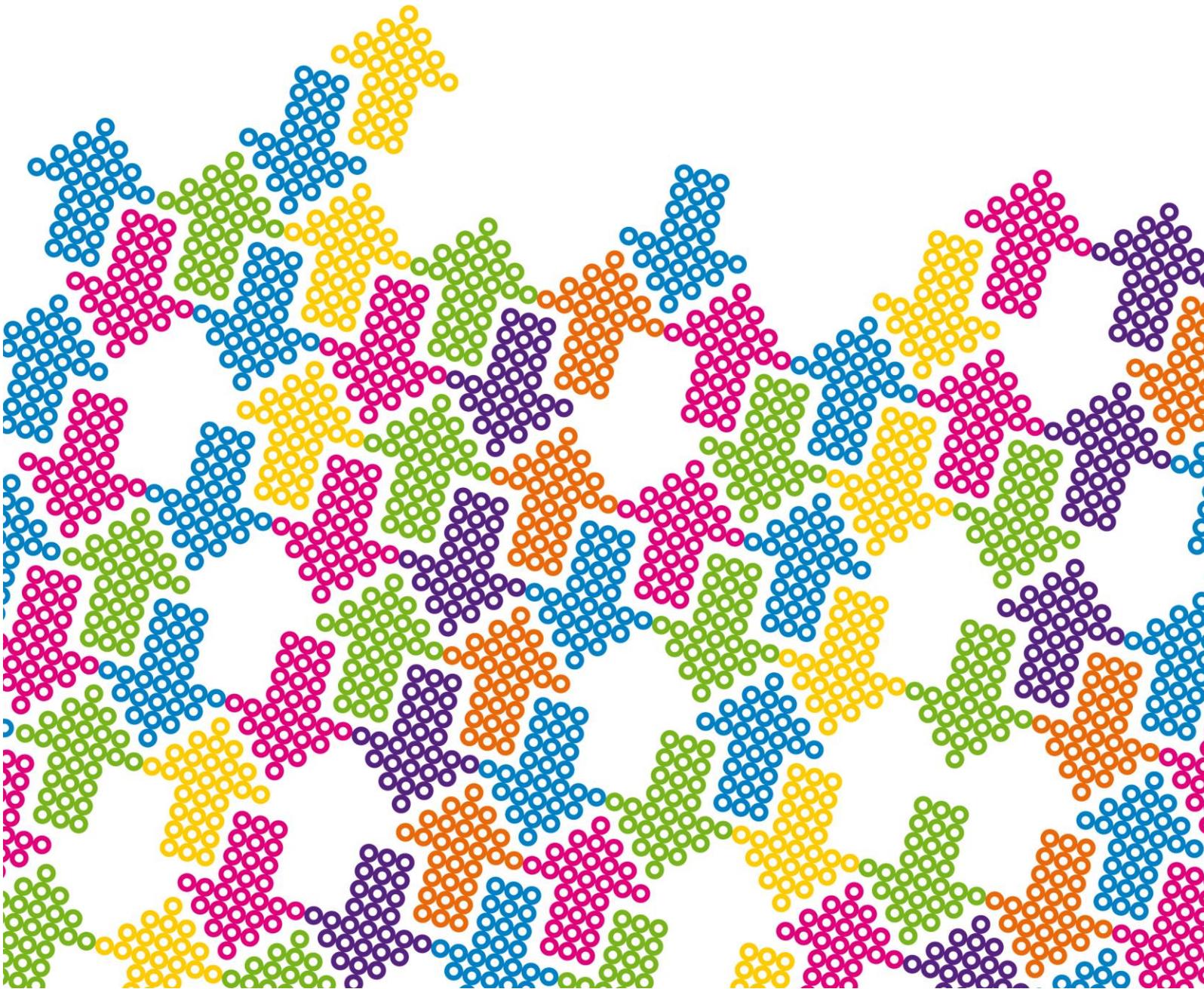




Ireland's Competitiveness Scorecard 2019

July 2019



Introduction to the National Competitiveness Council

The National Competitiveness Council (NCC) reports to the Taoiseach and the Government, through the Minister for Business, Enterprise and Innovation on key competitiveness issues facing the Irish economy and offers recommendations on policy actions required to enhance Ireland's competitive position.

In accordance with the European Council recommendation of September 2016 on the establishment of National Productivity Boards by euro area countries, in March 2018, the Government mandated the National Competitiveness Council as the body responsible for analysing developments and policies in the field of productivity and competitiveness in Ireland.

Each year the NCC publishes two annual reports:

- Ireland's Competitiveness Scorecard provides a comprehensive statistical assessment of Ireland's competitiveness performance; and
- Ireland's Competitiveness Challenge uses this information along with the latest research to outline the main challenges to Ireland's competitiveness and the policy responses required to meet them.

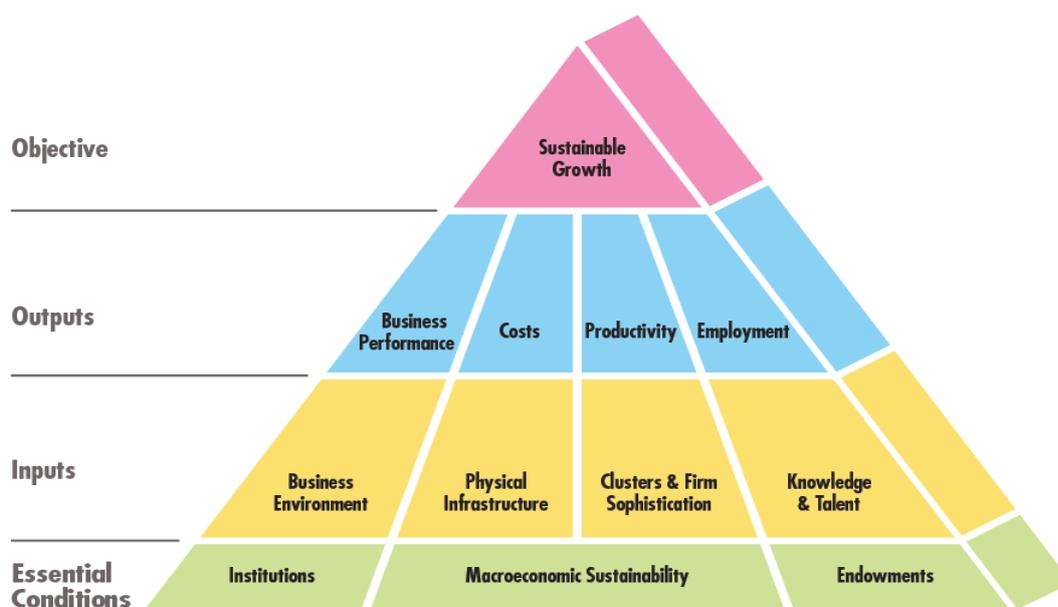
As part of its work, the NCC also publishes:

- The annual Costs of Doing Business report;
- An annual Productivity Review report; and,
- A series of competitiveness bulletins and other papers on specific competitiveness issues.

The work of the National Competitiveness Council is underpinned by research and analysis undertaken by the Enterprise Strategy, Competitiveness and Evaluation Division of the Department of Business, Enterprise and Innovation.

The NCC's Competitiveness Framework

The Council defines national competitiveness as the ability of enterprises to compete successfully in international markets. This is a significant factor influencing economic growth, jobs, wage rates and the quality of public services. National competitiveness is determined by a diverse range of factors. The Council uses an evidence-based "competitiveness pyramid" to illustrate the various factors (essential conditions, policy inputs and outputs), which combine to determine overall competitiveness and sustainable growth. Under this framework, competitiveness is not an end in itself, but a means of achieving sustainable improvements in living standards and quality of life.



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Pat Beirne	Chief Executive Officer, Mergon Group
Kevin Callinan	Senior General Secretary designate, Fórsa
Micheál Collins	Assistant Professor of Social Policy, University College Dublin
Isolde Goggin	Chair, Competition and Consumer Protection Commission
David Hegarty	Assistant Secretary, Department of Business, Enterprise and Innovation
Fergal O'Brien	Director of Policy and Chief Economist, Ibec
Seán O'Driscoll	President, Glen Dimplex Group
Margot Slattery	Country President, Sodexo Ireland
Martin Shanahan	Chief Executive, IDA Ireland
Julie Sinnamon	Chief Executive, Enterprise Ireland
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Chairman's Preface



This is my last preface as the Chair of the National Competitiveness Council and Ireland's National Productivity Board. I would like to record my gratitude to the Taoisigh and Ministers who, over the last five years, placed their trust in me to carry out this important independent role.

Ireland is a highly competitive economy

When I was appointed to the Council in 2014, Ireland was emerging from, arguably, the worst economic crisis in the history of the State and had exited the EU-IMF emergency funding programme less than two years previously. An export-led recovery in economic conditions followed and was underpinned by strong inward investment levels and a significant competitiveness improvement. This has resulted in Ireland now being ranked by the IMD as the 7th most competitive country in the world and the second most competitive country in the euro area. This is a significant achievement and, as the Competitiveness Council, it is important that we record this positive result.

The track record of the National Competitiveness Council

Over the last 5 years, the Council has made a significant contribution to the understanding, and improvement, of Ireland's competitiveness performance through the publishing of data, reports, bulletins and our recommendations for policy actions.

We have placed a particular emphasis on examining productivity performance and have taken on the role of Ireland's National Productivity Board on foot of a European Council agreement, and Irish Government decision, and have advocated for the importance of productivity at a European level. The Council has been successful in putting productivity at the centre of the debate around the future of Ireland's economy, and some of our key achievements in this space include: the productivity growth target in Enterprise Policy 2025; a new detailed data series on Irish productivity to be published by the CSO annually (which provides a more granular understanding of Ireland's productivity performance); and, the inclusion of productivity as a key pillar in the recently launched *Future Jobs Ireland 2019*.

The Council has also made progress on a number of specific areas of policy. Through our submission to the Action Plan for Jobs (2015 to 2018), we made recommendations on issues ranging from skills policy to taxation and from capital investment to the ease of doing business. The Council published new research and data on housing and rent affordability, and an index of Ireland's comparative costs with other locations, which provided input to the Housing Action Plan. The Council placed a particular focus on childcare costs in the NCC Challenge Report in 2015 and, subsequently, provided inputs from a competitiveness perspective to the Government initiative on the Single Affordable Childcare Scheme. The Council brought attention to the issue of legal service costs and influenced the Legal Services Bill based on the publication of an NCC Bulletin, albeit that the reform did not go as far as Members would have liked.

The Council highlighted, in good time, the escalating cost of insurance for businesses, which led to the establishment of the Cost of Insurance Working Group and instigated change based on recommendations arising. Following on from our observations around availability of credit, the Council raised awareness of the high cost of credit in Ireland (especially for loans less than €250,000) compared to the euro area. Various initiatives have been put in place since, e.g. the Micro Finance Ireland loan scheme and the Credit Guarantee scheme, although cost differentials still persist. The Council advocated for costs and competitiveness to be high on the agenda of the implementation Group for Foodwise2020.

The NCC placed emphasis on ensuring a focus, in 2016 and in 2017, on the coherence, coordinated delivery and monitoring of the National Planning Framework and the Government's Capital Plan, and prioritising investment to support competitiveness. Both were launched together, and a Project Ireland 2040 Delivery Board and project Tracker put in place. The Council successfully advocated for the inclusion of competitiveness as a central pillar in the Energy White Paper and we emphasised, in the National Climate Mitigation Plan, the need to 'competitiveness proof' initiatives and to ensure that energy-poverty

proofing, revenue recycling, and policies to induce behavioural change, accompany a time path for carbon tax increases. In addition to keeping competitiveness high on the political, economic and media agenda, these are some tangible examples of the impact of the Council.

The Future of the Council

The Council remains an important source of data, and its research output has been cited widely by, for example, the OECD, EU, Government Departments, IBEC, IDA, Enterprise Ireland, the SFA, ISME, and the American Chamber of Commerce. NCC outputs, and the Chair, are specifically consulted as part of the European Semester process and, since 2018, in its role as the National Productivity Board for Ireland. The Government's new economic pathway, 'Future Jobs Ireland 2019', is primarily aimed at enhancing productivity, sustainable jobs and building an innovative economy. The Council made a submission to Future Jobs at the end of 2018. Many of the Council's recommendations in its submission have been included as deliverables for 2019 and some others are already in progress, with a strong focus on those Council recommendations identified as key to improving SMEs productivity. The Council and I warmly welcome the commitment in Future Jobs Ireland 2019 to engage with the NCC by committing to respond formally, on an annual basis, to priority NCC recommendations and that, in its role as National Productivity Board of Ireland, the Council will be given the opportunity to review and comment on the progress of productivity-related deliverables in the Plan. I believe these commitments are strong evidence that the work of the Council not only keeps competitiveness and productivity high on the economic agenda but, also, that the Council's work will receive appropriate attention in the years ahead.

This is crucial given the challenges the Irish economy is likely to face in the coming years. As a small open economy, we are exposed to the actions of other countries in a way that many are not. Factors outside of our control (Brexit, US trade and taxation policy, Chinese economic performance, a global economic slowdown) will expose any weaknesses in the Irish economy. We need to ensure that growth is sustainable and make the most of the current positive economic climate to mitigate against these external threats.

Ireland's economy is exposed due to its reliance on a small number of firms

As one of the most open economies in the world, Ireland has been incredibly successful by building up areas of economic activity where we have a comparative advantage. However, this success presents its own challenges. Over time, the economy has become more concentrated in certain areas, leaving Ireland exposed to the performance of a small number of firms, trading in a relatively narrow range of products and services, and operating in a small number of sectors. Half of Ireland's exports go to the EU (including the UK), and over a quarter go to the US. Imports are similarly concentrated. A small cohort of firms delivers the vast majority of productivity performance and value add. The majority of firms, who provide the majority of the employment in the State, exhibit stagnant or declining productivity. Productivity growth is driven by a few sectors (professional services, manufacturing and ICT), while other sectors, such as construction, wholesale and retail, and accommodation and food sectors, have negatively impacted on productivity. Should there be negative shocks to the relatively few firms on which we rely, this would have a disproportionate impact on the whole economy.

Ireland is vulnerable to a worldwide 'price correction' in interest rates, energy costs and the environment

In the wake of the Global Financial Crisis, monetary policy was used as the primary policy lever to avoid a worldwide depression. Central banks around the world engaged in quantitative easing - pumping money into the world economy. We are now 10 years on from the depths of the economic crisis. Stimulated by continued low interest rates, equity markets around the world are approaching record highs. At some point, the world economy must be 'weaned off' cheap credit, but there are fears this would stifle a fragile world recovery. This leaves economies vulnerable if another crisis were to hit as the principal levers of monetary policy are already deployed. In Ireland's case, when we entered the economic crisis, the net public debt position was one of the lowest in the EU. This provided some headroom for the necessary (albeit insufficient) increase in public debt to manage the crisis. Despite a rapid economic recovery, public debt levels remain the highest in the EU leaving Ireland vulnerable in the face of any new crisis.

Climate change, amongst other environmental impacts, is resulting from a mispricing of the environment whereby, *inter alia*, low transport costs, cheap food and a disposable culture will have to be things of the past if global temperature increases are to be limited and innovation is to be incentivised. The economic incentives for individuals and firms to reduce carbon emissions are weaker than they need to be. Through international agreements, the Irish Government has committed to ambitious binding

targets. However, Ireland's greenhouse gas emissions are increasing (while they are decreasing in the across the EU), and we remain well below our EU 2020 target in terms of the share of renewables as an energy source in gross final consumption. The Council welcomes the Government's Climate Action Plan but Ireland will fail to meet its 2020 targets for greenhouse gas emissions and significant behavioural change will be required for Ireland to come anywhere near meeting its 2030 targets.

Forecasting is a minefield: Ireland is facing an inevitable competitiveness loss and a risk of overheating - or is it?

The Council is concerned with the prospect of the overheating of the Irish economy as capacity constraints drive price pressures and 'hidden inflation' in areas such as housing and commercial property, the cost of credit, insurance costs and business services, traffic congestion and sectoral wage inflation. There must be a relentless focus on keeping the cost of living down through the promotion of competition in markets, increased technology adoption, and regulatory reform. A virtuous circle between the cost of living, productivity and wage rates is critical for maintaining competitiveness and ensuring that jobs and wage rates are sustainable. The Council is particularly concerned that Ireland lags competitors in terms of lifelong learning (ensuring that the labour force continues to receive education or training over the course of their lifetime) and the fact that there appear to be high levels of skills mismatches (where people are either overqualified or underqualified for their jobs, or are not using their qualifications).

Competitiveness levers are the key

While the Council is concerned about overheating, we are equally concerned about the increasing economic storm clouds that are gathering. The headline economic figures present a positive picture of the Irish economy with the major risk being overheating. However, the figures do not capture the increasing downside risks. Hard Brexit, changes in US trade or tax policy, or a global economic slowdown could all disrupt the domestic Irish economy. Thus, Ireland is at risk from two different diseases. The good news is that the prescription for both is the same - a continued relentless focus on improving competitiveness.

Professor Peter Clinch

Chair, National Competitiveness Council

Executive Summary

On an annual basis, the National Competitiveness Council (NCC) assess the relative competitiveness of the Irish economy, flags any areas that may be a drag on competitiveness and where improvement may be required, and makes a series of recommendations to the Government on ways to tackle the issues identified to improve competitiveness. Given the range of matters that can impact on competitiveness, the NCC does this through a series of publications. The first three of the NCC's publications (the Cost of Doing Business Report, the Competitiveness Scorecard, and the Productivity Statement) focus on different aspects of Ireland's competitiveness performance. The NCC's final annual publication, the Competitiveness Challenge, builds on the evidence gathered in the previous reports and further research, and analyses specific issues in greater detail before making recommendations to Government on the best ways to tackle them.

This report, the Competitiveness Scorecard, builds on the evidence already presented in the Cost of Doing Business 2019 report, and the Productivity Statement 2018, adding a number of non-cost indicators that are assessed by the Council to inform the Council's view on how competitive the Irish economy is, and what issues the Council need to be aware of, and subsequently raise with Government, to ensure that Ireland's competitiveness position is safeguarded.

After a detailed examination of the available evidence, the NCC concludes that while the Irish economy remains internationally competitive, there are still several areas where more can be done to improve our overall competitiveness position.

Indicators of Competitiveness

The NCC recognises that competitiveness is a complex concept and it is the result of a multitude of different factors and policy decisions, some of which may not appear to have a large bearing on Ireland's economic position. This fact is also recognised by international observers, which is why the three most influential competitiveness indicators (IMD, WEF, and World Bank) are all composite indicators. Each one of these indicators comprises a large series of sub-indicators that measure a range of distinct structural policies (like the ease of enforcing a contract) that has an impact on competitiveness, assigns a score to this sub-indicator, and takes all these scores into account when calculating a final score.

While these rankings are subject to a whole range of methodological challenges and cannot be considered the final word in an assessment of a country's competitiveness, the results of the rankings can be informative in a broad sense.

Ireland continues to perform well in all these competitiveness rankings. Ireland is ranked as a top 25 economy in each indicator¹, and performs particularly well in the IMD rankings, where Ireland is ranked 7th (out of 63 economies). Ireland's performance in the rankings is of interest, but the overall trend in Ireland's position is potentially more significant. In the late 2000s, Ireland began to slide down the international rankings. However, since the early 2010s, Ireland's competitiveness rankings have improved.

This observation is supported by Ireland's Harmonised Competitiveness Indicator (HCI) figure (Fig 1.3), an indicator that gives a sense of the relative change in prices of goods and services in Ireland over time. This indicator points to a major loss in cost competitiveness from 2000 - 2009, followed by large competitiveness gains from 2010 onwards. This result is also reflected in a range of quality of life indicators and national income figures, where Ireland performs well.

While the Irish economy performs well in these aggregate indicators, there are still several areas where the performance of the Irish economy can be improved, and the sustainability of economic growth can be buttressed.

Sustainable Growth, Overheating and Concentration

It is forecast that Ireland's GDP will continue to grow quickly, while inflation remains subdued², though there are a number of downside risks for Ireland's economic growth. In 2019, domestic (and international) observers forecast that Irish GDP will grow

¹ WEF (23rd of 140); World Bank (23rd of 190)

² Department of Finance, Central Bank of Ireland, European Commission, IMF and OECD. For more information, see Table 1.2

by between 3.8% and 4.2% while inflation is forecast to be in the range of 0.7% to 1.3%. The Department of Finance and the Central Bank of Ireland also produce forecasts for GNP, which is forecast to increase at a similar level to GDP (between 3.7% and 4.0%). The most recent data, from Q1 2019, shows that the unemployment rate has continued its steadily downward trajectory and the seasonally adjusted unemployment rate was 4.6% in April 2019.

This is certainly welcome, but international threats remain, and domestically discussions have turned to the possibility that the Irish economy might start to overheat^{3 4} (or operate beyond capacity, which would undermine international competitiveness and threaten sustainable economic growth). This is likely to be a concern for the NCC in the coming years, as prices could rise unsustainably if the economy operates beyond potential.

This is not the only threat to sustainable growth. The Irish economy continues to be dependent on a small number of firms in a small number of sectors dominating Ireland's economic performance. This issue was raised by the Council in the Competitiveness Challenge 2018, which was published in December 2018, and the problem remains. Ireland's goods and services exports were dominated by a small number of sectors accounting for the bulk of exports. For goods, pharmaceuticals and chemicals accounted for 58% of Ireland's total goods exports, up from 45% in 2017. The services data suggest a similar concentration, with computer services dominating services exports in 2018 (43%), just below the 46% recorded in 2017.

The latest productivity data, which is set out in the NCC's 'Productivity Statement 2018' and has been referred to in the Competitiveness Challenge 2018, shows that Ireland is a very productive economy. However, a small number of firms deliver most of Ireland's productivity performance, while there are many domestic firms where productivity is stagnating.

In Ireland, public investment (at 1.9% of GDP) is still substantially below international peers (for example, the UK spends 2.4% of GDP on public investment). These below average investment figures may have contributed to the negative perceptions of Irish infrastructural quality exhibited in the WEF survey. However, the Council recognises that through the National Development Plan (NPD), the Government has recognised this issue and is acting, and notes that the Government faces a delicate balancing act to ensure that increase infrastructure investment does not push the economy towards overheating.

Ireland as a High Cost Economy

This divergence in productivity growth between top performers and the rest is a concern, especially in the context of the main finding of the NCC's 'Cost of Doing Business 2019' report, that Ireland is a high cost economy (albeit where prices are increasing slowly). Higher costs in general should not be an issue if productivity levels are higher, but if certain parts of the economy are not experiencing these higher productivity growth rates, they may be more affected by higher costs. Moreover, while average prices are increasing slowly, there are areas where Irish businesses face specific cost disadvantages relative to key competitor jurisdictions (including credit, business services, and commercial rents).

The Council is also concerned about the cost that businesses face in accessing insurance. In the absence of high-quality data, the Council is aware of substantial anecdotal evidence highlighting the serious issue of insurance costs. This has and continues to be an issue on which the Council has made recommendations to Government (including in the most recent Competitiveness Challenge).

Conclusions

All major indicators – the international competitiveness rankings, Ireland's Harmonised Competitiveness Indicator, productivity stats, GDP growth, and employment figures – suggest that the Irish economy is performing well in aggregate. However, there are still overarching areas that should be addressed. Productivity growth is concentrated in too small a number of firms, and more needs to be done to ensure that the right framework is in place to allow broad based productivity improvements across

³ 'Estimating Ireland's Output Gap: An Analysis using selected statistical filters' Department of Finance, December 2018

⁴ 'Fiscal Assessment Report' Irish Fiscal Advisory Council, June 2018

regions and sectors. Inevitably, this will take time to achieve, and Future Jobs 2019 – the first in a series of annual reports that outline the Government’s ambitions for the future of the economy – is a good first step towards achieving this.

The second area where improvements can be made is tackling areas where costs are out-of-line with the euro area, or OECD, average. The areas flagged in the NCC’s ‘Cost of Doing Business 2019’ report where the evidence suggested costs were out-of-line with international data were credit, commercial rents, and business services. Internationally comparable data is unavailable for business insurance, but anecdotally it is clear that this is still an area where increasing prices are putting pressure on businesses.

These are not new issues - the Council has raised these issues previously and made a series of recommendations to Government in the ‘Competitiveness Challenge 2018’. While the recommended policy actions (like many structural reform measures) may be difficult to implement, the Council believes that delivering broad-based productivity growth will ensure the sustainability and prosperity of the Irish economy.

How Ireland Performs

This section provides a high level overview of the main findings of each chapter.

Sustainable Growth

On some measures, the evidence suggests that the Irish economy is delivering sustainable growth for its citizens. Three indices⁵ that the Council looks at to estimate the quality of life in Ireland all suggest that Ireland continues to be a good place to live, which is supported by the figures for national income (median equivalised disposable income in Ireland (€22,900) is above the euro area and EU average. However, the story is more nuanced for environmental sustainability. For example, in Ireland, greenhouse gas emissions per capita (13.5 tonnes)⁶ were significantly higher than the EU (8.7 tonnes) and the UK (7.9 tonnes). Compounding this, renewable energy accounts for only 11% of total consumption, which compares unfavourably with the EU average (18%), and Ireland's climate target of 16%.

Business Performance

Ireland is a small open economy. Total trade (imports plus exports) account for 178% of GDP, significantly higher than the EU (77%) and the UK (54%). However, international openness appears to be concentrated in a few key sectors, and a few key export markets. This issue of export concentration has been flagged by the Council previously and remains an issue. In 2018, Irish goods exports were dominated by two sectors, pharmaceuticals and chemicals, which accounted for 58% of total goods exports (up from 45% in 2017). The services data suggest a similar concentration, with computer services dominating services exports in 2018 (43%), just below the 46% recorded in 2017.

Productivity

In the long run, productivity growth is the main driver of improvements in living standards and a key determinant of the sustainable wage level. Given the central importance of productivity, the Council produces a 'Productivity Statement' annually where this topic is discussed in greater detail. The 'Productivity Statement 2018' noted that Ireland's labour productivity (measured by GDP per hour worked) is above the OECD average. However, there this aggregate measure of productivity masks several underlying issues, and on a GNI* basis, Ireland's labour productivity is below some selected frontier economies (like Germany and the US), though still slightly above the UK, Japan and the OECD average. While not uncommon in OECD countries, the observation that a narrow base of enterprises in high value-added sectors, and within sectors, disguises many underperforming firms where productivity growth is stagnant or falling is more pronounced in Ireland.

Prices and Cost

The NCC also considers prices and costs in a separate report, the 'Cost of Doing Business' report to allow for a more detailed analysis of the issues. The 'Cost of Doing Business 2019' report's headline conclusion was that Ireland is a high cost economy (prices are 13% that the EU average), where average prices were increasing slowly (in 2018, Irish prices increased by 0.7%, the slowest rate in the euro area). There are several areas where prices appeared to be out-of-line with international rates, such as the cost of credit, commercial property, and business services.

⁵ The OECD's Better Life Index, the UN's Human Development Index, and the Sustainable Development Solutions Network's Ranking of Happiness.

⁶ CO₂ emissions per capita

Employment

Employment continues to improve. In Q1 2019, there were over 2.3mn people employed in Ireland, which represents an annual increase in employment of 3.6%. Headline, and long-term, unemployment rates have continued to trend downwards, with unemployment at 4.6% in April, and long-term unemployment at 1.7%. While this represents a significant improvement in the labour market, there are still issues, and the evidence suggests that there are substantial numbers of skills mismatches⁷ in the Irish economy. Survey results suggest that almost half (44%) of Irish workers have skills mismatches, which is much higher than the EU average (33.5%) and the OECD average (35.7%).

Business Environment

The business environment section examines the conditions within which enterprises must operate. Benchmarked themes include the cost and availability of credit and the taxation system. The supply and demand for credit has improved significantly since the height of the crisis, and the most recent data suggests that only 8% of SMEs considered access to finance as the most pressing concern that their business faced (compared to 24% in 2011). In S2 2018, only 19% of Irish SMEs applied for bank credit - lower than the euro area average (27%), and among them only 70% were successful in receiving the full amount requested compared to the euro area average (72%).

Physical Infrastructure

The availability of competitively priced, world-class infrastructure and related services is critical to support competitiveness. Perceptions regarding the overall quality of Irish infrastructure remain low. Ireland's score in international competitiveness rankings fell over the last five years, and in 2018, perceptions of Irish infrastructure were below the UK and the EU. In 2017, Government investment as a percentage of GDP in Ireland (1.9%) was significantly below the Netherlands (3.1%) and the UK (2.4%). However, the National Development Plan has set out the Government's plan to invest €116bn between 2018 and 2027, which should contribute to improving Ireland's performance in this area.

Clusters and Firm Sophistication

The European Commission's Cluster Mapping tool indicate that the quality of the regional entrepreneurial and innovation ecosystem ranks above the EU average, with a strong showing in Tertiary Education and SME innovation. However, the Irish regions, like Ireland as a whole, have a low score for lifelong learning and R&D expenditure. The perceived state of Irish enterprise business sophistication is good – and Ireland is ranked 14th in the world on this metric – above the euro area average, but just below the UK (with is ranked 12th). The EU Digital Economy and Society Index, which tracks the evolution of digital competitiveness, shows that Ireland is digitally competitive (7th in Europe). Ireland outperforms the European average in four of the five indicators, and ranked first in Europe in the integration of digital technology by businesses indicator.

Knowledge and Talent

The availability of knowledge, talent and skills are important for growth performance, and Ireland has a well-educated workforce. In 2017, almost half (46%) of the working age population had third level education, and over a third (36%) had upper secondary education. However, the proportion of the population with below secondary education (18%) was higher than the best performing countries, Poland (8%) and the US (10%). However, given the pace of technological change, it is increasingly important that people do not stop learning once in the workforce, and lifelong learning is a fundamental part of this. In Ireland, 12.5% of people aged 25-64 received formal (or informal) education or training. While this is above the EU average (11.5%), it is

⁷ A situation where employees are either underqualified or overqualified, or had a different skill set from the one required by the employer.

far below the Nordic countries, and the top performer, Switzerland (31.6%). As mentioned previously, the skills mismatch is also important in this regard.

Institutions

Institutional quality is difficult to measure, and almost impossible to compare across countries, but the Council focuses on the burden of regulation on businesses, perceptions of the quality of public services, and regulatory effectiveness. On this basis, Ireland has well-functioning institutions that support the economy. Moreover, the World Governance Indicator, which measures perceptions of Government effectiveness show that Ireland performs around the EU average, but below the UK.

Macroeconomic Sustainability

The macroeconomic environment plays a vital role in determining the sustainability of economy growth. The Council monitors a range of indicators on this topic, including the components of growth, Government finances, and the overall debt to income ratio. In Ireland, while Government debt (as a percentage of GDP) has fallen from 77% in 2015 to 65% (2018), measured on a per capita basis, Ireland has the highest debt level in the EU (at €43,000), much higher than the euro area average (€29,000) and Greece (€31,000). In 2018, Ireland ran a 1.8% current account surplus⁸.

Endowments

The productivity-based view of competitiveness emphasises the importance of endowments – natural resources, geographic location, demographics and size – and the role that they have in determining national competitiveness performance. While such factors cannot easily be impacted by policy, it is important to be aware of them for their impact on competitiveness. In 2018, Ireland continued to have the youngest population in the euro area – the median age in Ireland is 37 years old – compared to the UK (40), the EU (43) and the euro area (44). Net migration into Ireland has also risen steadily in the last five years, and in 2018, it was 34,000 with 90,300 people arriving and 56,300 leaving. Population density in Ireland has rising in the last 10 years, to 70 persons/km², but is significantly below the UK (272.4) and the EU (117.7).

⁸ Referencing the modified current account as a percentage of GNI* figures presented by IFAC.

Chapter 1. Ireland's Competitiveness Performance and Outlook

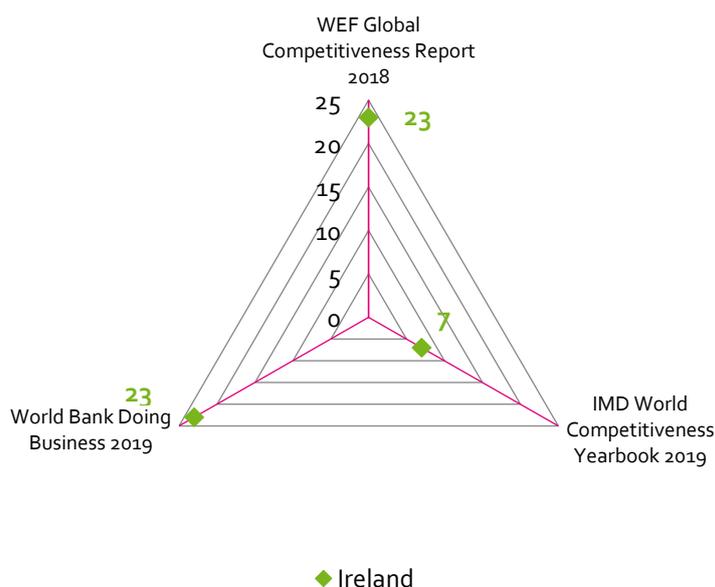
Ireland's Competitiveness Scorecard is one of several reports produced by the National Competitiveness Council annually. The Scorecard, along with the NCC's Cost of Doing Business report and the Productivity Statement, are designed to assess how competitive the Irish economy is relative to international peers and diagnose potential issue areas. These reports also build an evidence base that the Council uses in the Competitiveness Challenge, the NCC's main policy document, which makes policy recommendations to Government on ways to improve competitiveness.

1.1 International competitiveness performance

Competitiveness is a complex concept incorporating a myriad of interlinked and interdependent factors. To reflect this complexity, Ireland's Competitiveness Scorecard analyses a wide range of indicators, each capturing a different aspect of Ireland's competitiveness performance. These indicators measure a range of inputs, outputs and outcomes. Given the varied nature of these indicators, the National Competitiveness Council does not attempt to create a single quantifiable measure of competitiveness – rather, each indicator is assessed individually. Subsequently, the Council takes a holistic view of all the indicators to present a comprehensive picture of Ireland's international competitiveness performance.

Figure 1.1 presents Ireland's position in the three main international competitiveness rankings. As shown in the chart, Ireland performs well in each of these rankings.

Fig. 1.1 Overview of Ireland's International Rankings



Source: WEF, WB, IMD

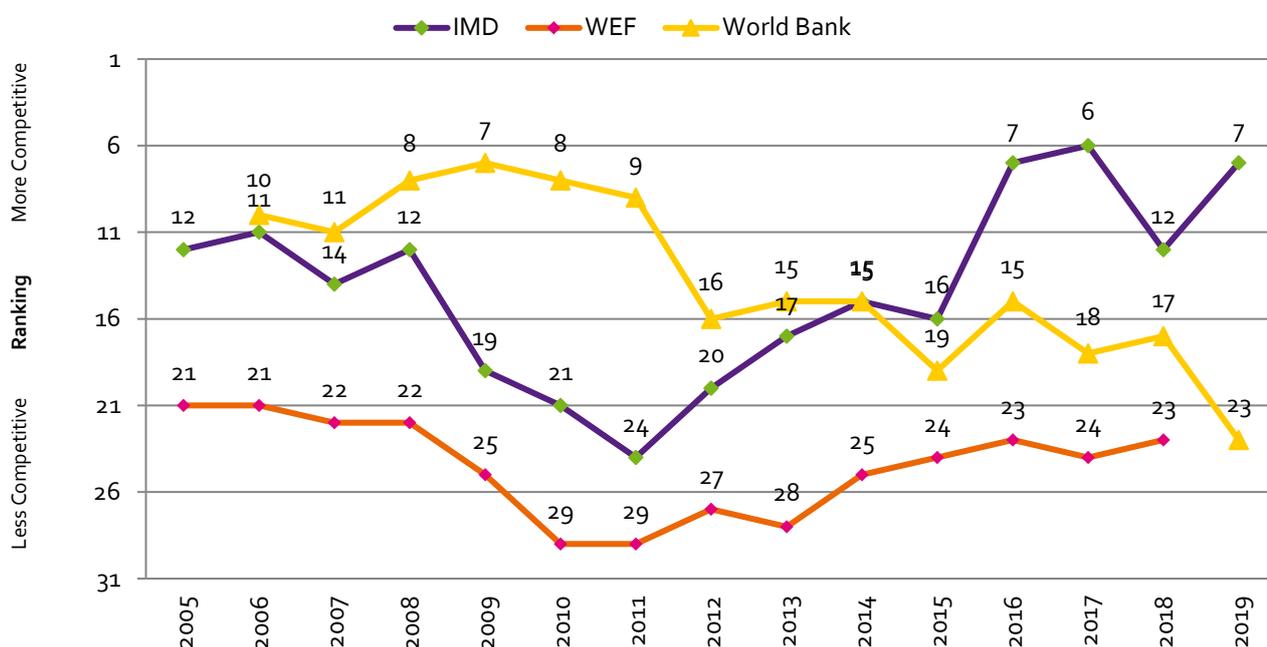
Indices and rankings are useful, if imperfect, measures of competitiveness performance. As the rankings are relative, in some instances, the change in Ireland's ranking is not a question of absolute deterioration or improvement in the various categories, but rather a matter of other countries improving their position relative to Ireland. Advanced economies such as Ireland, at the upper end of the rankings, can find it harder to get high impact from their reforms due to their already robust performance (i.e. as a country approaches the best performing economies, it becomes more difficult to make improvements). In addition, the methodology, surveys and data used in these benchmarking reports differ significantly. Methodologies are frequently revised, and this can have an impact on Ireland's ranking.

Figure 1.2 examines how Ireland's position in the three major international competitiveness rankings has evolved over time. In the run up to the Global Financial Crisis (and in the first years of the crisis), the rankings universally show a loss of competitiveness. Since the early 2010s, a more nuanced picture has emerged. The rankings from the Institute for Management

Development (IMD) and the World Economic Forum (WEF) have trended upwards, suggesting that Ireland has recovered some of the competitiveness that the economy lost during the recession. In contrast, the World Bank's ranking paints a somewhat less optimistic picture, with Ireland's fall in the rankings continuing (though continuing to rank highly overall).

The 2018 WEF Global Competitiveness Report currently ranks Ireland as the 23rd most competitive economy globally (remaining the same from the previous year), while Ireland is currently placed 7th in the IMD rankings, an improvement of 1 place from the previous year. The World Bank Doing Business report places Ireland 23rd out of 190 economies – a decline of six places from the previous year. This decline was largely due to a decline in Ireland's score in the sub-indicator that looks at the cost of registering a commercial property. The report noted that the increase in stamp duty on non-residential property transfers made property registration costlier. Globally, Ireland is a top 20 performer in the sub-indicators measuring paying taxes (ranked 4th), starting a business (10th), protecting minority investors (15th), and resolving insolvency (18th). Ireland ranked lower in trading across borders (52nd), getting electricity (43rd), and enforcing contracts (102nd).

Fig. 1.2 Ireland's global competitiveness rankings, 2005-2019



Source: WEF, WB, IMD

1.2 Harmonised Competitiveness Indicators

Harmonised Competitiveness Indicators (HCIs) are also a useful way of illustrating an economy's competitiveness performance. HCIs deflate relative exchange rates by the relative change in average prices to give a sense of how cost competitive an economy is at any given moment. When the real HCI trends upwards, it suggests that prices in the domestic economy (when taking exchange rates into account) are increasing faster than prices in other jurisdictions, making an economy look less competitive. When the real HCI trends downward, the opposite is the case, suggesting an overall competitiveness improvement.

Figure 1.3 reveals two broad trends. First, between 2000 and 2008, the Irish economy experienced a substantial loss of cost competitiveness, with Irish prices increasing much faster than prices in other jurisdictions. Second, from 2008, the Irish economy has experienced substantial improvements in cost competitiveness.

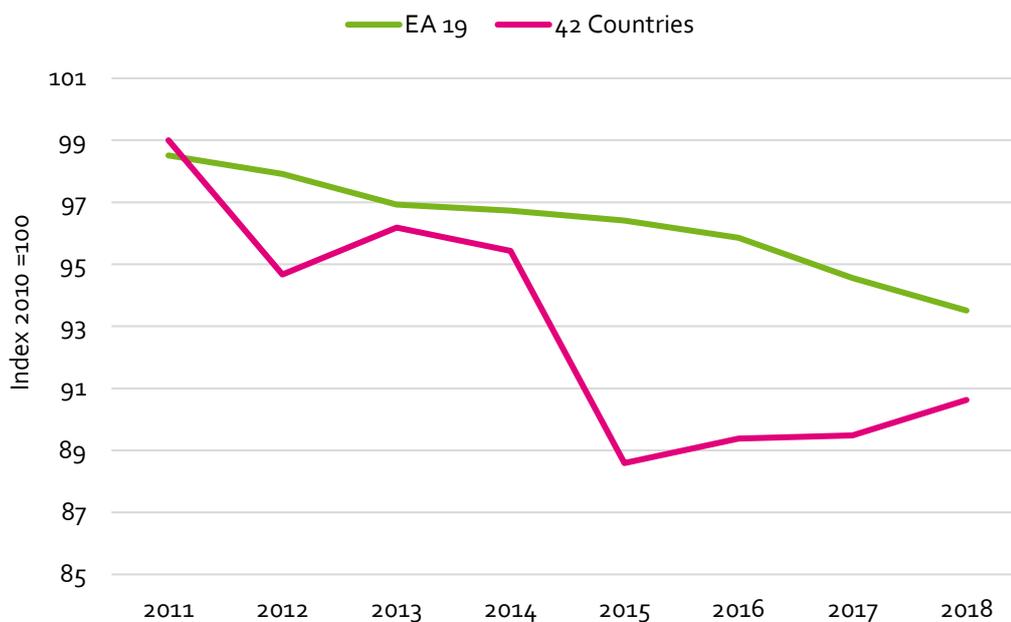
Fig. 1.3 Harmonised Competitiveness Indicators, Ireland, February 2012-February 2019



Source: Central Bank of Ireland, HCI Statistics

Factors outside of the control of Irish policy makers and enterprises, such as exchange rates, exert a considerable influence on national competitiveness and the cost base for enterprises located in Ireland. Favourable exchange rates, vis-à-vis Ireland's main trading partners, make firms based in Ireland more cost competitive and make international trade more profitable. As a large proportion of Ireland's exports are sold to countries outside the euro area (the UK, and the US), exchange rates are likely to have a greater impact on Ireland's relative international competitiveness than is the case in many euro area countries.

Fig. 1.4 Real effective exchange rate (REER), Ireland, deflated by CPI, 2011-2018



Source: Eurostat, Effective exchange rate indices

The Real Effective Exchange Rate (REER) is an index that tracks the change in a country's exchange rate relative to changes in relative inflation rates. Like the HCI, if the REER is trending downward, it suggests an improvement in cost competitiveness. Figure 1.4 suggests that Ireland has become more cost competitive relative to both the euro area, and a wider group of economies, since 2011.

1.3 Economic Outlook⁹

The Irish economy is in its strongest place since the Global Financial Crisis. With estimated GDP growth of 6.7 percent (GNI* at 4.5 %) in 2018, Ireland continues to outperform the rest of the euro area, the EU and other major global economies. Post-crisis lows in unemployment rates¹⁰ (4.4%), the ongoing dynamic performance of the labour market (employment up by 2.9% y-o-y), the highest number of people in employment on record and increases in income tax receipts (6.5% - end March 2019), are compelling evidence of this.

As a small open economy, the evolution of global economic and trading conditions has an important bearing on Irish economic prospects. Ireland remains vulnerable to developments in the global economic environment, and in the last few quarters this landscape has become more challenging for Ireland's growth prospects. The global economy has continued to expand, but the momentum has slowed amid high uncertainty - increase in trade tensions and tariff hikes between the United States and China, European economy impacted by slow growth in Germany and Italy, weakening financial market sentiment, trade policy uncertainty, and concerns about Brexit.

⁹ The projections set out in this document are contingent upon a 'soft' exit of the UK from the EU.

¹⁰ Figure for May 2019, CSO

Owing to the weak and uncertain external environment, GDP growth in Ireland is forecast to moderate in the coming years. The European Commission forecasts for economic growth for Ireland together with our major partners are shown in the table 1.1.

Table 1.1: Economic Growth Outlook (Annual percentage change), European Commission¹¹

	2018	2019	2020
World	3.6	3.2	3.5
EU-27	2.1	1.4	1.7
Euro area	1.9	1.2	1.5
Ireland	6.7	3.8	3.4
Germany	1.4	0.5	1.5
France	1.6	1.3	1.5
Italy	0.9	0.1	0.7
UK	1.4	1.3	1.3
US	2.9	2.4	1.9
China	6.6	6.2	6.0
Japan	0.8	0.8	0.6

Source: European Commission Spring 2019 Forecast

The European Commission forecast is that underlying economic activity in Ireland is projected to remain relatively solid and will continue to grow at a fast pace. The Irish economy is forecast to grow by 3.8 per cent in 2019 and 3.4 per cent in 2020. However, prospects for growth in Ireland’s main trading partners are lower with the global economy forecast to expand by 3.2 percent and the euro area by 1.4 percent this year. The short-term economic growth outlook for major euro area countries like Germany, France and Italy as well as the UK and the US remains modest.

Comparison of Forecasts

Table 1.2 shows the domestic and international short-term forecasts on a number of key economic variables. As shown, the forecasts from all institutions suggest that the underlying economic activity in Ireland will remain robust in 2019. These reports do flag a number of downside risks that would act to slow growth, especially the consequences of a hard Brexit.

¹¹ https://ec.europa.eu/info/sites/info/files/economy-finance/ecfin_forecast_spring_070519_overview_en_o.pdf

Table 1.2: Forecast Annual percentage change key indicators, Ireland, 2019

	GDP	GNP	HICP
Department of Finance	3.9	3.7	0.9
Central Bank of Ireland	4.2	4.0	0.7
European Commission	3.8	NA	1.0
IMF	4.1	NA	1.2
OECD	3.9	NA	1.3

Source: Various Bodies¹²

The Irish GDP and GNP is forecast to grow in 2019 by all institutions albeit at more moderate pace than 2018. The range of forecasts extends from 3.8 per cent to 4.2 per cent.

On the domestic front, despite the tightening labour market, inflation is expected to increase only moderately. Conditional on the current oil prices trend, the Central Bank predicts the headline HICP inflation to average 0.7 per cent in 2019 as lower energy prices offset a pickup in services inflation. For 2019, the range of forecasts for HICP extends from 0.7 per cent to 1.3 per cent.

The OECD forecast Irish GDP to grow moderately in 2019 (3.9%), compared to the strong rates recorded in recent years owing to the increasing capacity constraints, especially in the construction sector, and weaker external conditions. The report warns that a disorderly conclusion of Brexit negotiations could plunge the Irish economy into a recession.

¹² <https://www.gov.ie/en/publication/eg7b68-stability-programme-update-2019-april-2019/>
<https://www.centralbank.ie/docs/default-source/publications/quarterly-bulletins/qb-archive/2019/quarterly-bulletin-q2-2019.pdf>
https://ec.europa.eu/info/sites/info/files/economy-finance/ecfin_forecast_spring_070519_overview_en_o.pdf
<https://www.imf.org/en/Publications/WEO/Issues/2019/03/28/world-economic-outlook-april-2019>
<http://www.oecd.org/economy/ireland-economic-snapshot/>

GDP components and Labour market

Table 1.3: Annual percentage change in the components of the Irish economy, 2018-2022

	2018	2019	2020	2021	2022
Real GDP	6.7	3.9	3.3	2.4	2.5
Real GNP	5.9	3.7	3.1	2.2	2.3
Exports	8.9	5.2	4.5	3.7	3.6
Imports	7.0	5.9	5.0	4.4	4.2
Personal Consumption	3.0	2.7	2.5	2.1	2.3
Government Consumption	6.4	3.9	2.7	2.0	2.0
Investment	9.8	6.9	5.5	4.2	4.1

Labour Market (Annual percentage change, unless stated otherwise)

Employment	2.9	2.2	2.1	1.5	1.6
Unemployment rate (%)	5.7	5.4	5.2	5.3	5.2
Labour Productivity (GDP per hour worked)	3.1	1.5	1.0	0.7	0.7
Labour Cost (per employee)	2.5	3.0	3.2	3.3	3.5

Department of Finance, Stability Programme Update 2019

Department of Finance forecasts economic growth in Ireland to moderate to a more sustainable rate over the medium term. The forecast is for headline GDP to increase by 3.9 per cent in 2019 reflecting the less favourable economic prospects in key export markets like the euro area and the UK. Gross national products (GNP) – output of a country's residents regardless of the location of the actual underlying economic activity– is forecast to expand by 3.9 per cent in 2019. For 2020, both GDP and GNP are projected to increase at a rate of 3.3 and 3.1 per cent respectively.

Against a backdrop of slowing external demand, Irish exports are forecast to grow by 5.2 per cent this year and 4.5 per cent in 2020. The forecast for overall consumption suggests that consumer confidence will falter in the medium terms with both growth in personal and government consumption projected to slow down. Owing to this slowdown, imports are projected to drop to 5.9 in 2019 and to 5.0 per cent in 2020. Total investment is projected to increase by just under 7 per cent this year largely on the assumption of positive contributions from private and public sector.

Further gains in employment are forecast this year, with employment expected to increase by 2.2 per cent. The unemployment rate has fallen dramatically in recent years and was 5% in Q1 2019. In the medium term, the unemployment rate is expected to average around just over 5 per cent.

After several years of modest to static earnings growth, evidence from recent quarters points to an acceleration in wage inflation. As the labour market is expected to tighten further, it is projected that the labour cost per employee will increase by 3

per cent in 2019 and 3.2 per cent the year after. Labour productivity is forecast to average around 1 per cent in the next three years.

Overall, the outlook for the Irish economy remains positive but several challenges lie ahead – possible risk of domestic overheating and capacity constraints on the one hand, and a slowdown in key export markets on the other. In addition, the UK’s forthcoming exit from the European Union continues to cast a shadow over prospects. Charting a course through the next few years will be challenging.

Chapter 2. Sustainable Growth

Competitiveness is not an end in itself but is a means of achieving sustainable improvements in growth and living standards. The Council monitors progress on this goal by assessing economic, social, and environmental dimensions of societal wellbeing. In Ireland, and internationally, there is increasing interest in benchmarking quality of life improvements, and monitoring living standards, income levels, health, and life expectancy. The Scorecard benchmarks three elements of sustainable growth: quality of life; income; and, environmental sustainability.

Quality of Life: A key objective of competitiveness is to support a high quality of life, which is broader than material living standards. Several international organisations produce indices that attempt to capture these broader factors that are not always captured by headline economic indicators.

- The Council monitors three indices designed to measure well-being, and in all three of these indices, Ireland performs well relative to other countries:
 - The **OECD's Better Life Index** uses a combination of economic indicators (like employment and income) and 'soft' indicators (like civic engagement and work-life balance) to provide a fuller picture of the quality of life in different economies. The latest data (2017) shows that Ireland performs well in several indicators – especially education, safety and environmental quality.
 - The **UN's Human Development Index** measures average achievement in three basic dimensions of human development: a long and healthy life (measured by life expectancy at birth); knowledge (years of schooling); and, a decent standard of living (GNI/ capita). Ireland (with an overall score of 0.938) is one of the best performers in the world. This score placed Ireland ahead of the UK (0.92) and the OECD average (0.89).
 - The **UN's Sustainable Development Solutions Network's Ranking of Happiness**, which uses survey data to estimate whether the population of an economy are living their best possible life, ranks Ireland 16th (out of 156 countries).

National Income: High and rising incomes are a key measure of the success of national competitiveness. While higher incomes are not the only elements for a happy life, they are an important factor. This is demonstrated by the fact that it is included in the two composite quality of life indicators above (OECD, UN HDI). The indicators in this section cover the level and growth of Ireland's national income.

- Ireland's exceptionally strong economic growth in recent years has been reflected in GDP per capita. In 2017, Ireland's GDP per capita was one of the highest in the EU. However, as Ireland's GDP figures are prone to distortions from activities of multinational, the Council also examined Ireland's modified GNI (GNI*) per capita. Ireland's GNI*/ capita performance places Ireland more in line with the OECD and euro area GDP/ capita averages.
- The median equivalised disposable income – defined as the total income of a household divided by the number of household members – in Ireland (€22,900) has increased by over 15% in the four years to 2017, was above the euro area (€18,700) and the UK (€21,000). However, the Nordic countries and the Netherlands substantially outperform Ireland in this indicator. Denmark is the best performing EU country with a median equivalised disposable income of €29,380.

Environmental Sustainability: Ensuring that economic growth is environmentally sustainable is crucial. The essence of environmental sustainability is a stable relationship between human activities and the natural world, one that does not diminish the prospects for future generations to enjoy a quality of life at least as good as our own. Indicators in this section include per capital CO₂ emissions, waste generation and renewable energy use.

- The Paris Agreement, in force since November 2016, represents a global effort to limit temperature increases to less than 2 degrees and to pursue efforts to limit the temperature increase to 1.5 degrees above pre-industrial levels. Within Europe, one of the main instruments to reduce greenhouse gas emissions is the EU Emissions Trading Scheme (ETS), which currently covers about 45% of EU emissions, and 28% of total emissions in Ireland.

- However, greenhouse gas emissions per capita in Ireland (13.5 tonnes) were significantly higher than the EU (8.7 tonnes) and the UK (7.9 tonnes). Compounding this, renewable energy accounts for only 11% of total consumption, which compares unfavourably with the EU average (18%), and Ireland's climate target of 16%.

2.1 Quality of Life

Fig. 2.1.1 OECD Better Life Index, Measuring Well-Being²³, Ireland 2017

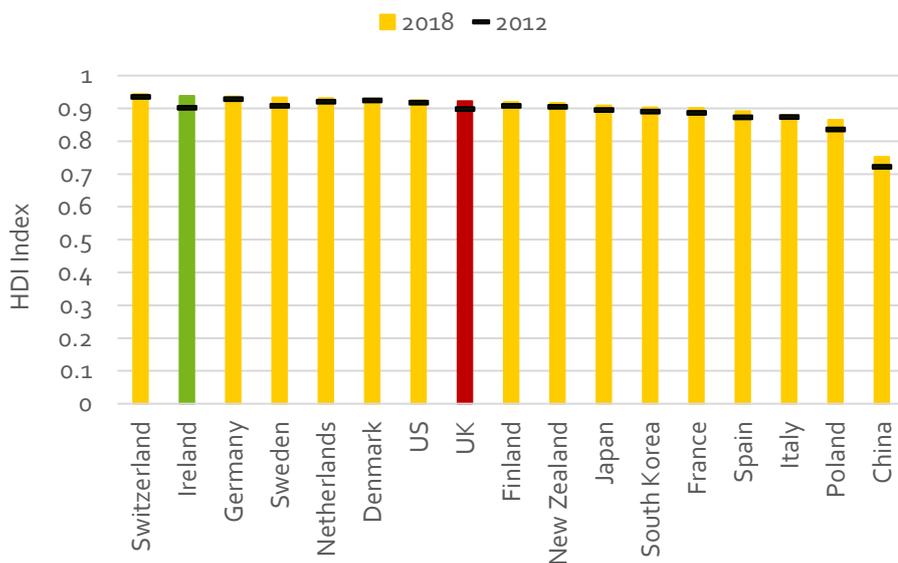


This chart compares Ireland's score across the well being indicators with the UK. Ireland performs well though respect to the UK, Irish performance are mixed with Ireland scoring higher than the UK in five indicators and lower in four indicators. Ireland scored highest in safety indicator (9.4) and lowest in the civic engagement indicator (4.0). While the UK scored highest in the accessibility to services indicator (9.0).

rank: n/a

Source: OECD How's life? 2017

Fig. 2.1.2 Human Development Index²⁴, 2012 and 2018



This figure shows the HDI index score of selected countries. With HDI value of 0.938, Ireland was one of the best performers in the world in 2018, better than the UK (0.92). Between 2012 and 2017, Ireland's HDI value increased from 0.9 to 0.938, an increase of over 4%.

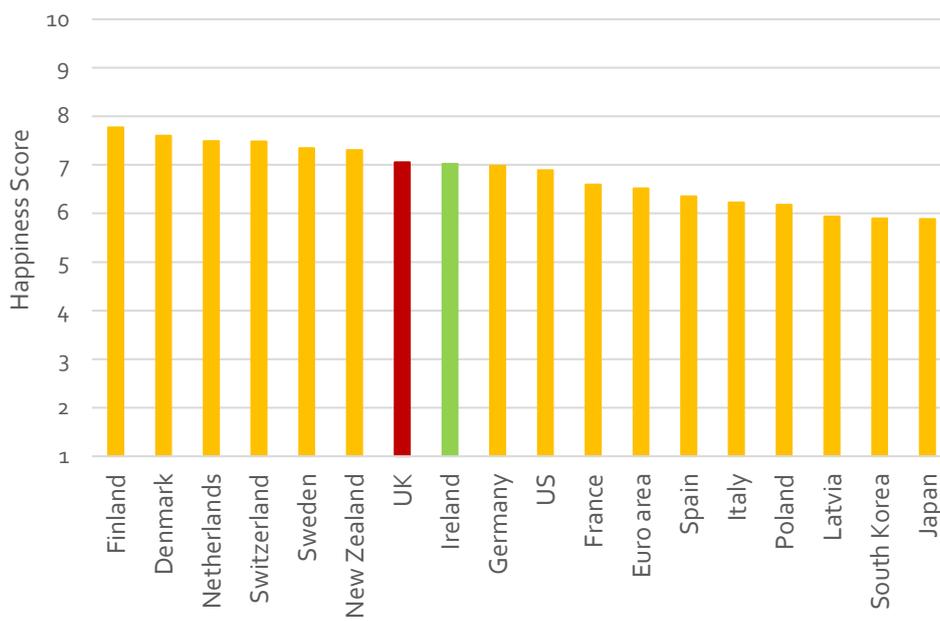
OECD rank: 4th

Source: United Nations, HDI, 2018

²³ Wellbeing is measured on a scale from 0-10 with 10 being the frontier score

²⁴ The Human Development Index is a statistic composite index of life expectancy, education, and per capita income indicators, which are used to rank countries into four tiers of human development. A country scores a higher HDI when the lifespan is higher, the education level is higher, and the gross national income GNI per capita is higher.

Fig. 2.1.3 Happiness Rankings, 2019¹⁵



This figure shows the selected countries overall happiness scores-based. The data comes from the Gallup World Poll. With the overall score of 7, Ireland is ranked 16th (out of 156 countries) in the Happiness rankings, just below the UK (15th).

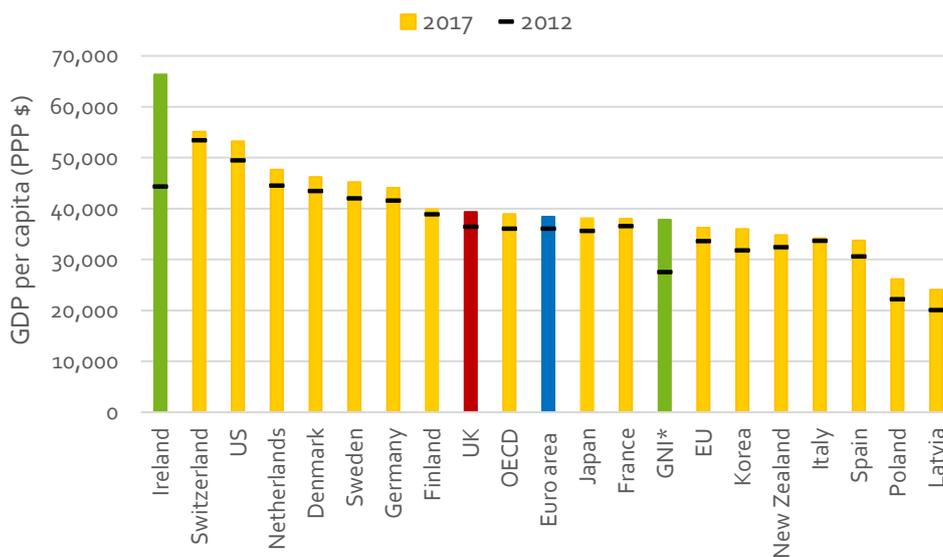
Euro-area rank: 4th

Source: UN Sustainable Development Solutions Network

¹⁵ World Happiness Report 2016 -2018. (<https://worldhappiness.report/ed/2019/>). Survey results based on overall happiness score 0-10 (0=worst possible life (10=best possible life).

2.2 National Income

Fig. 2.2.1 GDP per capita, constant prices (PPS-2010), Ireland GNI*/capita (current prices)

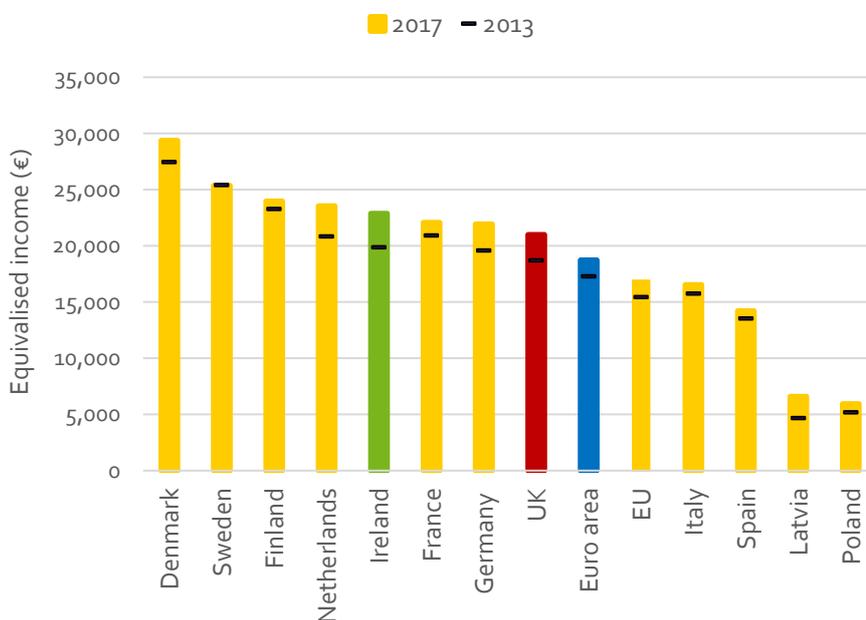


This figure shows the GDP per capita of selected OECD countries. Irish GDP/ capita has increased by 50% in the five years to 2017, reflecting the strong economic growth experienced in the country. At €66,334, Ireland had the highest GDP/ capita among the benchmarked countries in 2017. Ireland GNI*/ capita in 2017 (€37,805) is also shown.

OECD rank: 2nd (GDP)

Source: OECD, GDP per capita and Productivity

Fig. 2.2.2 Median equivalised disposable income



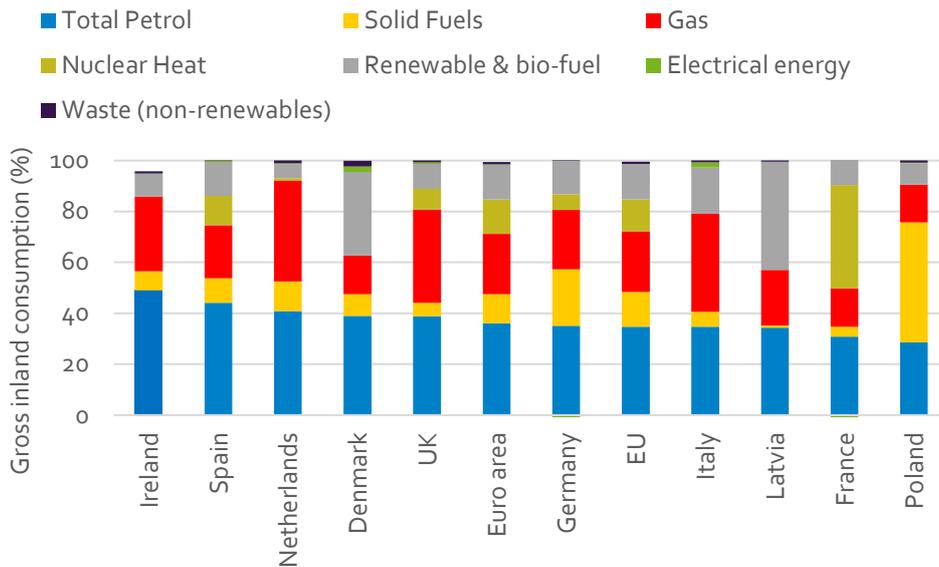
Median equivalised disposable income in Ireland increased by over 15% between 2013 and 2017. In 2017, Irish households had significantly higher disposable income (€22,879) compared to their counterparts in the UK (€20,995) and the euro area average (€18,773).

Euro area rank: 5th

Source: Eurostat, Quality of Life Survey, Income and Living Conditions

2.3 Environmental Sustainability

Fig. 2.3.1 Gross inland consumption, percentage by fuel type¹⁶, 2017

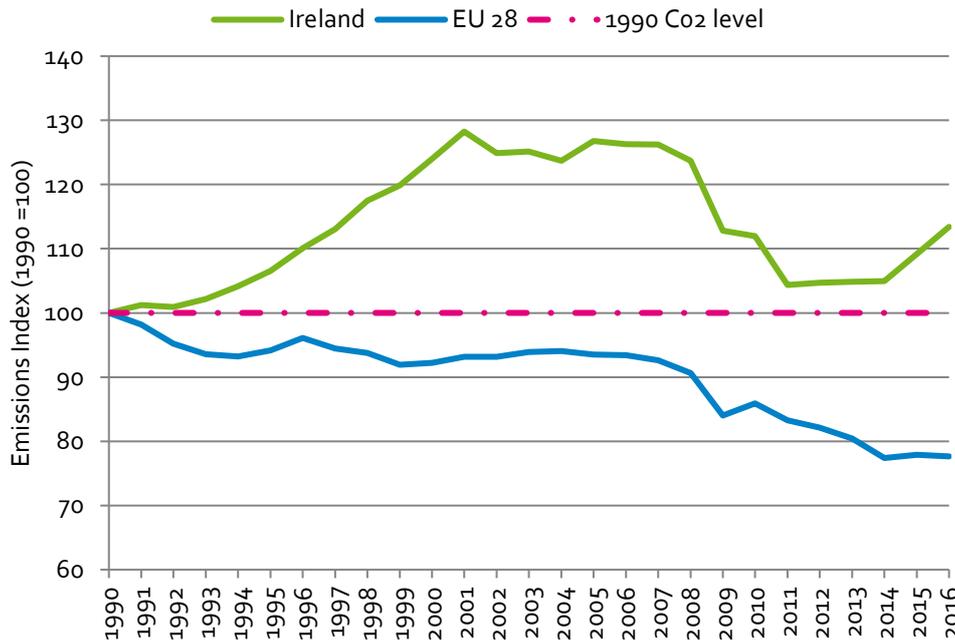


As this figure shows, there is a considerable heterogeneity across EU member states in terms of fuel consumption. In 2017, 85% of total energy consumed in Ireland was fossil fuels compared to 71% in the euro area and 80% in the UK. Ireland (9%) also lags behind UK (10%) and the EU (14%) in terms of use of renewable energy.

rank: n/a

Source: Eurostat, Simplified Energy Balances

Fig. 2.3.2 Greenhouse Gas emissions (Kt CO₂ equivalent indexed to 1990), Ireland, EU-28, 1990-2016



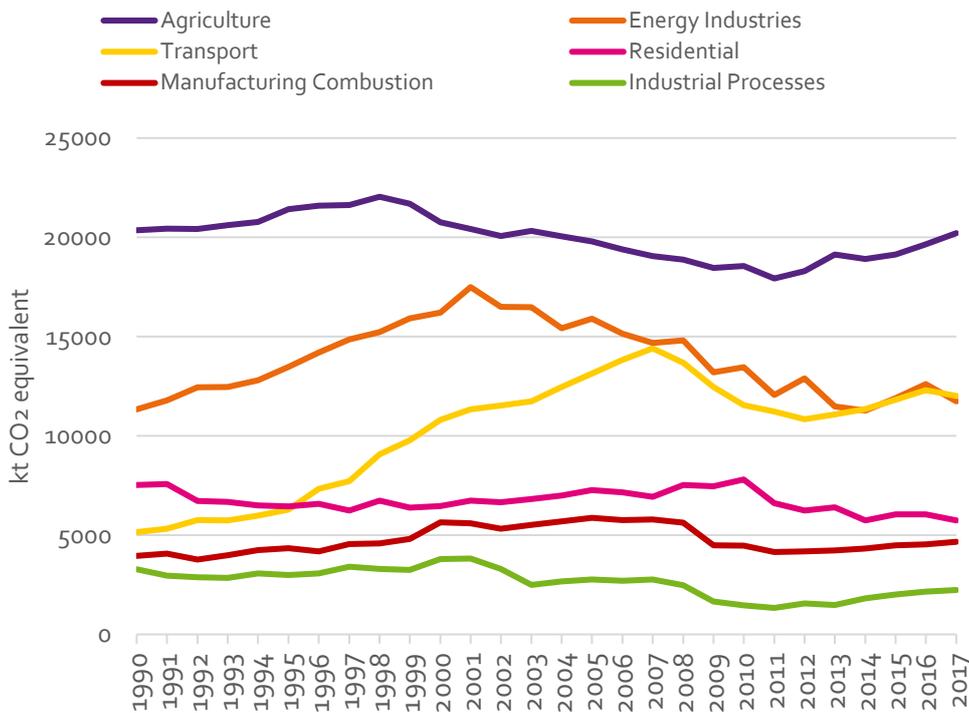
Since 1990, there have been a number of broad trends in the level of Ireland's greenhouse gas emissions. From 1990 to 2001, emissions rose before leveling off until 2008. From 2008 to 2011, they declined significantly and remained at that level until 2014. From 2014 onwards, emissions have been increasing. In contrast, EU28 emissions have been steadily decreasing since 1990 and are now almost 25% lower than they were in 1990.

rank: n/a

Source: Eurostat, Greenhouse Gas Emissions Index

¹⁶Gross inland consumption refers to energy consumption of the whole economy and of individual sectors

Fig. 2.3.3 Emissions by national climate change sectors (Kt CO₂ equivalent), Ireland, 1990-2017

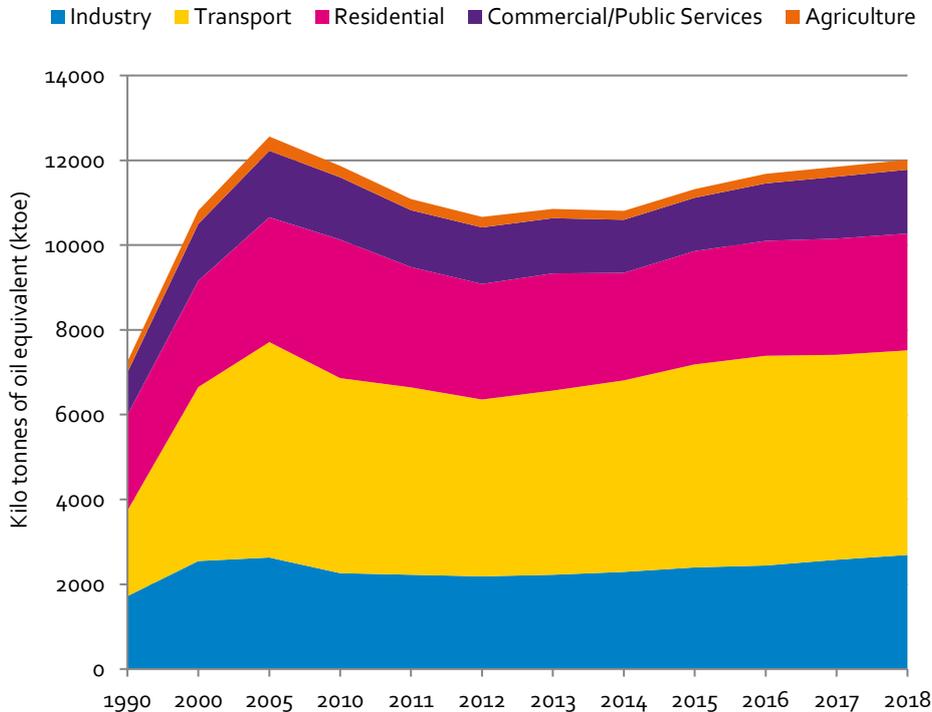


Using the EPA data, we are able to take a closer look at the sectoral drivers of the overall changes in emissions set out in Figure 2.3.2. Interestingly, emissions from the majority of sectors remained roughly the same over the period, while transport sector emissions more than doubled. The latest data shows that the agriculture sector accounted for the highest proportion of Irish emissions (33%) followed by the energy industry (19%) and transport sector (20%).

rank: n/a

Source: EPA, Ireland's Final Greenhouse Gas Emissions 1990-2017¹⁷

Fig. 2.3.4 Total final energy consumption by sector, Ireland, 1990-2018



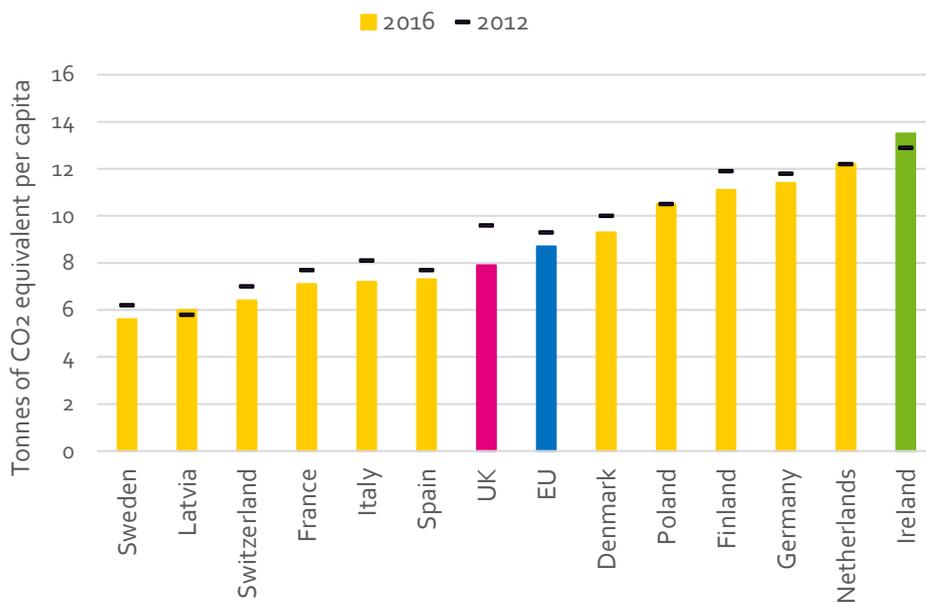
The SEAI figures document a similar trend to the one outlined above. Between 1990 to 2018, total energy consumption in Ireland increased by over 65% with the majority of this increase driven by a large increase in the energy consumption of the transport sector from 1990 to 2000.

rank: n/a

Source: SEAI Energy Statistics

¹⁷ <http://www.epa.ie/pubs/reports/air/airemissions/ghgemissions2017/#d.en.63244>

Fig. 2.3.5 Greenhouse Gas emissions per capita, 2016

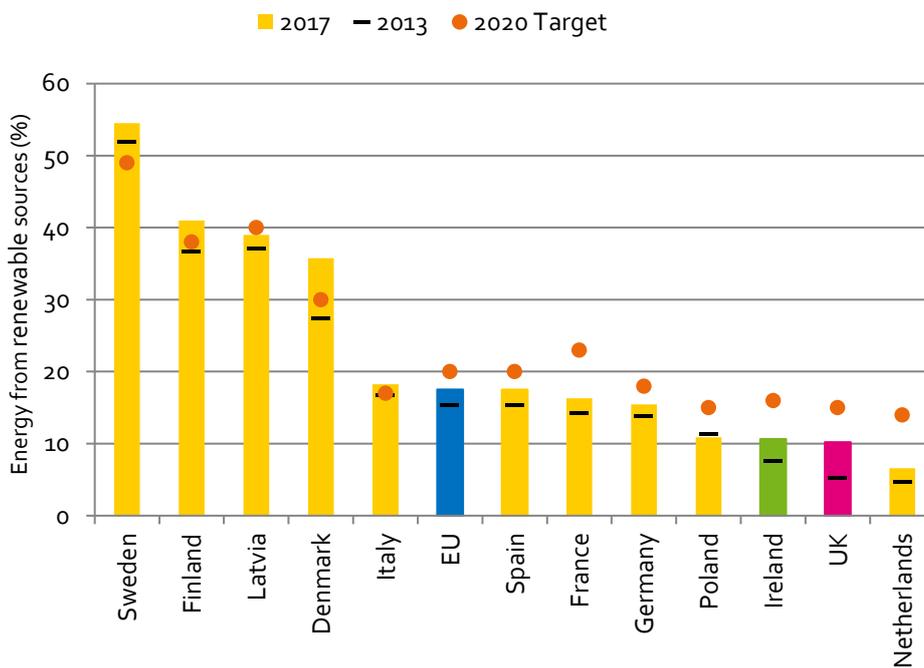


On a per capita basis, Ireland is the only benchmarked country where greenhouse gas emissions have increased (by 4.6%) in the period between 2012 and 2016. In 2016, 13.5 tonnes of CO₂ was produced per person - significantly higher than the UK (7.9) and the EU (8.7).

EU-rank: 3rd

Source: European Environment Agency (EEA), Energy Statistics

Fig. 2.3.6 Share of renewable energy in gross final consumption, 2017



One of Ireland's binding EU 2020 targets is that by 2020 16% of final energy use must be from renewables. Between 2013 and 2017, the share of renewable energy (relative to total energy consumed) has increased from 7% to almost 11%. However, this is still below Ireland's 2020 commitment, and the EU average (17.5%).

EU rank: 22nd (use of renewables in final energy consumption)

Source: Eurostat, Energy Statistics

Chapter 3. Competitiveness Outputs

The Council sees the competitiveness outputs as the key determinants of Ireland's competitiveness performance. Two of the most important factors determining competitiveness (productivity and costs) are covered in separate Council publications (the Cost of Doing Business Report, and the Productivity Statement), but the main findings of these publications are set out here as well. Alongside these indicators, the Council looks at business performance and employment, as other crucial outputs of competitiveness.

- **Business Performance: The performance of the business sector is central to the Council's definition of competitiveness, and an open and internationally exposed economy facilitates technological transfer, increases competition, and can lead to domestic adoption of international best practice. This economic openness for businesses is a key channel for the diffusion of technology from the best performing economies to the rest.**
 - Ireland, and Irish businesses, are extremely open to the international economy. Total trade in Ireland was 178% of Ireland's GDP, which was significantly higher than the EU (77%) and the UK (54%). However, international openness is concentrated by a few key sectors, and a few key export markets.
 - In 2018, the largest export markets for Irish goods were the EU (50%), the US (28%), and China (4%). The UK was the largest export market within the EU (accounting for 23% of all exports to the EU), followed by Germany (15%) and France (7.6%). These economies also dominated Ireland's goods import figures, with most Irish imports coming from the EU (60%), the US (17.7%), and China (6%). The figures for services trade broadly reflect these results.
 - Ireland's goods exports were dominated by a small number of sectors, with pharmaceuticals and chemicals accounting for 58% of Ireland's total goods exports in 2018. Using the same metric, services exports demonstrated an even greater sectoral concentration, with computer services and business services accounting for 66% of all services exports.
 - In Ireland, new enterprises account for 7.7% of all enterprises, or just over 19,000. While this is increasing, it is still low compared to the EU (9.7%) and the UK (15%). Of these new enterprises, 84% survive the first year of business, which was just above the EU (83%), and lower than the UK (89%). Interestingly, more enterprises survive for five years in Ireland (80%) compared to the UK (44%).
- **Productivity¹⁸: In the long run, a country's standard of living is largely dependent on productivity performance. In certain metrics, Ireland is one of the most productive economies in the world, but it is important to fully understand the underlying data that underpins this positive headline figure.**
 - Labour productivity in Ireland (measured by GDP per hour worked) is clearly above the OECD average and other advanced economies.
 - Using modified Gross National Income (GNI*), which strips out the impact of globalisation activities, Ireland's labour productivity level is below some selected frontier economies (including Germany and the US), although still above the UK, Japan and the OECD average.
 - Beneath the aggregate trends, there is a considerable heterogeneity across sectors to the extent that Ireland's productivity performance is built upon a narrow base of highly productivity (mainly foreign-dominated) sectors.
- **Costs: Cost competitiveness is critical to ensuring that enterprises based in Ireland can compete successfully in international markets. The Council's recent publication 'Cost of Doing Business in Ireland 2019'¹⁹ examined the overall cost level and the rate of change for several key business inputs.**
 - The 'Cost of Doing Business in Ireland 2019' report found that Ireland is a high cost economy – with prices roughly 13% higher than the EU average – but one where prices were increasing slowly (0.7%).
 - Labour costs in Ireland are broadly in line with the euro area average, and total hourly labour cost in Ireland was €30.90, which was lower than the corresponding figures for Denmark, Sweden, France and Germany. However, it was higher than the total hourly labour cost in the UK (€25.70).

¹⁸ The NCC's 2018 Productivity Statement can be found at <http://www.competitiveness.ie/Publications/2018/NCC-Productivity-Statement-2018.html>

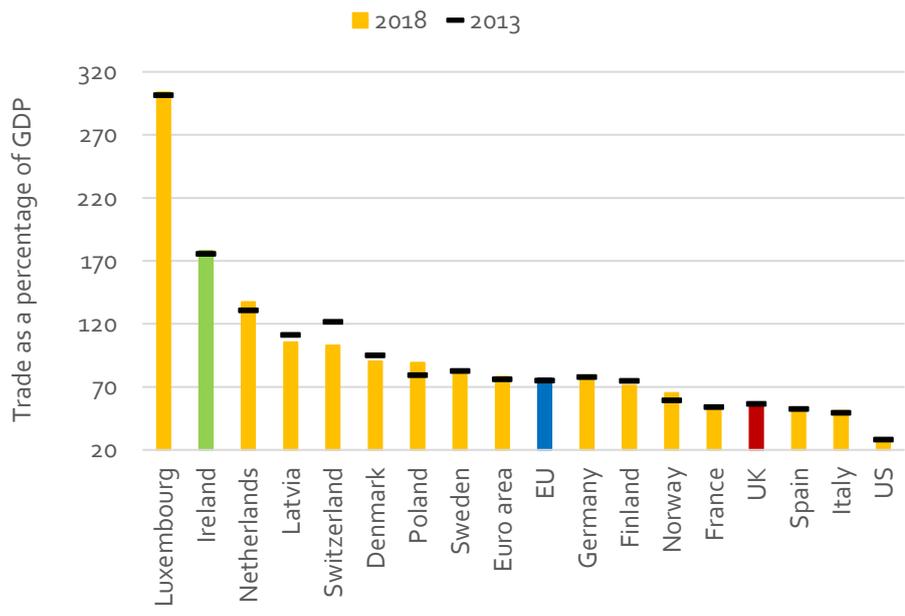
¹⁹ 'The Cost of Doing Business in Ireland 2019 report' can be found at <http://www.competitiveness.ie/Publications/2019/Cost%20of%20Doing%20Business%202019.html>

- After remaining flat between 2012 and 2014, Irish labour costs have started to increase in line with the growth in labour costs in other jurisdictions. The latest data shows that Irish labour costs increased by 2.9% in 2018 – which is concerning as it is four times higher than the rate of inflation.
 - The cost of credit in Ireland (3.3%) is significantly higher than in other euro area countries (2%), meaning Irish businesses must pay more to borrow money to invest.
 - The price of business services (like consultants, legal services, computer programming) is increasing at the 4th fastest rate in the EU. The only EU comparator country where prices increased faster was Luxembourg.
 - Commercial rents and the cost of constructing office buildings are also high in Ireland relative to international competitors.
- **Employment: Employment is a key determinant of living standards, and if unemployment is higher than the natural rate it suggests that an economy's scarce resources are not being fully utilised. This section considers a range of indicators, measuring key aspects of labour market performance including employment and unemployment.**
 - The data shows that there continues to be improvements in the labour market. In Q1 2019, there were over 2.3 million people in employment, which represented an annual increase in employment of 3.6%.
 - Headline, and long-term, unemployment rates have also been on a steadily downward trajectory. The seasonally adjusted unemployment rate was 4.6%²⁰ in April. The long-term unemployment rates decreased from 2.1% to 1.7% in the year to Q1 2019, bringing the number of long-term unemployed people to 40,900.
 - Youth unemployment (15- 24 years) decreased to 10.3 % in April 2019 from 14.4% in April 2018. There were 29,700 young people unemployed in April 2019.
 - In Ireland, 44% of workers had skills mismatches, meaning that they were either underqualified or overqualified, or had a different skill set from the one required by the employer. This was much higher than the EU average, where 33.5% of workers had skills mismatches, and the OECD average (35.7%).

²⁰ Provisional data

3.1 Business Performance

Fig. 3.1.1 Exports and Imports as a percentage of GDP, 2018²¹

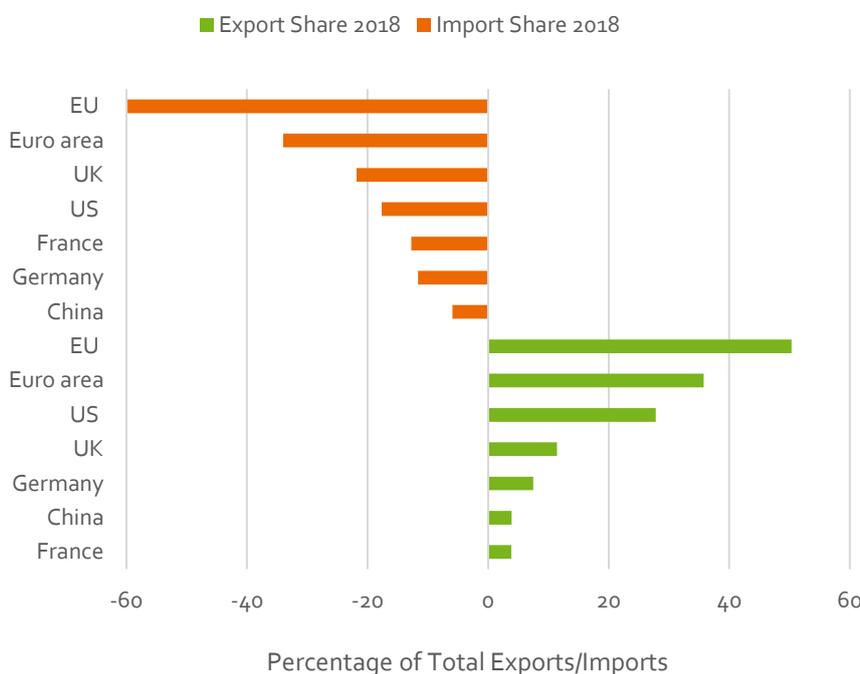


This graph shows the exports and imports of goods and services in selected countries, as a percentage of GDP. In 2018, total trade as a percentage of the GDP amounted to 178% in Ireland, significantly higher than the EU (77%) and the UK (54%).

EU rank: 2nd

Source: OECD, Trade Statistics

Fig 3.1.2 Irish goods exports and imports, percentage share by trading partners, 2018



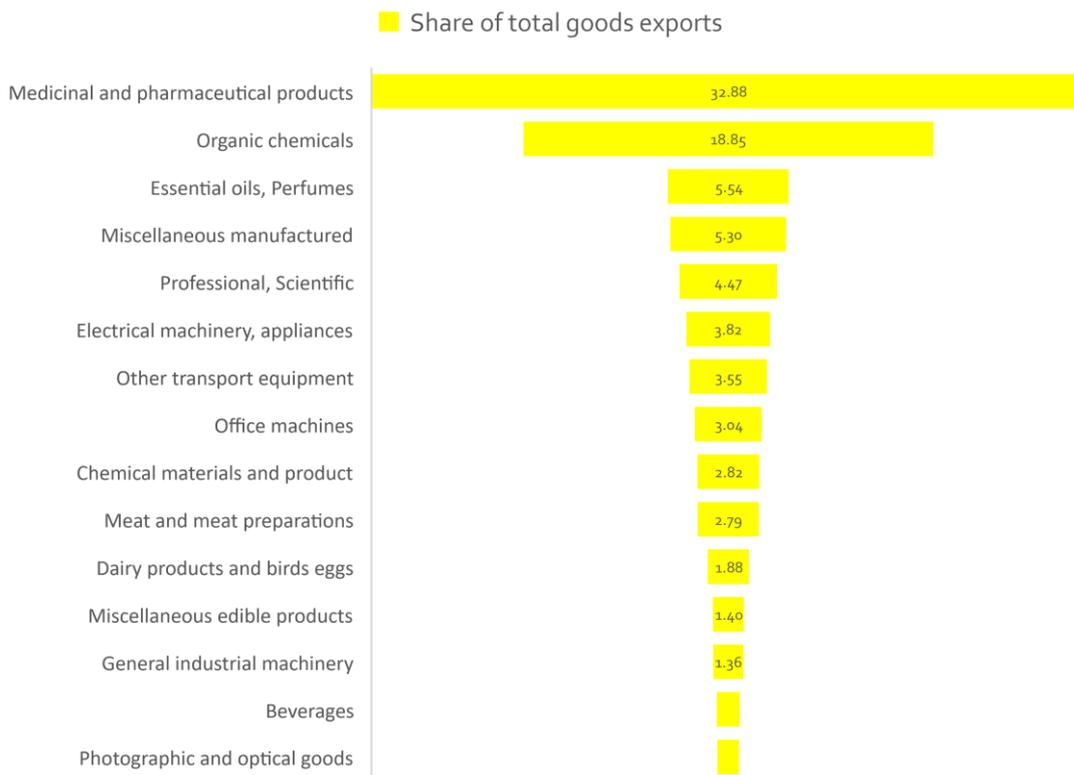
Intra-EU trade accounts for a significant proportion of Ireland’s global trade as shown in the chart. In 2018, half of Ireland’s exports were destined for the EU, while 60% of Irish imports came from the EU. The UK was Ireland’s largest single trading partner within the EU, accounting for 11% of exports and 22% of imports. Outside the EU, the US was Ireland’s largest trading partner, accounting for 28% of exports and almost 18% of imports.

rank: n/a

Source: CSO, Trade Statistics

²¹ 2017 data for US

Fig. 3.1.3 Goods Exports Top 15 Commodities 2018

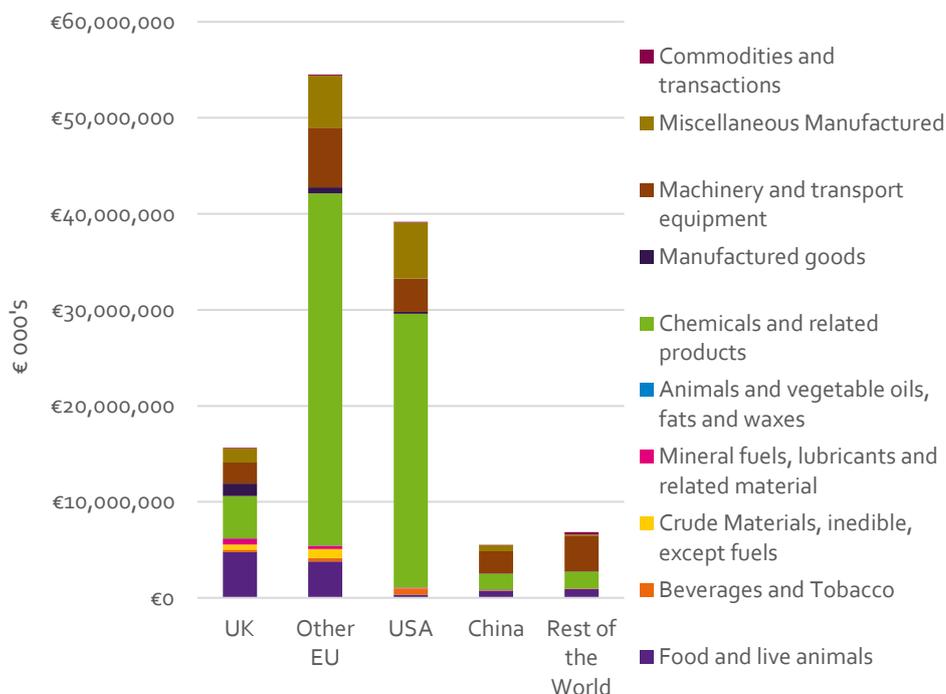


This figure demonstrates a clear concentration in the sectors that export in Ireland. Two sectors, pharmaceutical and chemicals, accounted for over half of Ireland’s total goods exports. Since 2017, the share of Medicinal and Pharmaceutical exports as a proportion of total goods exports increased by almost 4 percentage points, while the share of organic chemicals as a proportion of total goods exports increased by 3 percentage points from 2017, demonstrating that export concentration remains very high.

rank: n/a

Source: CSO, Trade, Exports Value by Commodity Group

Fig. 3.1.4 Goods Exports by Commodity and Trading Partner, 2018

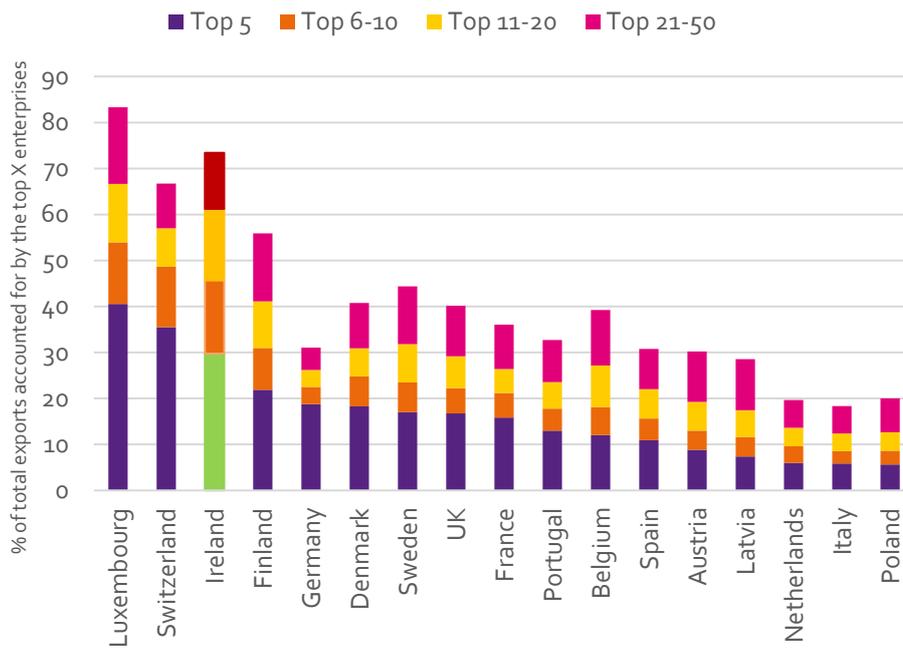


The data allows us to break down the results presented in Fig 3.1.2 and Fig 3.1.3 in more detail, and examine the sectoral makeup of Irish exports by partner country. In 2018, Ireland’s three largest goods export markets were the EU27 (€54.4 billion), the US (€39.1 billion) and the UK (€ 15.6 billion). Chemical products accounted for the largest share of export from Ireland to the EU (€36.6 billion) and the USA (€28 billion), while food and live animals (€4.7 billion) accounted for the largest share of export to the UK.

rank: n/a

Source: CSO, Trade, Exports Value by Country and Commodity Group

Fig. 3.1.5 Value of goods exports by enterprise concentration, 2016

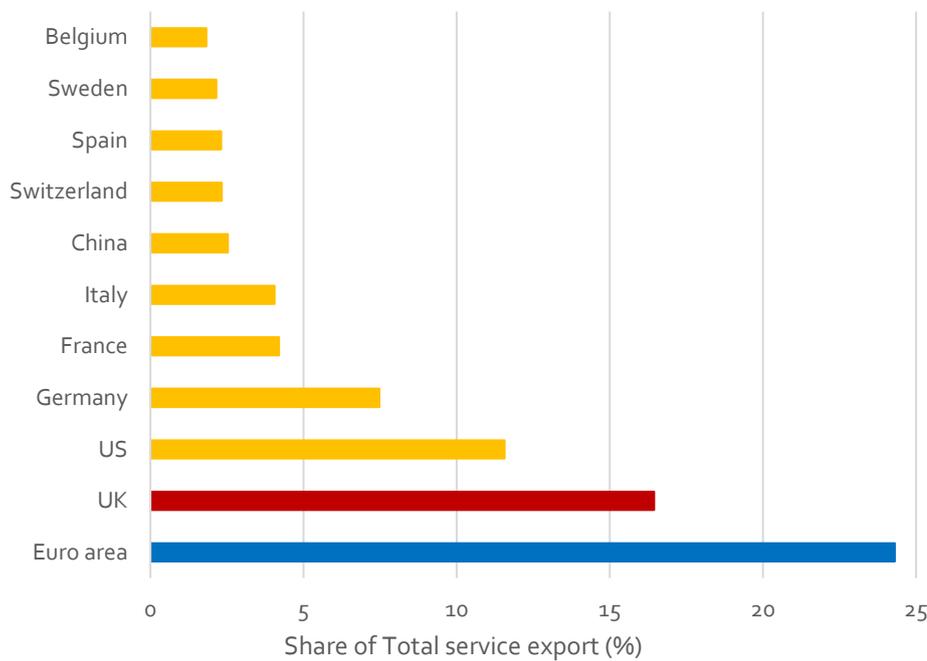


The data also breaks down goods exports at the firm level, and it is clear that Irish goods exports are dominated by a very small number of firms. In 2016, the top five exporters in Ireland accounted for almost one-third (30%) of all goods exports. Looking only at the top 50 exporting firms, almost 75% of total goods exports were accounted for. Ireland's high share of total trade accounted for by a small number of traders was very high relative to many EU countries and the UK (40%).

EU -rank: 2nd

Source: Eurostat, Concentration of Trade

Fig. 3.1.6 Services Exports by Principal Trading Partner, Ireland, 2017

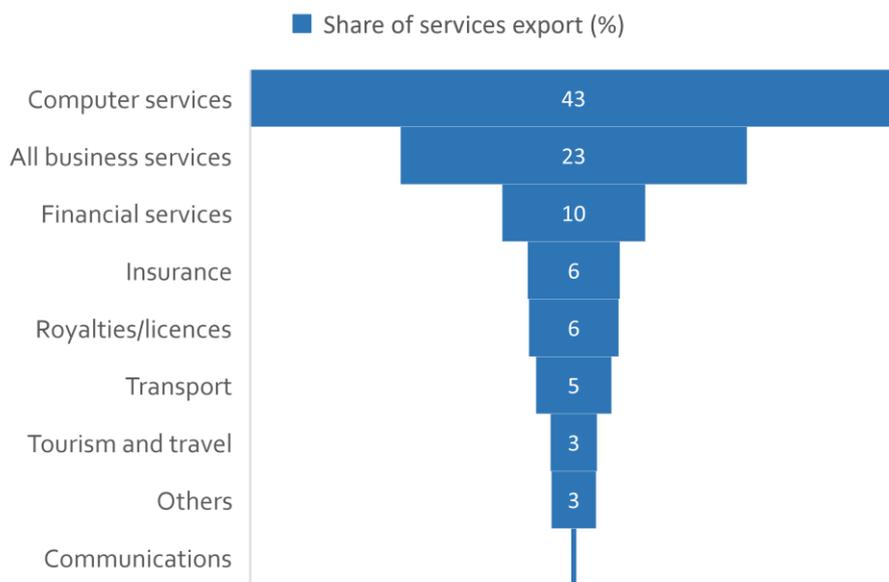


This figure shows the destinations for Irish services exports, and like goods exports, there is a concentration. In 2017, the euro area was the largest market for Irish service exports, accounting over 24% of the total. The UK was the second largest export market, accounted for 16% of the total, and the US was third accounted for just over 11% of the total.

rank: n/a

Source: CSO, Trade, Exports of Services by Geographic Location

Fig. 3.1.7 Services Trade by Principal Category, Ireland, 2017²²

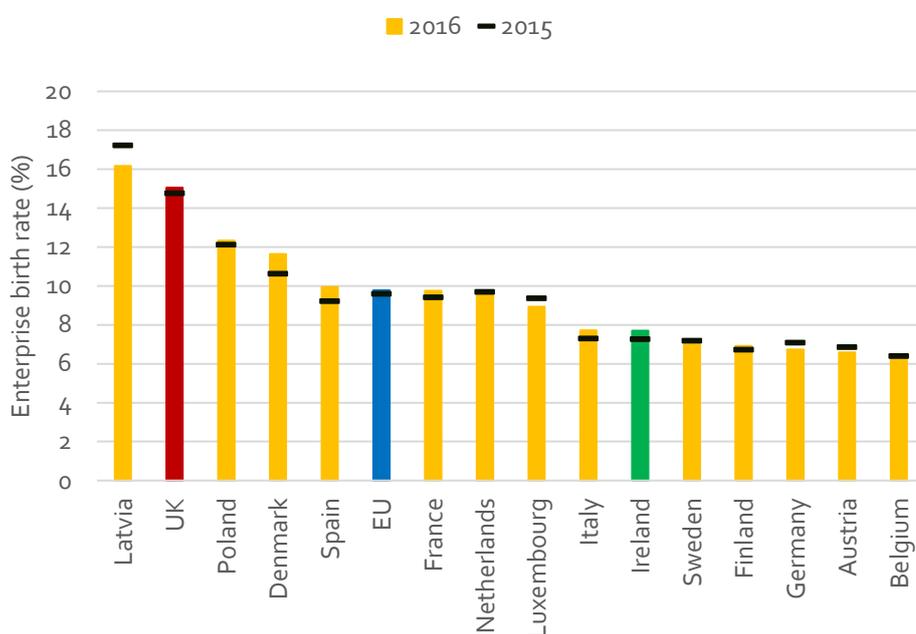


Ireland's service trade is highly concentrated with computer services accounting for 43% of total service export in 2017 (46% in 2016). Business services and financial services were the next largest category accounting for 23% and 10% of total service exports respectively.

rank: n/a

Source: CSO, Trade, Exports of Services by Component

Fig. 3.1.8 Enterprise births as a percentage of active enterprise²³, 2016



This figure shows the birth rate of new enterprises in selected EU countries. The number of newly born enterprises as a proportion of the total number of active enterprises increased in most of the countries in 2016 compared with 2015. At 7.7%, the birth rate of new enterprises in Ireland in 2016 was low compared to the EU (9.7%) and the UK (15%).

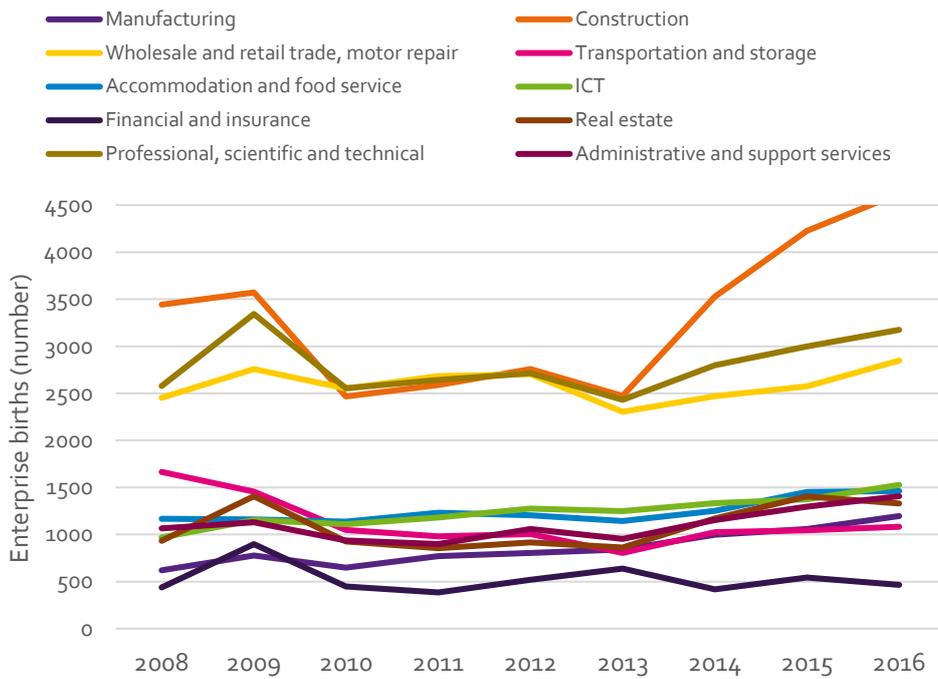
EU-rank: 22nd

Source: Eurostat, Business Demography

²² All business services - Merchanting, Other Trade related services, Operational leasing, Legal, Accounting and other professional services, Advertising and market research, Research and development, Architectural engineering and other technical services, Management services between affiliates, Trade related services, Other.

²³ New business birth rate is defined as number of new businesses registered in calendar year. Restructuring, mergers or break-ups are not included.

Fig. 3.1.9 Enterprise births by sector, Ireland 2008 – 2016

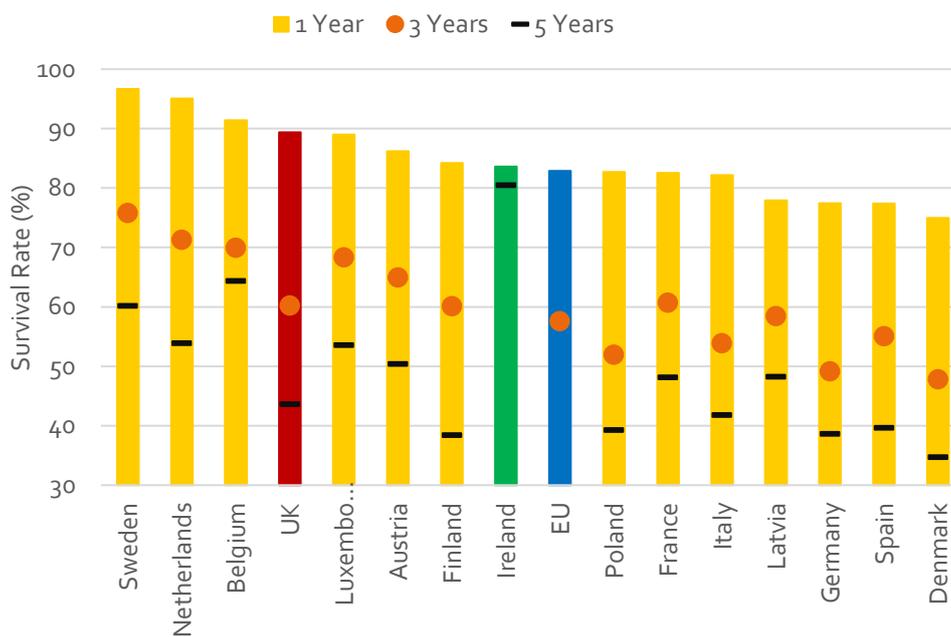


New enterprise birth rate in Ireland increased by over 24% during the period 2008-2016 with 19,116 new enterprises births in 2016. The Construction sector accounted for the largest number of new enterprise births (4,623) in 2016, an increase of over 34% in the ten years to 2016. While the number of new enterprises in the professional and wholesale sector trended upward, birth rate in other sectors remained similar to previous levels observed.

rank: n/a

Source: CSO, Business Demography

Fig. 3.1.10 Enterprise Survival rate, 2016

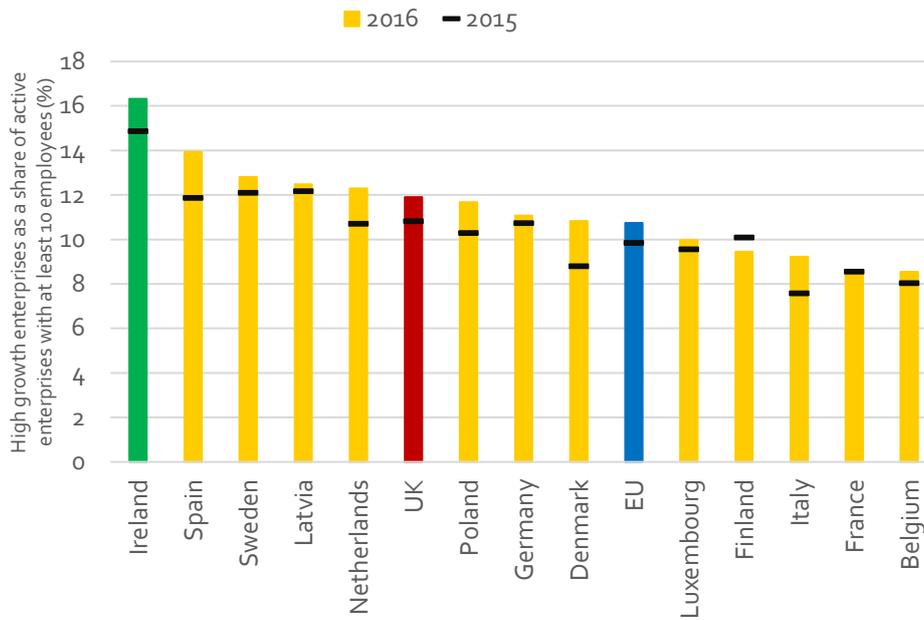


This figure shows the enterprises' survival rate across the selected countries. With almost 84% of the new enterprises surviving the first year, the one year survival rate in Ireland was just above the EU (83%) but lower than the UK (89%). However, in Ireland, a higher proportion of enterprises (80%) survived for five years in Ireland compared to the UK (44%).

rank: n/a

Source: Eurostat, Business Demography

Fig. 3.1.11 High growth enterprises (as a proportion of total enterprise), 2016



This figure shows the considerable variation that exists in the share of high growth enterprise (growth in employment numbers by 10% or more, from an initial base of at least 10 employees) across the EU. The share of high growth enterprises in Ireland (16%) in 2016 was the highest in the EU, and significantly higher than share in the UK (12%) and the EU (11%).

EU-rank: 1st

Source: Eurostat, Business Demography

3.2 Employment

Fig. 3.2.1 Employment, unemployment & long – term unemployment, Q1 2013 – Q1 2019

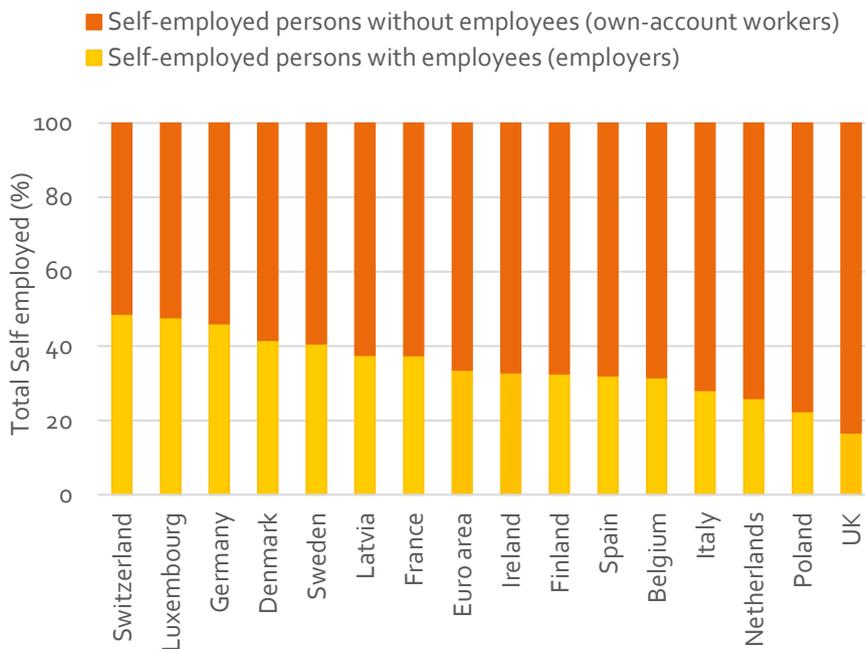


From Q1 2013 and Q1 2019, there was a significant improvement in the Irish labour market. The data shows a significant increase in full time employment (28%) and a large fall in both the headline (and long term) unemployment rate. In Q1 2019, there were over 2.3m people in employment (full time and part time), 115,000 people unemployed and just over 40,000 people in long term unemployment.

rank: n/a

Source: CSO, Labour Force Survey

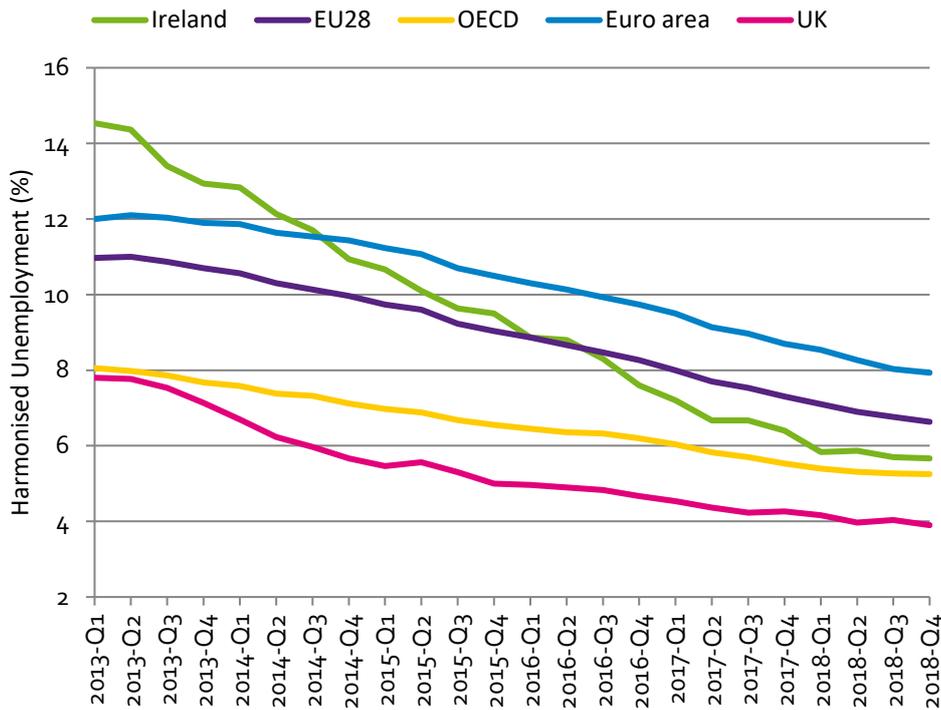
Fig. 3.2.2 Self-employed persons, employers and those without employees, 2017



In 2017, there were 254,600 self-employed people in Ireland. Over 32% of them were also employers with employees, but 67% of them worked on their own. The corresponding figure for the UK was 16% (employers) and 83% (own-account) and the euro area was 33% (employers) and 66% (own - account).

Source: Eurostat, Labour Force Survey

Fig. 3.2.3 Unemployment rate (seasonally adjusted, standardised rate)²⁴, Q1 2013-Q4 2018

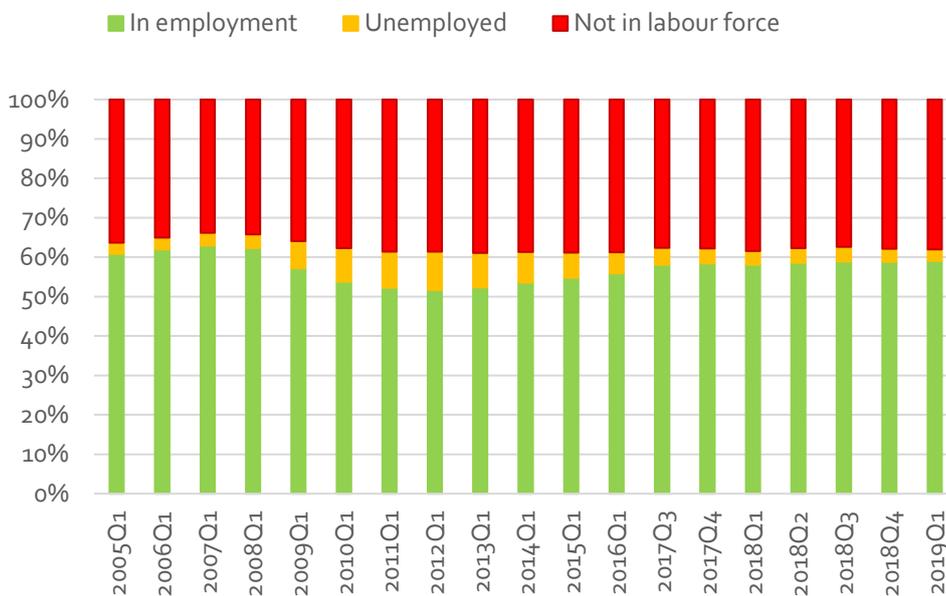


This figure shows that the seasonally adjusted unemployment rate has trended downward in all the jurisdiction over the period analysed. In Ireland, unemployment has fallen from over 14% in Q1 2013, and was around 6% in Q4 2018. This rate was lower than the rate in the Euro area (8%) but above the rate recorded in the UK (3.9%).

rank: n/a

Source: OECD, Harmonised Unemployment Rates

Fig. 3.2.4 Labour force participation, persons aged 15 and over, Q1 2013 – Q1 2019



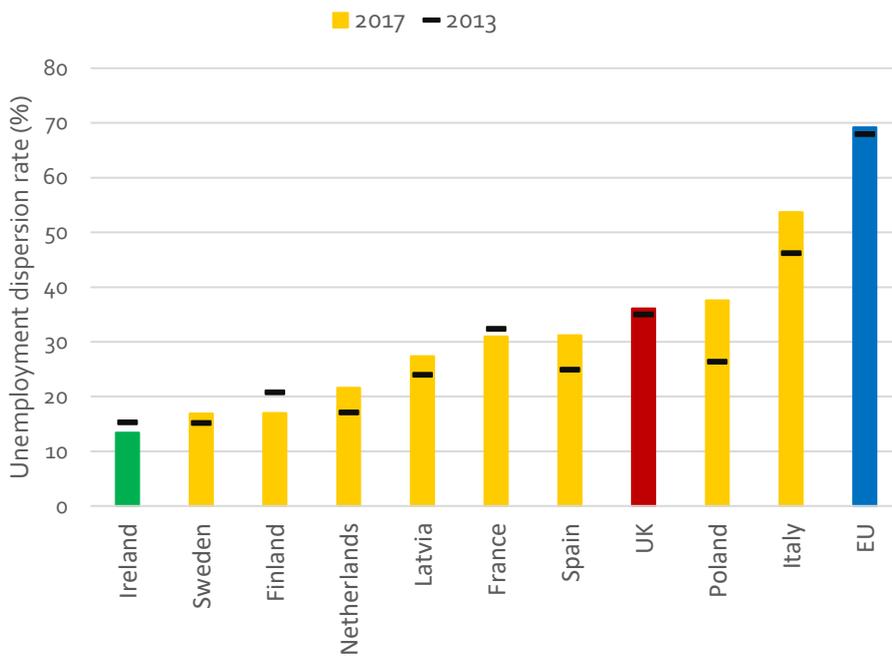
From Q1 2005 to Q1 2019, the Irish participation rate (i.e. the proportion of people in the labour force relative to the total population) has remained relatively. After rising significantly during the recession, the unemployment rate is almost at pre-crisis level in Q1 2019. From Q1 2013 to Q1 2019, the unemployment rate in Ireland fell from over 12% to 5%.

rank: n/a

Source: CSO, Labour Force Survey

²⁴ Standardised unemployment rates define the unemployed as people of working age (15-64) who are out of work and have taken specific steps to find work.

Fig. 3.2.5 Dispersion of regional unemployment (selected economies), 2017

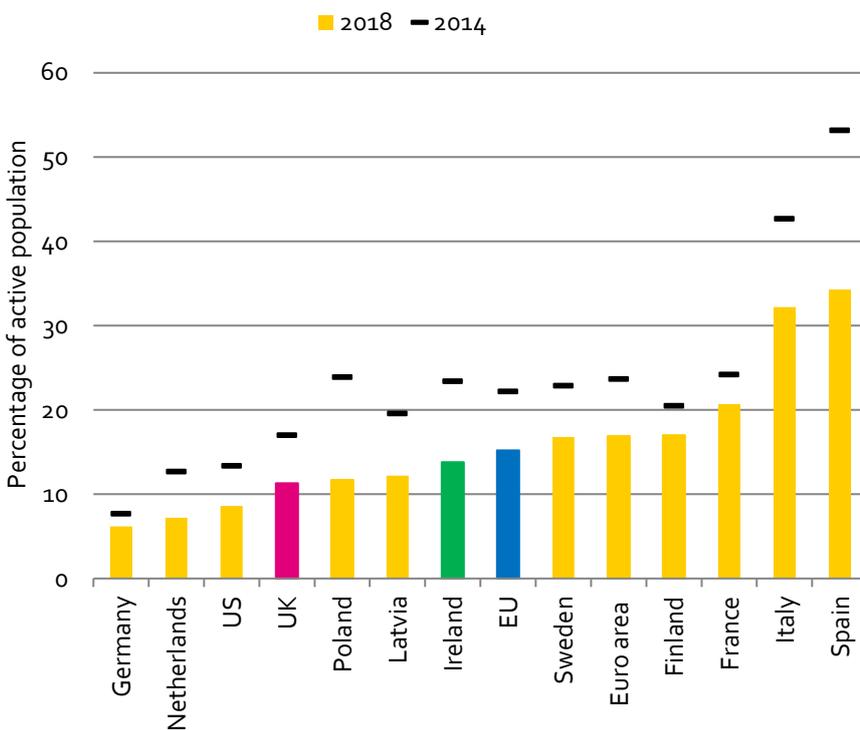


This figure shows the dispersions in unemployment rates across regions in selected countries. The lower dispersion rate indicates the higher level of cohesion across regions and less variations within regions in terms of level of unemployment. The dispersion rate has fallen in Ireland in the last five years and at 13.4%, the rate in Ireland was the lowest in the EU in 2017.

EU rank: 1st

Source: Eurostat, Dispersion of regional unemployment rates by NUTS 3 region

Fig. 3.2.6 Youth²⁵ unemployment rates, 2018



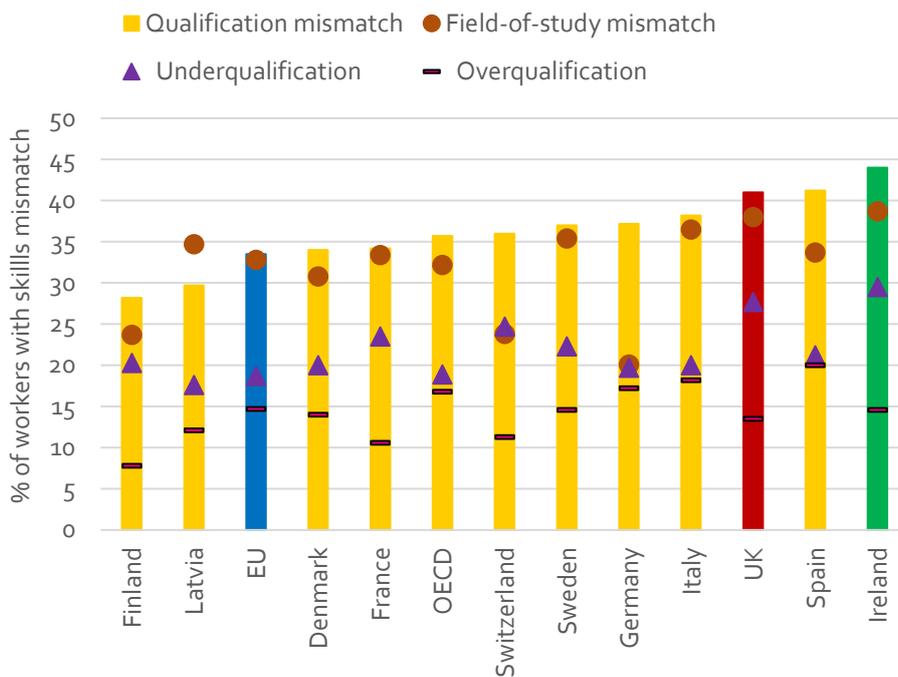
Between 2013 and 2018, youth unemployment (i.e. the unemployment rate for those aged 15-24) fell across the benchmarked countries. Youth unemployment in Ireland decreased by 10 percentage points to 13.8%. At this level, the youth unemployment rate in Ireland was lower than the EU average (15.2%) and above the UK (11.3%).

rank: n/a

Source: Eurostat, Labour Force Survey

²⁵ 15-24 years of age

Fig. 3.2.7 Proportion of workers with skills mismatches, 2016

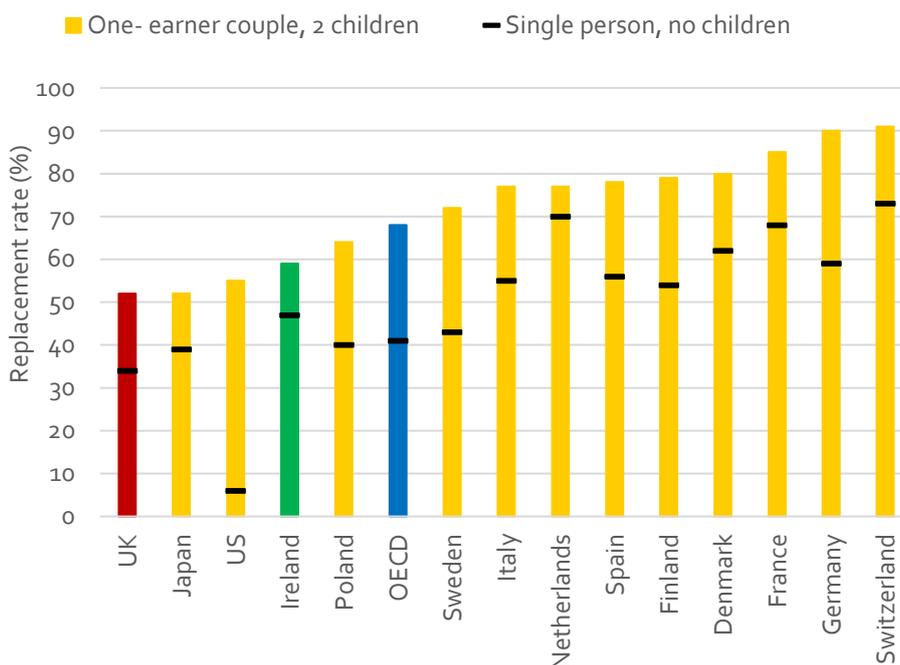


This figure shows the skills mismatch in the labour force in selected countries. In Ireland, at 15%, the proportion of over qualified workers was low compared to underqualified (29%) workers or workers mismatched by field of study (38.7%). In terms of workers with qualification mismatch, at 44%, the proportion was significantly high in Ireland compared to the UK (41%) and the EU (33.5%).

rank: n/a

Source: OECD, Labour Market, Skills for Jobs, Mismatch-National Statistics

Fig. 3.2.8 Net replacement rates for long-term unemployed²⁶, 2016



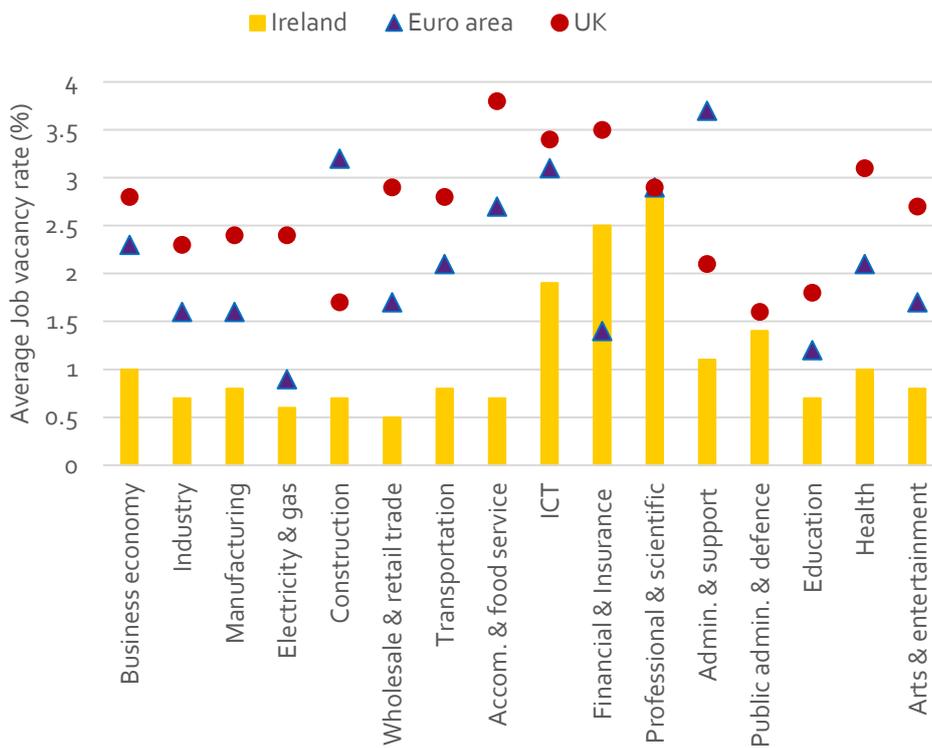
This figure shows the net replacement rates (i.e. the proportion of net income in work that is maintained after job loss) across OECD countries. Specifically, it looks at the long term unemployed who were earning 100% of the average wage pre-unemployment. The rate for a one earner couple with two children in Ireland (59%) is lower than the OECD average (68%). However, for a single person with no children (47%), the rate is higher than OECD (41%).

OECD rank: 33rd & 30th

Source: OECD, Net Replacement Rates in Unemployment

²⁶ Long term unemployed refers to someone who is out of employment for the duration of 12 months or more.

Fig. 3.2.9 Job Vacancy rate by sector²⁷, 2018



In 2018, there was a considerable divergence across the economic sectors in terms of job vacancy rate in Ireland. The vacancy rate was highest in the professional and scientific sector (2.8%) and lowest in wholesale and retail sector (0.5%). In the euro area, the sector with the lowest vacancy rate was electricity and gas (at 0.9%) and highest in admin and support (at 3.7%).

rank: n/a

Source: Eurostat, Labour Market, Job Vacancy Statistics

²⁷ Based on vacancies published by the employment services

Chapter 4. Competitiveness Inputs

The third tier of the pyramid focuses on 'competitiveness policy inputs'. Four categories of inputs are examined: the business environment; physical infrastructure; clusters and firm sophistication; and, knowledge and talent. These represent the drivers of current and future competitiveness.

- **Business Environment: this section examines the conditions within which enterprises operate. Benchmarked themes include the cost and availability of credit and the taxation system.**
 - The supply and demand for credit has improved significantly since the height of the crisis. As a result, the most recent data²⁸ suggests that only 8% of SMEs considered access to finance as the most pressing concern that their business faced (compared to 24% in 2011).
 - However, only 24% of Irish SMEs applied for bank credit, compared to other EU countries like France (35%) and Italy (34%). The percentage of SMEs successful in receiving the total amount requested as a loan was also significantly lower in Ireland (14%) compared to those countries, France (29%) and Italy (24%).
 - In 2018, private equity investments in Ireland amounted to a very small 0.07% of GDP, which is far below the UK (1.26%) and even the EU average (0.47%)
- **Physical Infrastructure: The availability of competitively priced world-class infrastructure (e.g. energy, telecoms, transport, waste and water) and related services is critical to support competitiveness. Well-developed infrastructure can increase mobility of workers and goods, reduce traffic congestion and increase productivity. As well as the immediate impact on labour mobility, for instance, physical infrastructure also plays a key role in determining quality of life and the attractiveness of a place to work.**
 - Government investment as a percentage of GDP remains well below the pre-crisis levels (4.6%). In 2017, at 1.87% of GDP, it was the lowest among the benchmarked countries, and significantly below the Netherlands (3.1%) and the UK (2.4%).
 - Perceptions regarding the overall quality of infrastructure in the economy remain low in Ireland. Ireland's score in international competitiveness rankings fell over the last five year. In 2018, Ireland scored 4.4 (out of 7), well below the UK (5) and the EU (4.95). This was drive largely driven by perceptions of Irish rail infrastructure, which was below that of the UK and the EU.
 - The National Development Plan 2018- 2027 (NDP) sets out the Government's plan to invest €116bn, which is expected to improve Ireland's performance in international league tables for public investment, and perceptions regarding the overall quality of infrastructure.
- **Clusters and Firm Sophistication: Firm sophistication concerns two elements that are intricately linked - the quality of a country's overall business networks; and, the quality of individual firms' operations and strategies. Clusters are diverse and varied in terms of development – some originate out of the third level sector or Government research centres, others are loose networks of SMEs, and some orbit around anchor firms.**
 - The European Commission's Cluster Mapping tool indicate that the quality of the regional entrepreneurial and innovation ecosystem rank above the EU average, with a strong showing in Tertiary education and SME innovation. However, the Irish regions – like the economy as a whole – have a low score for lifelong learning and R&D expenditure.
 - The perceived state of Irish enterprise business sophistication is good – and Ireland is ranked 14th in the world on this metric – above the euro area average, but just below the UK (which is ranked 12th).
 - The EU Digital Economy and Society Index, which tracks the evolution of digital competitiveness, shows that Ireland is digitally competitive (7th), more so than the EU (14th). Ireland's performance is ahead of the

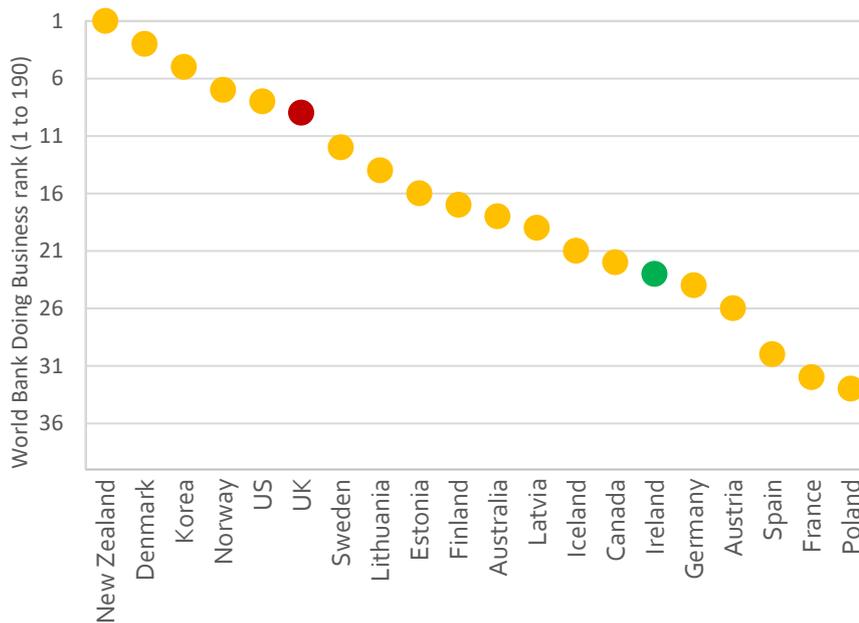
²⁸ ECB/ European Commission SAFE survey, 2018

European average in four of the five indicators and is ranked first in Europe in terms of Integration of digital technology (1st).

- **Knowledge and Talent: The availability of knowledge, talent and skills are important for growth performance between countries. This section examines the quality of formal education at all levels.**
 - In 2017, just under half (46%) of the working age population in Ireland have third level education, and over a third (36%) had upper secondary education, meaning Ireland has one of the best educated workforces in the world. However, the proportion of the population with below secondary education (18%) was higher than the best performing countries, Poland (8%) and the US (10%).
 - Ireland is also investing in research and development to build up the store of knowledge through research and development. In 2017, R&D expenditure in Ireland was 1.05% of GDP, which was far below the EU average (2.06%) and the best performing EU country, Sweden (3.4%). In contrast, scientists and engineers made up a higher proportion of the active population in Ireland (6.9%) than the EU average (4.8%), though still below Sweden (8.2%).
 - Given the pace of technological change, it is increasingly important that a workforce does not stop learning once in the workforce, and lifelong learning is a fundamental part of this. In Ireland, 12.5% of people aged 25-64 received formal (or informal) education or training. While this is slightly above the EU average (11.5%), it is far below the Nordic countries, and Switzerland (31.6%) – the top performer.
 - The availability of knowledge and talent is not the only important factor here – it is crucial that it is being used in the right places – and Ireland does not perform well when it comes to skills mismatches (see Fig 3.2.7).

4.1 Business Environment

Fig. 4.1.1 Doing Business Ranking²⁹, 2018/2019

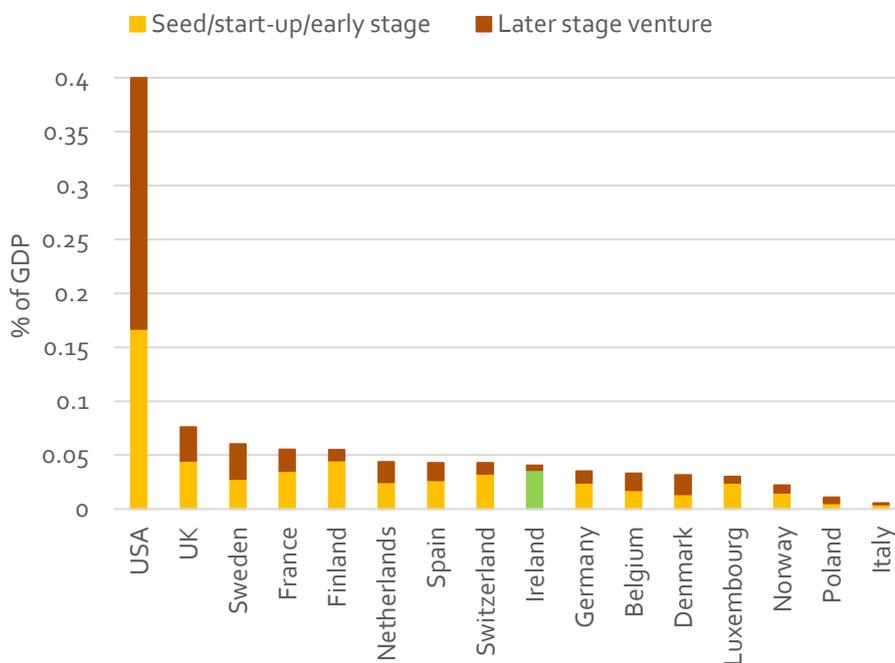


This figure shows the World Bank's Doing Business rankings of selected countries. In 2018, Ireland was ranked 23rd out of 190 economies, a fall of six place from 2017. New Zealand was ranked 1st overall with Denmark the highest ranked EU countries with overall ranking of 2nd. The UK was ranked 9th.

Euro area rank: 5th

Source: World Bank, Ease of Doing Business 2019

Fig. 4.1.2 Venture Capital Investment (as a percentage of GDP), 2017



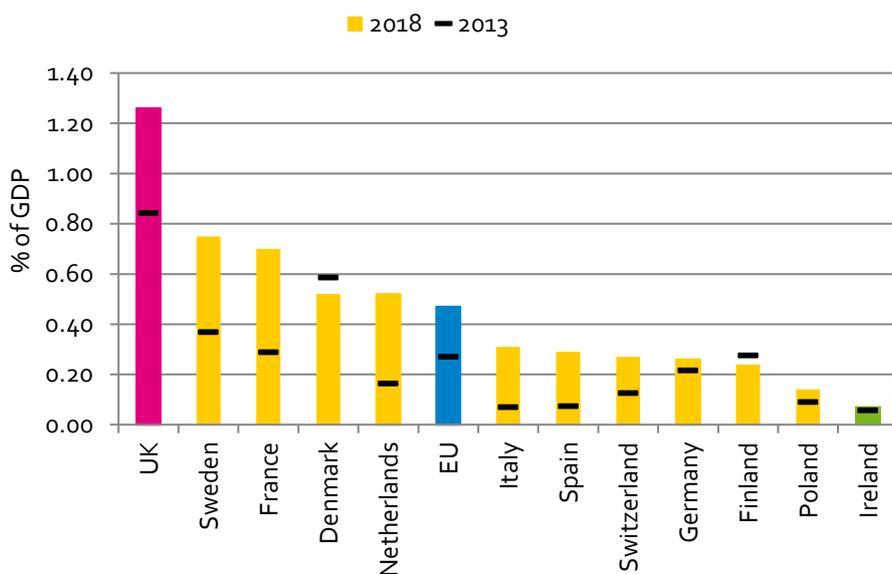
In 2017, total Venture Capital (VC) investment as a percentage of GDP in Ireland (0.04%) was significantly below the OECD 24 average (0.12%), the US (0.4%) and the UK (0.07%). The data breaks down the overall figure as either early stage investment, or later stage investment, and in Ireland the vast majority of the venture capital that does take place takes the form of early stage investment, which is different to the UK and the US figures where later stage ventures account for a higher proportion of VC. As with all figures deflated by GDP, the Irish figures need to be treated with a degree of caution.

OECD-24 rank: 9th

Source: OECD, Entrepreneurship Financing Database (EFD)

²⁹ The World Bank's Ease of Doing Business report assesses the impact of regulations through SME's life cycle and ranks economies out of 190 economies.

Fig. 4.1.3 Private equity investment (as a percentage of GDP), 2018

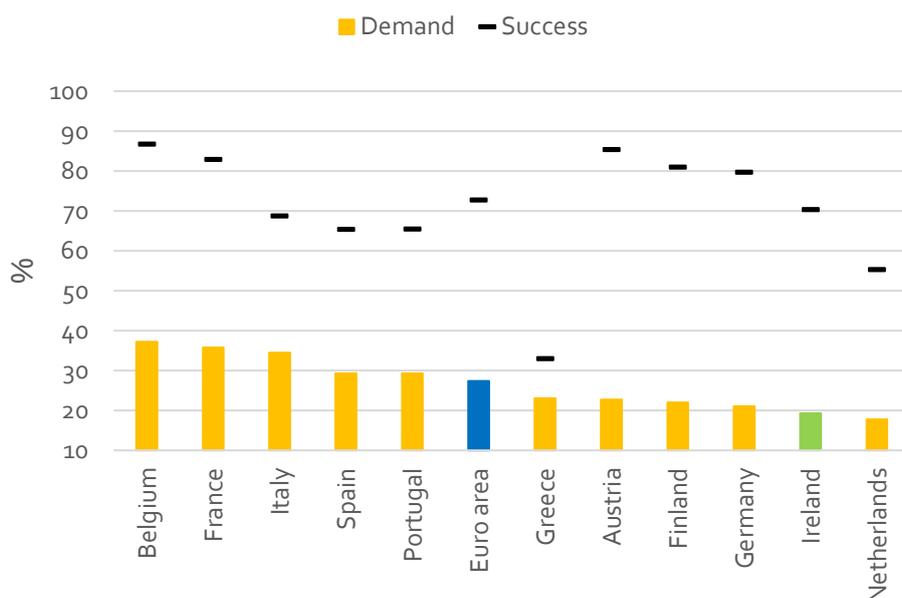


Private equity investment as a proportion of GDP increased slightly in Ireland (0.01%) in the period 2013 - 2016, as it did across the majority of benchmarked countries. At 0.07% of GDP in 2018, it is however, remains significantly below the UK (1.26%) and the EU (0.47%).

rank: n/a

Source: Invest Europe, European Private Equity Activity 2018

Fig. 4.1.4 Demand and Success in accessing credit, SMEs, Oct 2018 to March 2019



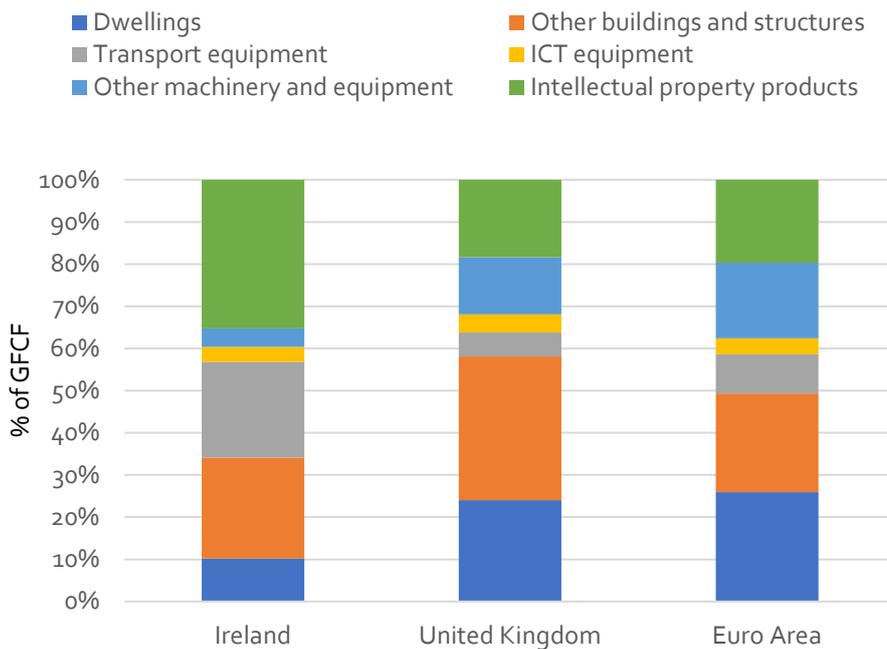
This figure shows that, between October 2018 and March 2019, 19% of SMEs applied for bank credit in Ireland, significantly below the euro area average (27%). The success rate (i.e. the proportion of total applicants that received the full requested amount) was 70% in Ireland (70%). Close to the euro area average (72%), but far below some of the top performers like Belgium (87%) and Austria (85%), and far above Greece (33%).

rank: n/a

Source: ECB, SAFE

4.2 Physical Infrastructure

Fig. 4.2.1 Gross Fixed Capital Formation, by category, current prices, 2018

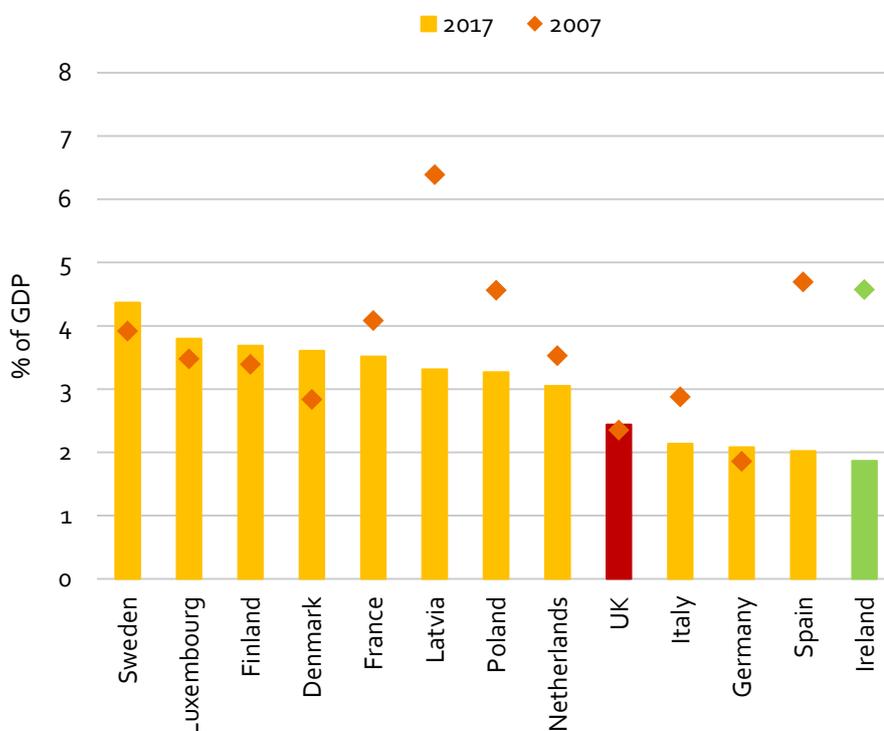


In Ireland, gross fixed capital formation (i.e. investment) was equal to 25% of GDP in 2018. This was higher than the UK (17%) and the euro area (21%) in 2018. The composition of Ireland's GFCF was quite different to the UK and the euro area, with intellectual property (35.2%) and transport equipment (22.7%) accounting for a much higher share of Ireland's GFCF relative to the UK and the euro area.

rank: n/a

Source: Eurostat, National Accounts

Fig. 4.2.2 Government investment as percentage of GDP, 2017

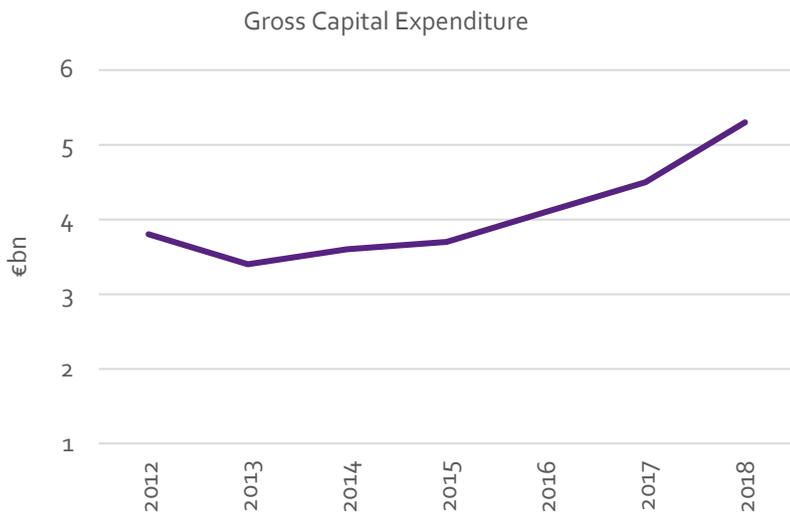


Government investment as a percentage of GDP remains well below the pre crisis level (4.56 %). In 2017, at 1.87% of GDP, it was the lowest among the benchmarked countries and significantly below UK (2.43%).

OECD rank: 33rd

Source: OECD, Government at a Glance, 2017

Fig. 4.2.3 Trend in Public Capital Expenditure, Ireland, 2012-2018

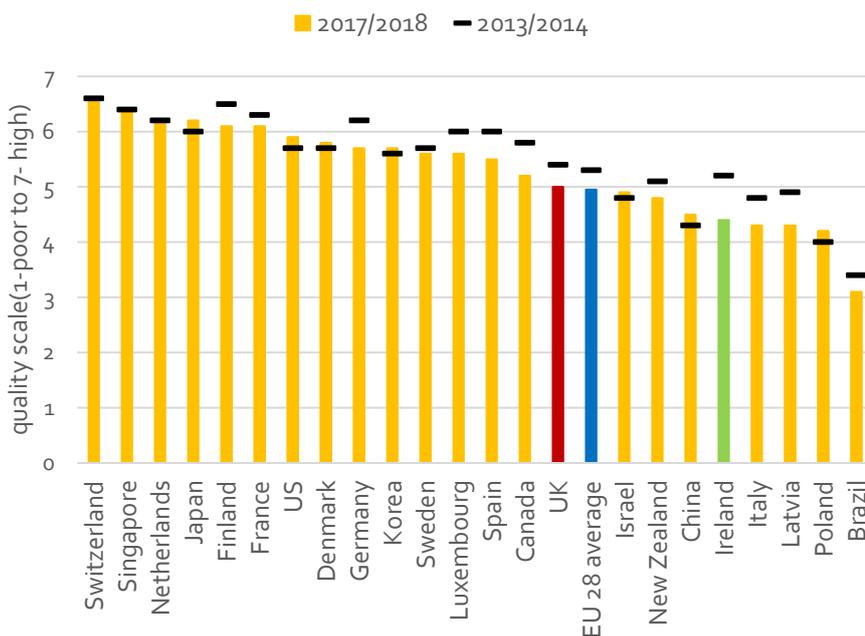


This figure shows that the gross capital expenditure in Ireland has trended upward since 2013. The gross capital expenditure has increased by over 55% in Ireland during the last six years with the €5.3 billion accounted for 2018 compared to €3.4 billion in 2013.

Rank: n/a

Source: Department of Public Expenditure and Reform, Expenditure report 2018

Fig 4.2.4 Perception of Infrastructure Quality³⁰, 2017/2018



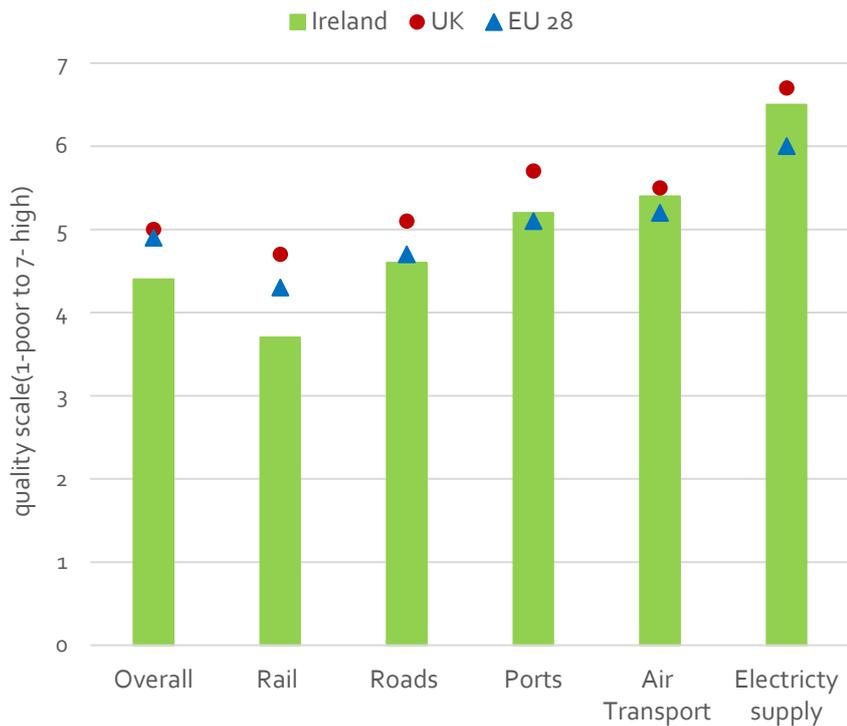
Perception on infrastructure quality has fallen in the last five years in Ireland and remains low compared to the EU and the UK. In 2018, Ireland scores 4.4 out of seven, well below the UK score of 5 and EU-28 score of 4.95.

OECD ranking: 27th

Source: World Economic Forum

³⁰ WEF Survey data, part of dataset used in calculation of WEF ranking

Fig. 4.2.5 Perception of Rail, Roads Ports, Air Transport & Electricity supply, Ireland, EU-28, UK, 2017/2018³¹

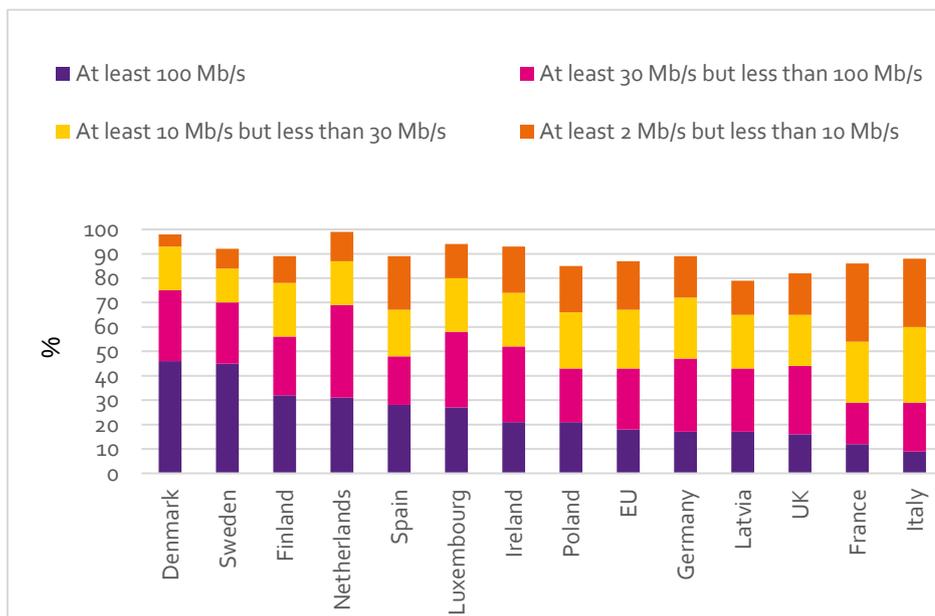


The overall perceptions of Irish infrastructure can be broken down into various categories: rail; roads; ports; air; and, electricity. As noted above, the overall perception of infrastructural quality is relatively low in Ireland (4.4) compared to the UK (5) and the EU (4.9). The more granular data suggests that this result is driven by lower perceptions of Ireland’s rail network, while perceptions of other aspects of infrastructure perform relatively well compared to the EU (though there is still a gap with the UK).

OECD ranking: 27th

Source: OECD, World Economic Forum Survey

Fig. 4.2.6 Enterprises³² with broadband access by maximum contracted download speed of fixed internet connection, 2018



This figure compares the proportion of enterprises based on the internet download speed available to their enterprise. In 2018, 21% of enterprises in Ireland had access to high speed internet (over 100mb/s), above the EU (18%) and the UK (16%). Overall, 93% of enterprises had broadband access of over 2mb/s.

EU rank: 7th (at least 100mb/s)

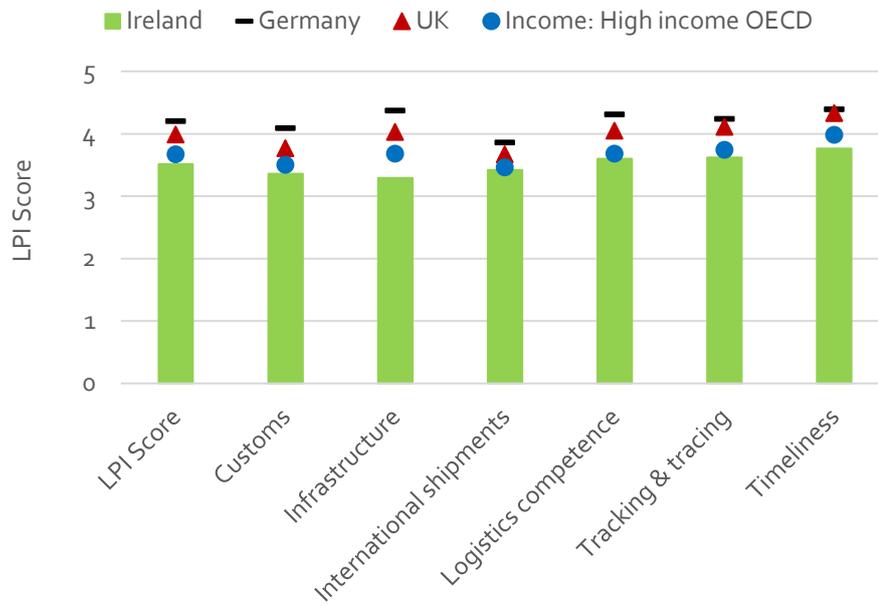
Source: Eurostat, Digital Economy and Society

Fig. 4.2.7 Logistics Performance Index (LPI) Score³³, 2018

³¹ Data based on WEF survey

³² All enterprises, without financial sector (10 or more persons employed)

³³ The World Bank logistics performance (LPI) is the weighted average of the country scores on the six key dimensions: Efficiency of the clearance process (i.e., speed, simplicity and predictability of formalities) by border control agencies, including customs; Quality of trade and transport related infrastructure (e.g., ports, railroads, roads, information technology); Ease of arranging competitively priced shipments; Competence and quality of logistics services (e.g., transport operators, customs brokers); Ability to track and trace consignments; Timeliness of shipments in reaching destination within the scheduled or expected delivery time.



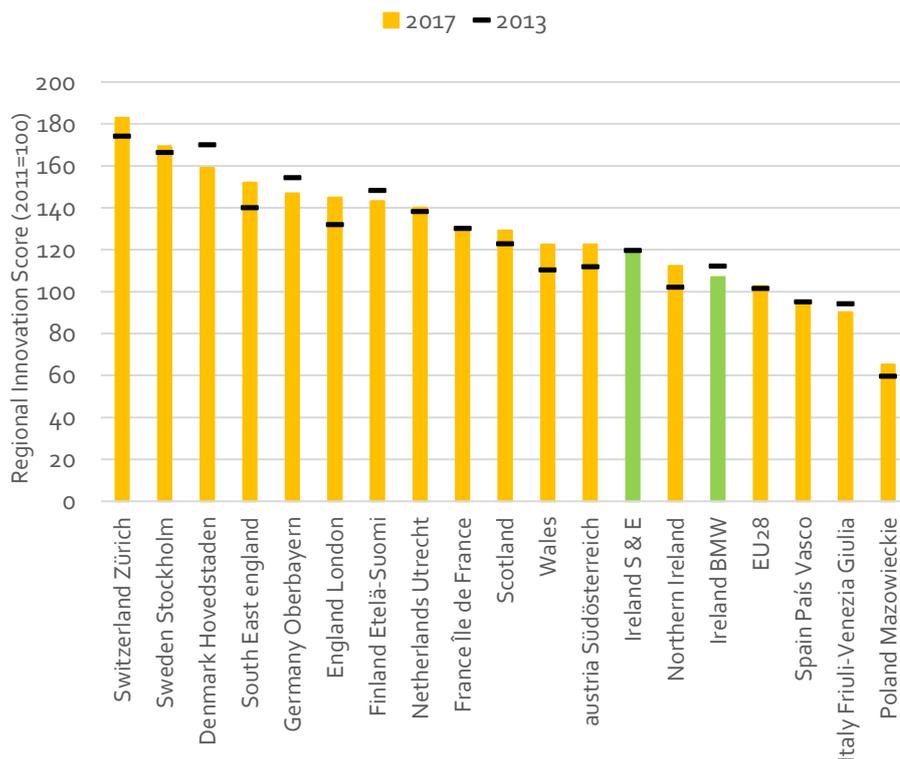
Ireland is ranked 29th in the 2018 LPI index scorecard behind Germany (1st) and the UK (9th). Ireland scored highest in the logistics competence (26th) but scores well behind UK and Germany in all six dimensions.

Rank: n/a

Source: World Bank, International LPI Scorecard

4.3 Clusters and Firm Sophistication

Fig. 4.3.1 Regional Ecosystem Scoreboard (RES), Median Country Scores, 2017



This figure shows the Regional Ecosystem Scoreboard composite index which is based on the quality of the regional entrepreneurial and innovation ecosystem that supports clusters. Overall, Irish regions rank above the EU with strong showing in Tertiary education and SME innovation but score low in Lifelong learning and R&D expenditure.

rank: n/a

Source: European Commission, Regional Innovation Ecosystem

Fig.4.3.2 Perceived State of Cluster Development³⁴, 2017/2018

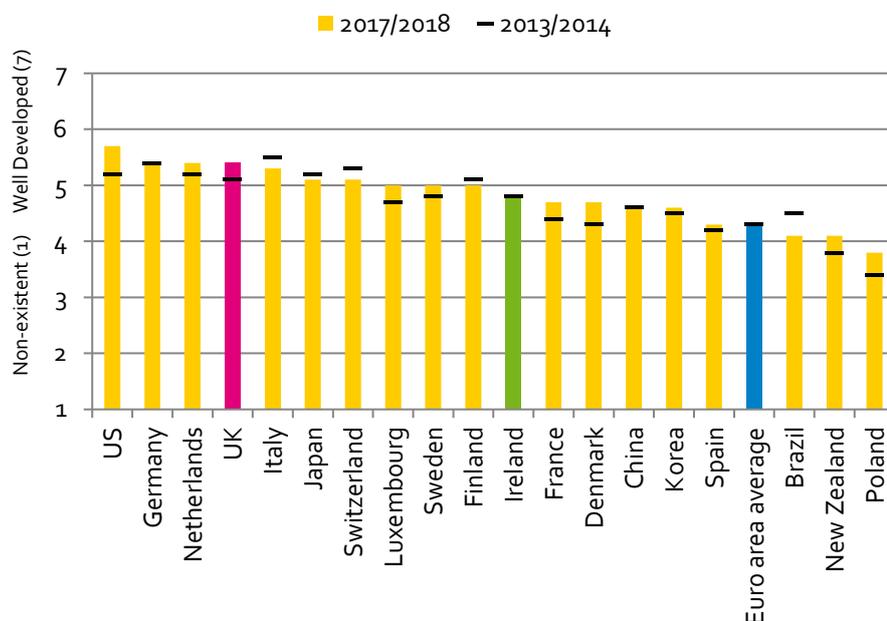


Figure 4.3.2 presents WEF rankings based on personal assessment of managers in surveyed companies about cluster development in their country. In Ireland the weighted average score in 2017/18 was 4.8. This was below the UK (5.4) but above the euro area average (4.3).

OECD rank: 8th

Source: World Economic Forum, Global Competitiveness Index 2017-2018

³⁴ In your country, how widespread are well-developed and deep clusters (geographic concentrations of firms, suppliers, producers of related products and services, and specialized institutions in a field)? [1 = non-existent; 7 = widespread in many fields]

Fig.4.3.3 Perceived State of Enterprise Business Sophistication³⁵, 2017/2018

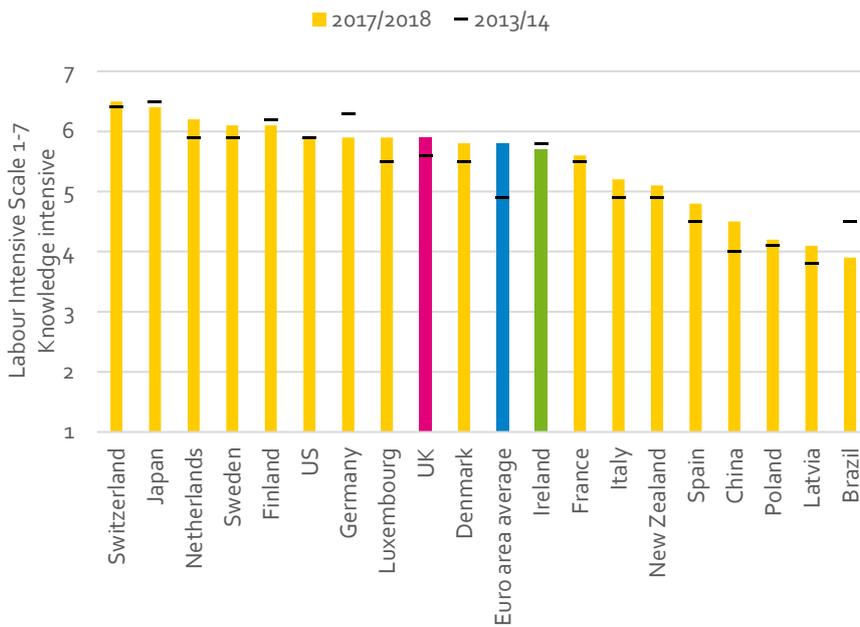
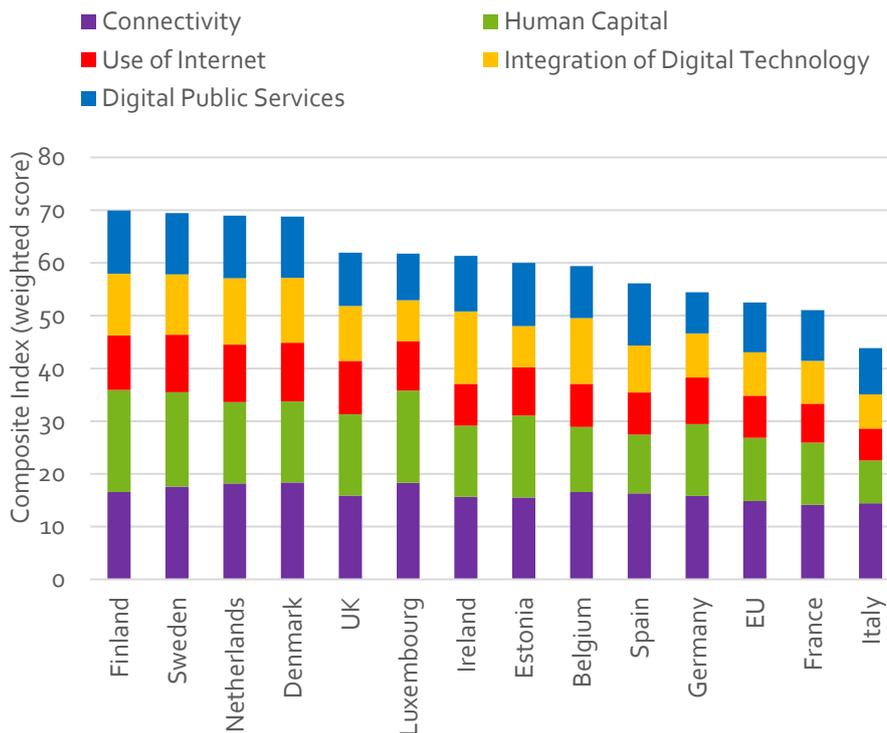


Figure 4.3.3 provides an indication of the relative sophistication of business processes as perceived by national executives. Ireland is ranked 14th in the world and 7th in the euro area and scores above the euro area average. The UK is ranked 12th in the world. Ireland's rank has fallen compared to 2013.

OECD rank: 14th

Source: WEF

Fig. 4.3.4 European Digital Economy and Society Index Innovation Scoreboard (DESI)³⁶, Overall ranking, 2019



The EU DESI tracks the evolution of digital competitiveness in EU countries. It shows that Ireland is digitally competitive and above EU. Ireland (1st) is ranked highest in the EU in Integration of Digital Technology pillar. Finland with the highest overall score was ranked first followed by Sweden and Netherlands. Ireland was below the UK (5th) but well above EU (12th) in the overall ranking.

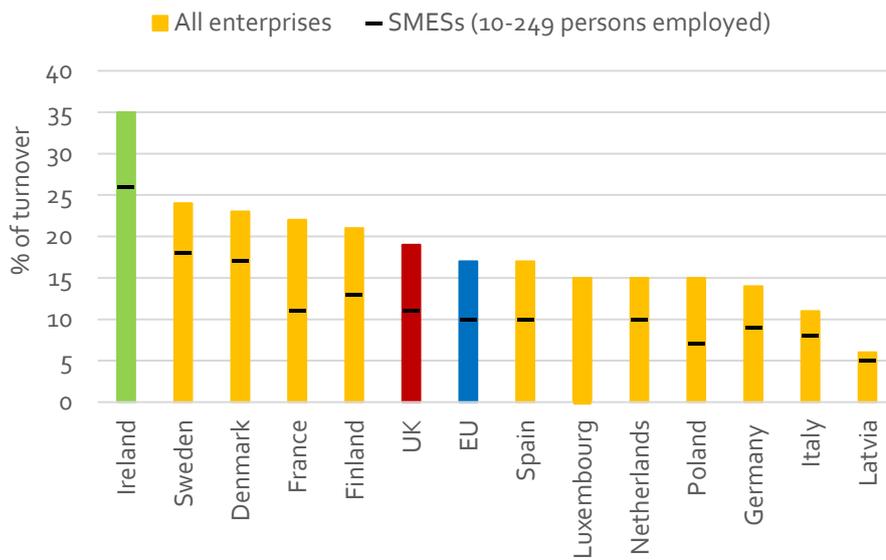
EU rank: 7th

Source: European Commission, DESI

³⁵ These figures represent survey data, and are specifically in response to the question: 'in your country, how sophisticated are production processes? [1 = not at all—production uses labour-intensive processes; 7 = highly—production uses latest technologies]'

³⁶ The Digital Economy and Society Index (DESI) is a composite index that summarises five relevant indicators (Connectivity, Human Capital / Digital skills, Use of Internet by citizens, Integration of Digital Technology by businesses, Digital Public Services) on Europe's digital performance and tracks the evolution of EU member states in digital competitiveness.

Fig. 4.3.5 Enterprises total turnover from e-commerce, 2018³⁷

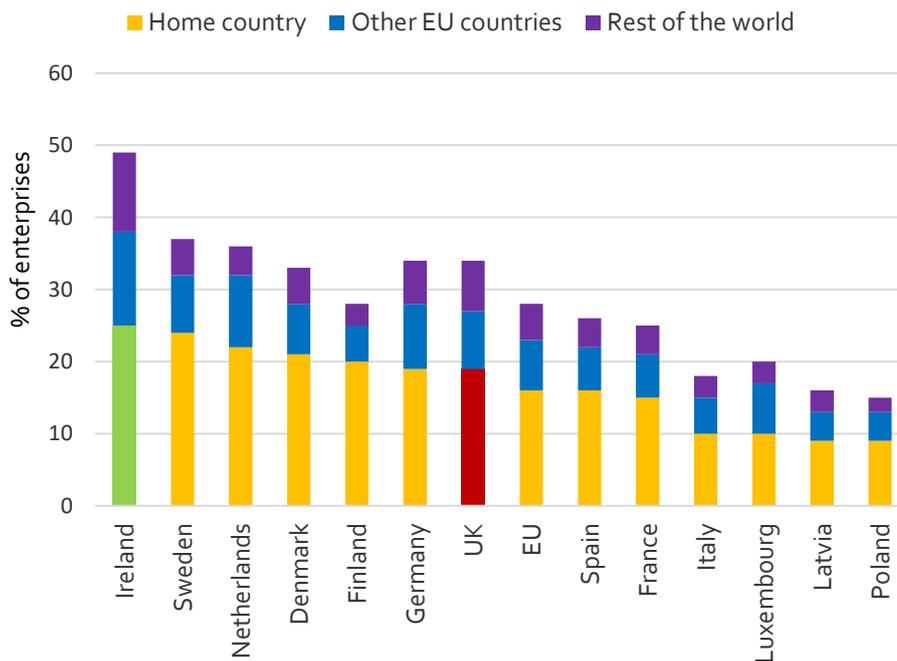


This figure shows the proportion of e-sales out of total turnover recorded by enterprises in selected countries. In Ireland, e-sales accounted for 35% of total turnover for all businesses, and 26% of turnover for SMEs. This was significantly higher than their counterparts in the UK (all businesses, 19%, and SMEs, 11%) and the EU (all businesses, 17%, and SMEs, 10%).

EU rank: 1st

Source: Eurostat, Digital Economy and Society

Fig. 4.3.6 Enterprises with web sales, by place of sale, 2017



In 2017, Ireland had the highest proportions of enterprises (13%) with web sales to other EU countries compared to the UK (8%) and the EU average (7%).

Ireland also had the highest share of enterprises (11%) that conducted online sales with rest of the world and within Ireland (25%). Irish enterprises remain leaders in the EU in terms of online sales.

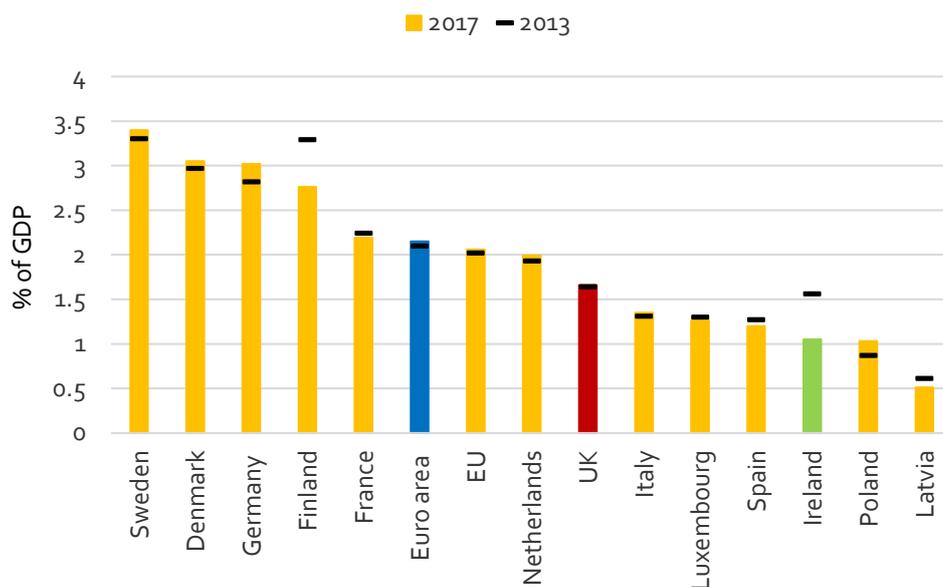
EU rank: 1st

Source: Eurostat, Digital Economy and Society

³⁷ SMEs data for Luxembourg is not available

4.4 Knowledge and Talent

Fig. 4.4.1 Gross R&D expenditure (GERD³⁸) as a percentage of GDP, 2017

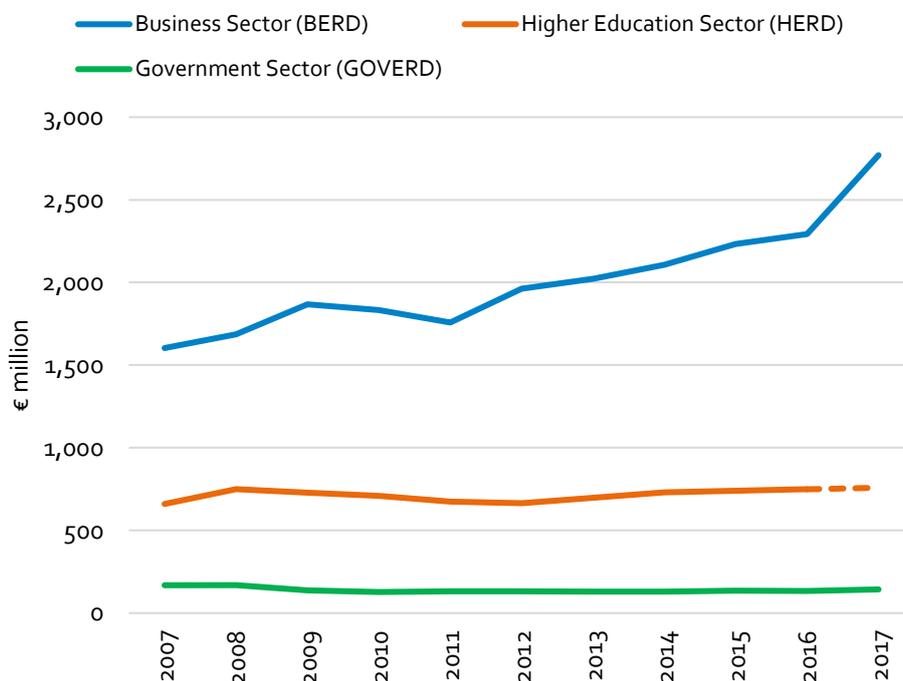


This figure shows the gross R&D expenditure as a percentage of GDP across selected countries. While there is a considerable heterogeneity across EU countries, R&D expenditure in Ireland (1%) has fallen since 2013 (1.6%) and remains well below the euro area (2.2%) and the UK (1.7%). However, this number needs to be treated with caution given the distortions to which Ireland's GDP figures are prone. Fig 4.4.2 (below) provides more context here.

Euro area rank: 9th

Source: Eurostat, Research and Development Statistics

Fig. 4.4.2 Expenditure on R&D by sector, Ireland, 2007-2017³⁹



This chart helps to give context to the above chart. While R&D expenditure (as a proportion of GDP) has fallen since 2013, R&D expenditure has increased in the same period. In the last 10 years, R&D expenditure by the business enterprise sector has trended upward, whereas it was stable in the Government sector and the Higher Education sector.

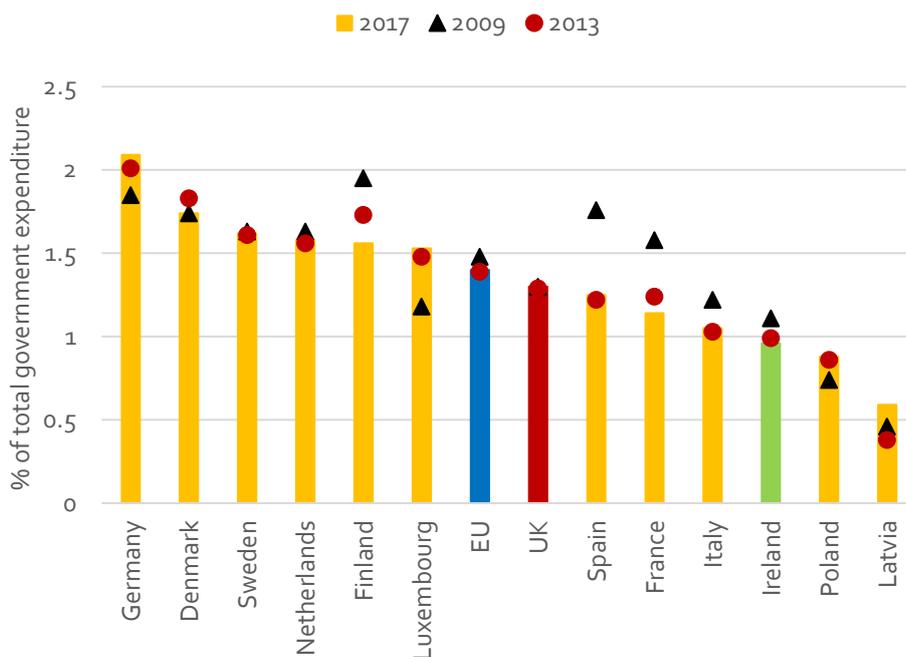
rank: n/a

Source: CSO, Research and Development Statistics

³⁸ Gross Expenditure on Research and Development (GERD) is the sum of R&D expenditure in the business, higher education and government sectors.

³⁹ HERD 2017 figure is an estimate

Fig. 4.4.3 Share of Government budget appropriations or outlays on R&D, 2017

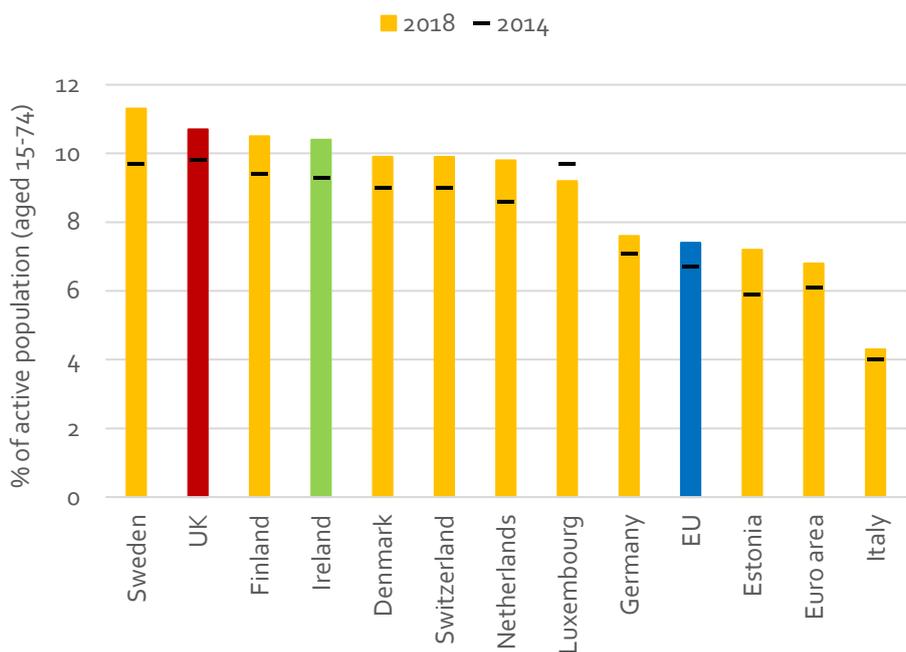


This figure shows the estimated share of Government expenditure on R&D across selected countries. In Ireland, it has fallen from 1.11% in 2009 to 0.96 % in 2017. Also, appropriations or outlays on R&D in Ireland remains significantly lower compared to the UK (1.3%) and the EU (1.4%).

Euro area rank: 9th

Source: Eurostat, Research and Development, Government Expenditure

Fig. 4.4.4 Scientists and engineers as a percentage of active population aged 15-74, 2018

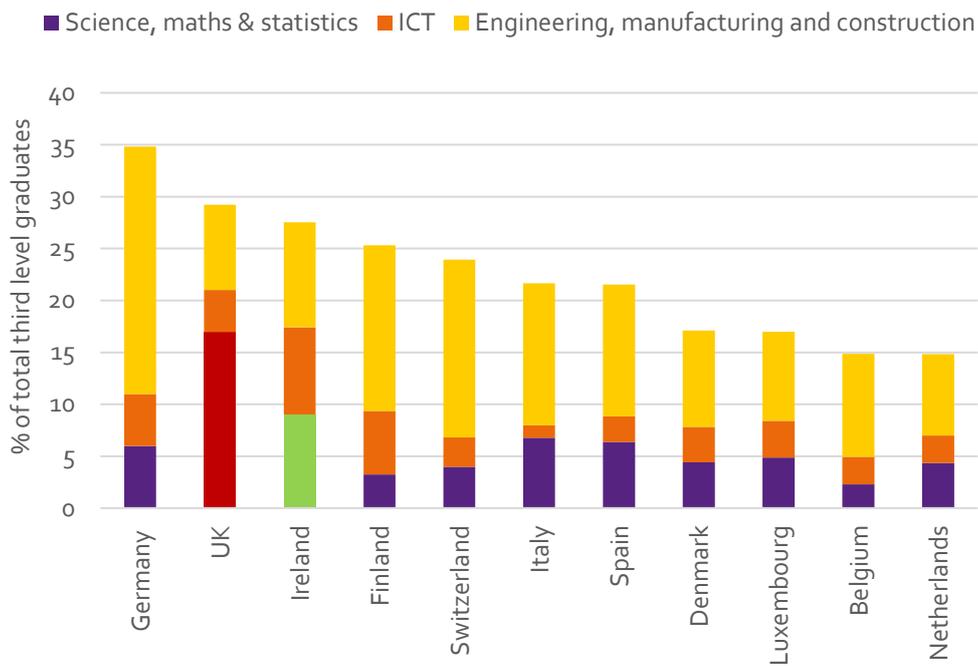


Since 2014, the number of scientists and engineers in Ireland (as a proportion of the active population) has increased. In 2018, 10% of the active population in Ireland were Scientists and engineers, which was higher than the EU (7.4%) and slightly lower than the UK (11%).

Euro area rank: 4th

Source: Eurostat, Human Resources in Science and Technology

Fig. 4.4.5 STEM graduates as a percentage of total third level graduates, 2017

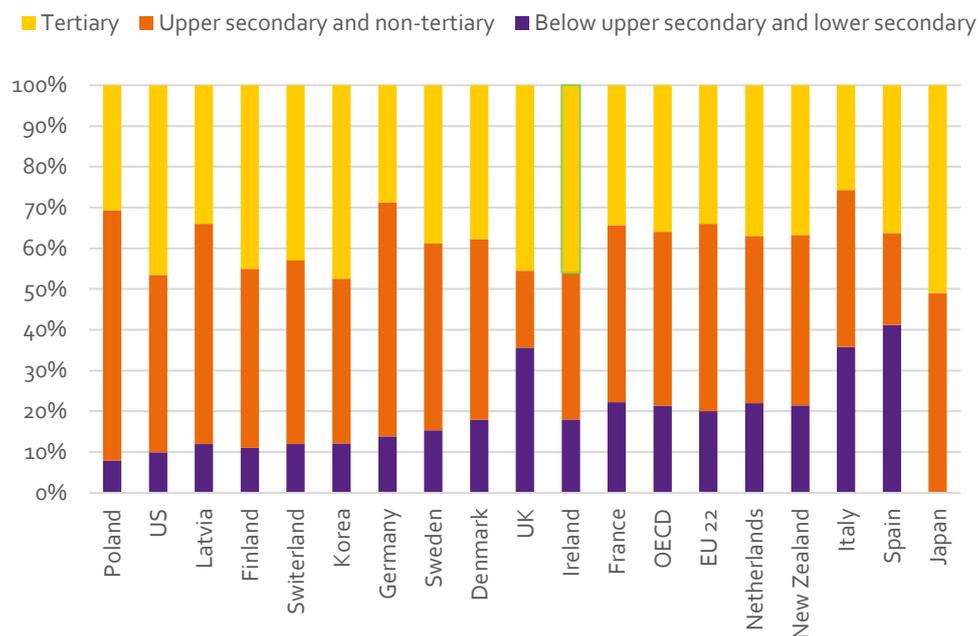


In 2017, Germany had the highest proportion of STEM graduate in the EU, with 34% of all graduates getting a STEM degree. In Ireland, the corresponding figure was 27%. Interestingly, the composition of these STEM graduates is quite different. In Ireland, a much larger proportion of STEM graduates study ICT courses, compared with Germany where engineering, manufacturing, and construction is the largest contributor of STEM graduates.

Rank: n/a

Source: Eurostat, Graduates by Education level, Programme Orientation and Field of Education

Fig. 4.4.6 Education attainment of population aged 25-64 by highest level of education⁴⁰ (%), 2017



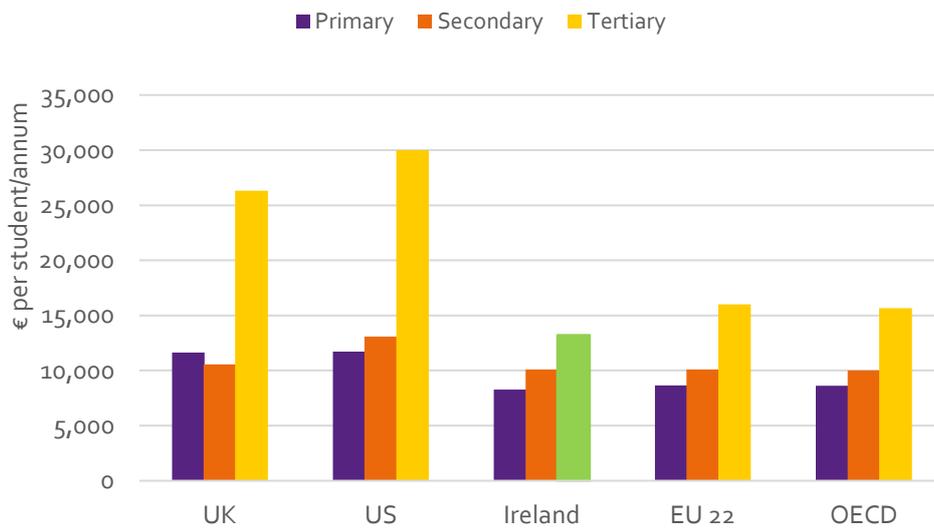
In 2017, Ireland had one of the highest proportions of the working age population with tertiary education (46%), and one of the lowest proportions of the working age population with below secondary education (18%).

rank: n/a

Source: OECD, Education at a Glance 2018

⁴⁰ Upper secondary and non-tertiary refers to people with upper secondary and post-secondary but non-tertiary education. Data missing for Japan for below upper secondary and lower secondary level

Fig. 4.4.7 Annual expenditure on education institutions, per students (\$ US PPP), 2017

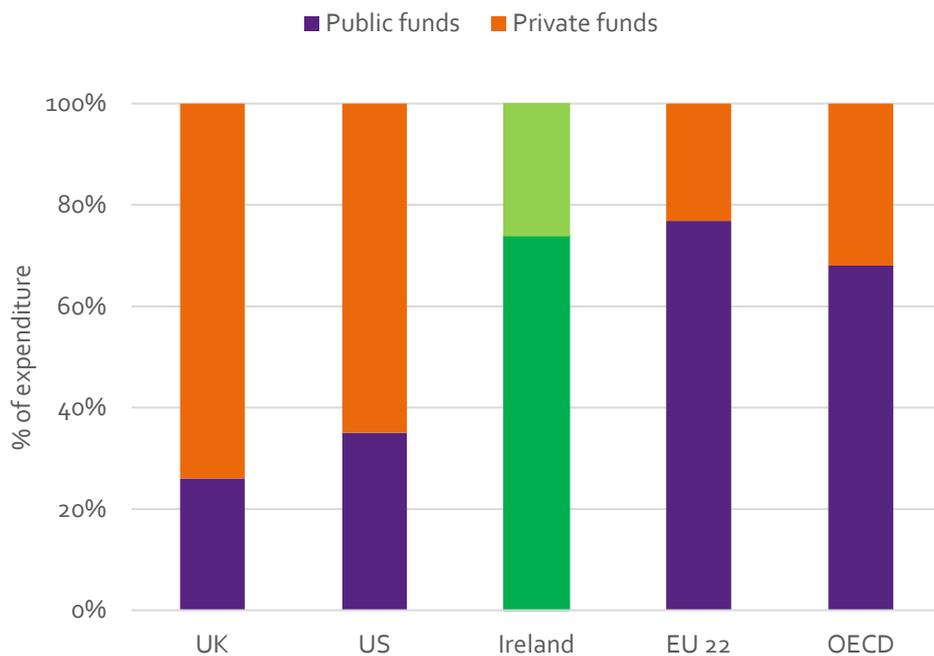


This figure shows that spending per student at pre-school (kindergarten) and post-school (university) level in selected OECD countries. Spending per student on tertiary education in Ireland remains below the OECD and the EU22 average, but is higher in Secondary and Primary level. The UK and the US spend significantly more per person on tertiary level compared to Ireland.

OECD rank: 18th (Tertiary)

Source: OECD, Education at a Glance 2018

Fig. 4.4.8 Breakdown of tertiary educational expenditure, 2017

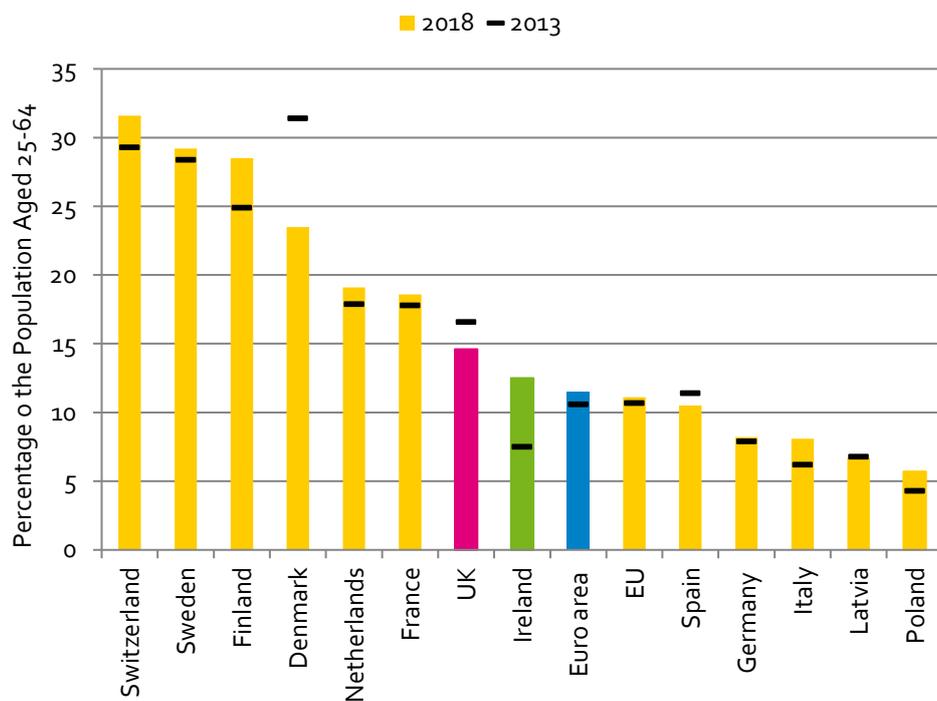


Compared to the UK and the US, tertiary education is primarily funded by public funds in Ireland and the EU. In 2017, the share of private sector funding on tertiary education in Ireland was 26% compared to 71% in the UK and 65% in the US. However, 74% of funding came from the exchequer in Ireland compared to 25% in the UK and 35% in the US.

rank: n/a

Source: OECD, Education at a Glance 2018

Fig. 4.4.9 Lifelong learning⁴¹ (as a percentage of population aged 25-64), 2018

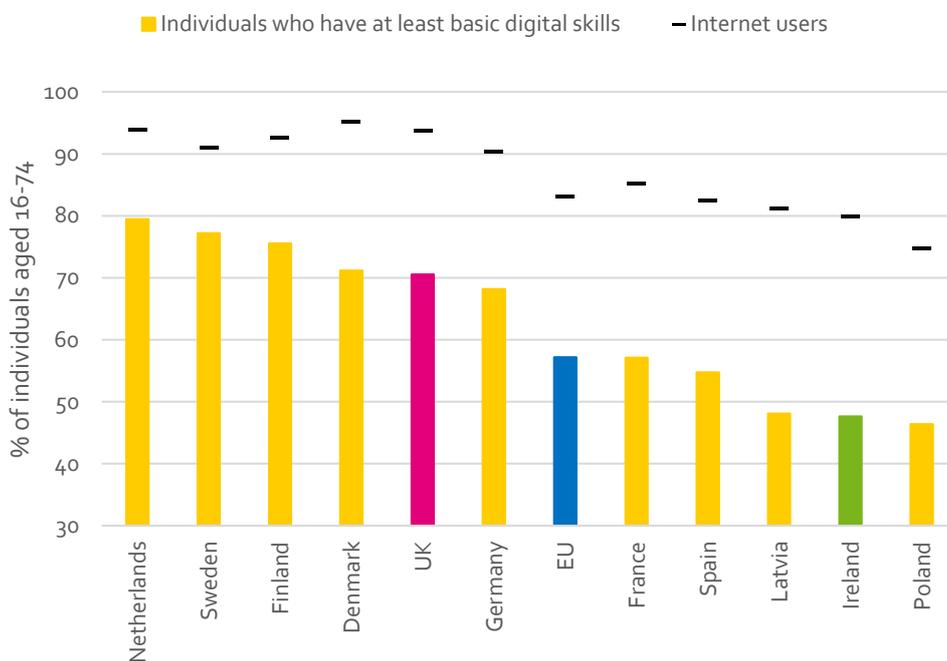


In the last six years, the percentage of 25-64 years cohorts in receipt of education and training (both formal and informal) in Ireland has increased by 5 percentage points. The figure in Ireland (12.5%) is above the EU (11.1%) and Euro area (11.5%) but below the UK (14.6%).

EU rank: 10th

Source: Eurostat, Participation Rate in Education and Training

Fig. 4.4.10 Population having at least basic digital skills⁴², 2019



As shown in the figure, only 48% of the population report having at least basic digital skills in Ireland. This is one of the lowest levels in the EU. Ireland (80%) is also behind the EU (83%) and the UK (93.8%) in terms of number of people actively using the internet.

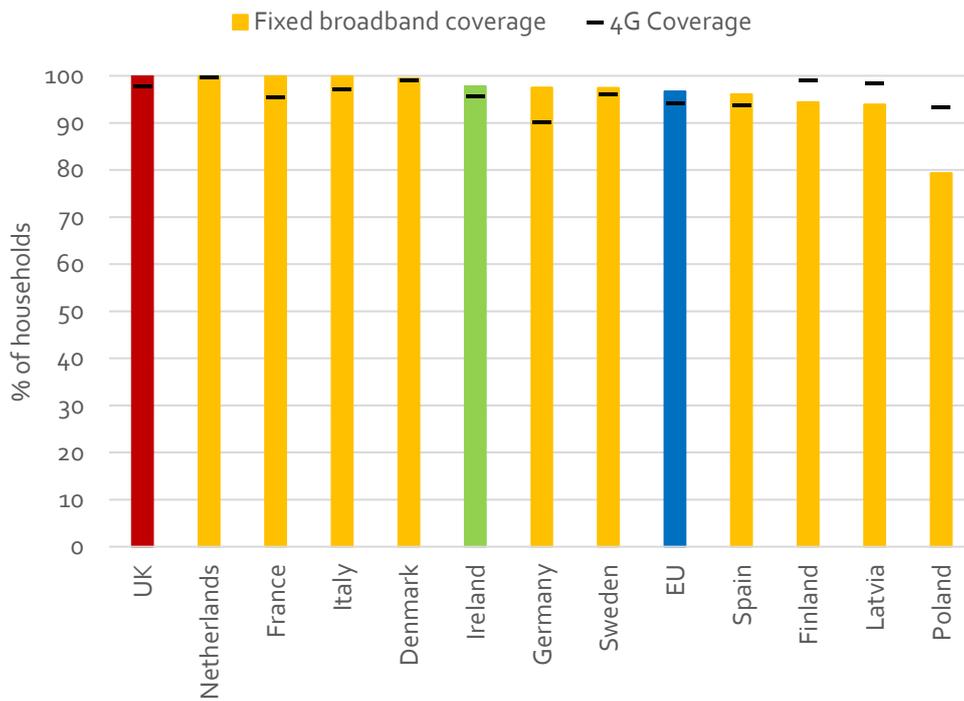
EU rank: 23rd

Source: European Commission, Digital Economy and Society Index

⁴¹ Lifelong learning - people in receipt of education and training (both formal and informal)

⁴² Based on survey of individuals aged 16-74

Fig. 4.4.11 Proportion of households with broadband coverage and 4G coverage, 2019



Overall connectivity in Ireland has improved significantly in recent years (currently ranked 12th in EU). In 2019, almost 98% of the household in Ireland had fixed broadband coverage, above the EU (96.7%) but below the UK (100%). Ireland (95.7%) also performs better than the EU (94.3%) but is behind the UK (97.8%) in terms of 4G coverage. It is important to note that this figure does not differentiate for the quality of the connection.

Euro area rank: 13th (Fixed Broadband)

Source: European Commission, Digital Economy and Society Index

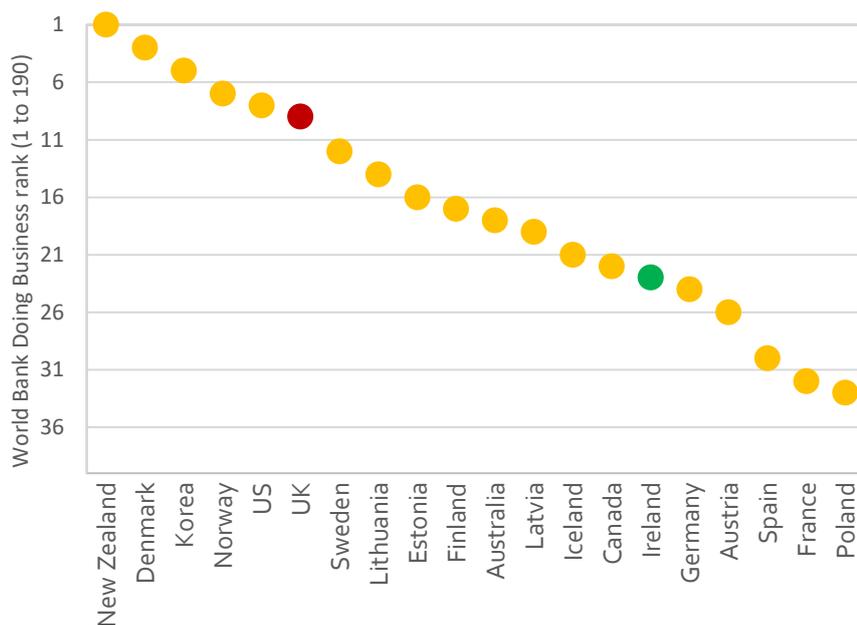
Chapter 5. Essential Conditions

For an economy to be productive and competitive, several pre-conditions need to be in place to allow economic activity take place and ensure that there are sufficient resources to facilitate production. This section looks at some of the the necessary, but not sufficient conditions for economic growth and competitiveness to take hold.

- **Institutions: institutional quality is difficult to measure, and almost impossible to compare across countries, but the Council focus on the burden of regulation on businesses, perceptions of the quality of public services, and regulatory effectiveness.**
 - The World Bank's Doing Business Index assesses the burden of regulation on SMEs by focusing on several processes small businesses are likely to face and determines the time and cost of completing these processes. Currently, Ireland is ranked 23rd in the world in this index, a fall from the 2009 peak of 7th. The overall figure masks high rankings in paying taxes (1st), protecting minority investors (3rd), and starting a business (4th), and low rankings in registering property (28), trading across borders (28) and enforcing contracts (31).
 - Perceptions of the Government effectiveness can also be revealing. The World Governance Indicator, which measures perceptions of Government effectiveness ranked Ireland ranked 20th in the OECD. This was roughly the OECD average, but it was below the UK score for this indicator.
- **Macroeconomic sustainability: the macroeconomic environment plays a vital role in determining the sustainability of economic growth. A range of indicators are monitored under this heading, including the components of growth, government finances and overall debt to income ratio.**
 - Strong public finances are imperative to a country's sustainable economic growth. In Ireland, Government debt (as a percentage of GDP) has fallen from 77% in 2015 to 65% (2018), which means that Ireland's debt (relative to GDP) is smaller than the UK (87%) and the euro area average (85%).
 - However, when the debt is measured on a per capita basis, the figures tell a different story. At €43,000 the Government debt per capita in Ireland is the highest in the EU, much higher than the euro area average (€29,000) and Greece (€31,000).
 - The Government deficit (as a percentage of GDP) has fallen significantly in the last three years from a deficit of 1.9% to balance, reflecting the significant improvement in the Irish Government's fiscal position. In 2018, the overall euro area deficit stood at 0.5% with seven states recording a surplus and eleven states recording a deficit.
 - Income tax remains the main source of tax revenue for the Irish Government (accounting for 39%) of overall tax revenue, followed by VAT (25%) and corporation tax (17%).
 - In 2018, Ireland ran a 4.5% current account surplus, moving from a deficit of 1.2% in 2013.
- **Endowments: the productivity-based view of competitiveness emphasises the importance of endowments – that is natural resources, geographic location, demographics and size have a role in determining national competitive performance. While such factors cannot easily be impacted by policy, it is important to be aware of their impact on competitiveness. Factors such as demographic trends (i.e. population growth), labour force participation, migration and population density are examined here.**
 - In 2018, Ireland continued to have the youngest population in the euro area. The median age is 37 years old – which compares with the median age in the UK (40), the EU (43) and the euro area (44).
 - Net migration into Ireland has risen steadily in the last five years and in 2018, it was 34,000 owing to the arrival of 90,300 into the country and 56,300 out of the country. These figures can be broken down by educational attainment, and since 2013, there has been a significant positive trend in net migration figures among people with a tertiary education. In 2018, net migration figures for people with a third level education was 22,700 and increase of over 9% from 2017.

5.1 Institutions

Fig. 5.1.1 Doing Business Ranking⁴³, 2018/2019

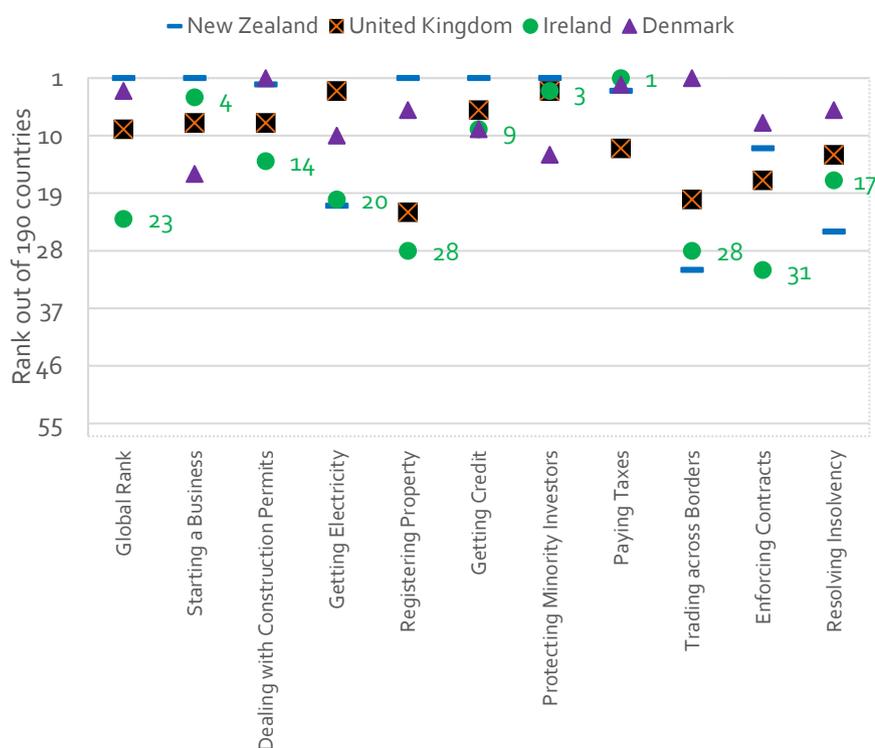


This figure shows the World Bank’s Doing Business rankings of selected countries. In 2019, Ireland was ranked 23rd out of 190 economies, a fall of six place from 2018. New Zealand was ranked 1st overall with Denmark the highest ranked EU countries with overall ranking of 2nd. The UK was ranked 9th.

Euro area rank: 5th

Source: World Bank, Ease of Doing Business

Fig. 5.1.2 Ease of Doing Business Ranking by Theme, Selected countries, 2018/2019



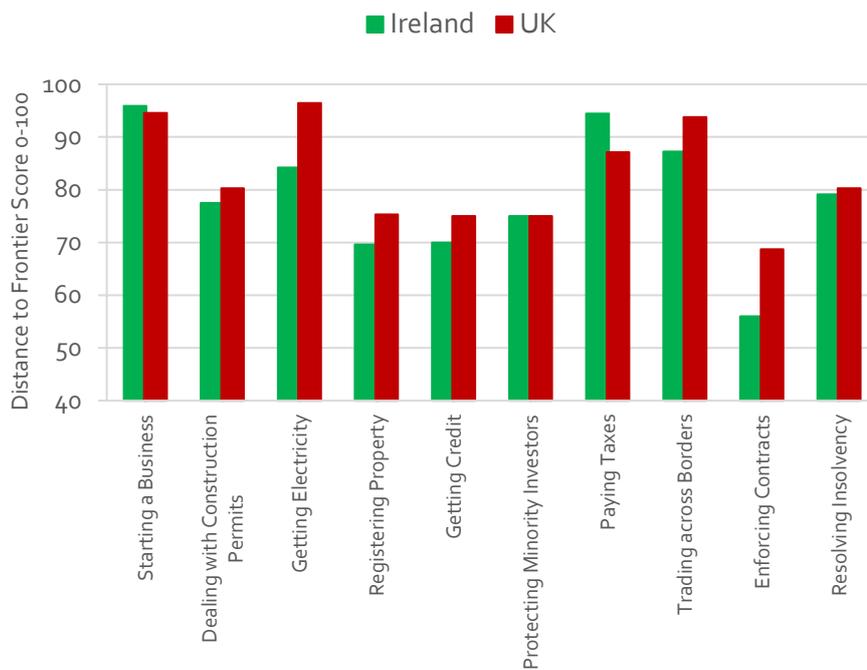
This figure highlights the significant variations in Ireland’s Ease of Doing Business performance across different themes examined by the World Bank. Ireland ranks well and in the top ten in Paying Taxes (1st), Protecting Minority Investors (3rd), Starting a Business (4th) but lags significantly behind frontier countries in Registering Property (28th), Trading across Borders (28th) and Enforcing Contracts (31st).

rank: n/a

Source: World Bank, Ease of Doing Business

⁴³ The World Bank’s Ease of Doing Business report assesses the impact of regulations through SME’s life cycle and ranks economies out of 190 economies.

Fig. 5.1.3 Ease of Doing Business, Distance to the Frontier, Ireland and the UK, 2018/2019

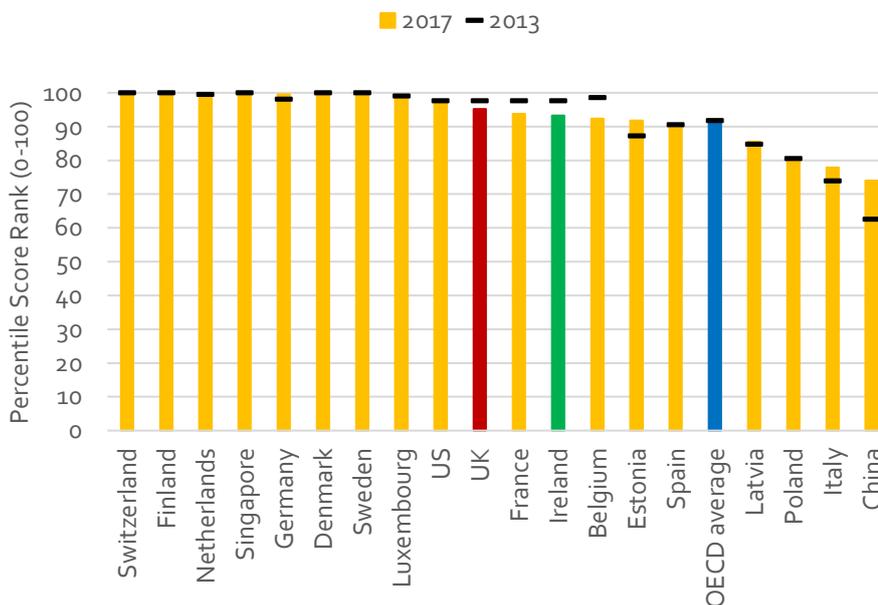


This figure shows the respective score (out of 100) of Ireland and the UK in each indicator used in the World Bank's Ease of Doing Business ranking. Relative to the UK, Ireland scores poorly in enforcing contracts, getting electricity and trading across borders. Ireland leads the UK in terms of paying taxes and also has a slightly better score in starting a business.

rank: n/a

Source: World Bank, Ease of Doing Business

Fig. 5.1.4 Perception of Government effectiveness⁴⁴, 2017



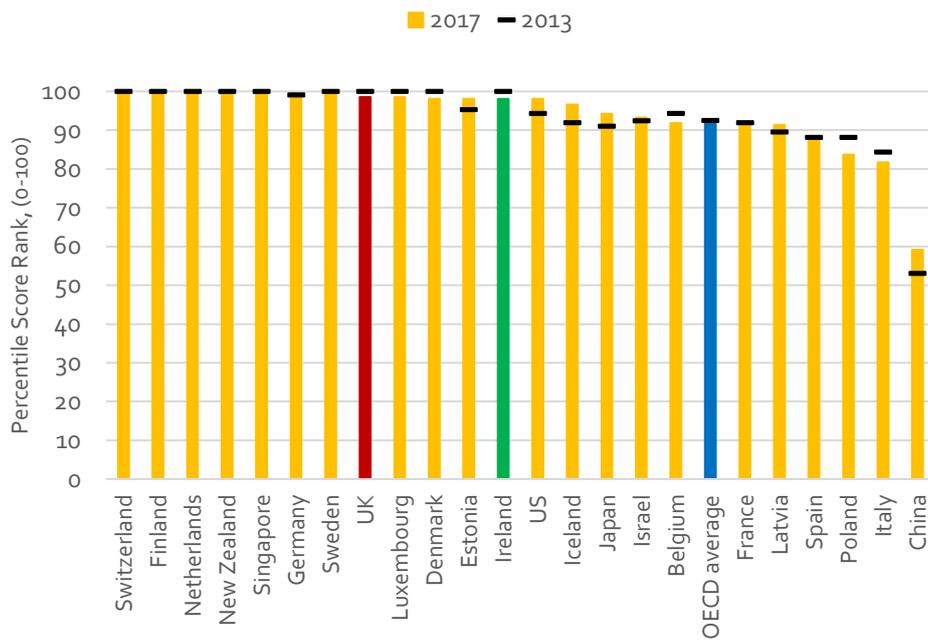
Public trust in Government necessary to sustain economic growth and improve well-being. Ireland is ranked 20th in the OECD and scores 93/100, above the OECD average (91), but behind the UK (95).

OECD rank: 20th

Source: World Bank, World Governance Indicator (WGI)

⁴⁴ Reflects perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. The Worldwide Governance Indicators (WGI) are a research dataset summarizing the views on the quality of governance provided by a large number of enterprises, citizen and expert survey respondents in industrial and developing countries

Fig. 5.1.5 Perception of Regulatory effectiveness⁴⁵, 2017



This figure shows the ranking scores of selected countries on Governance indicator. Ireland scores 98.07 out of 100 in perceptions of the ability of the government to initiate and implement business friendly regulations and ranked 12th in the OECD. The UK is ranked 10th with the score of 98.55.

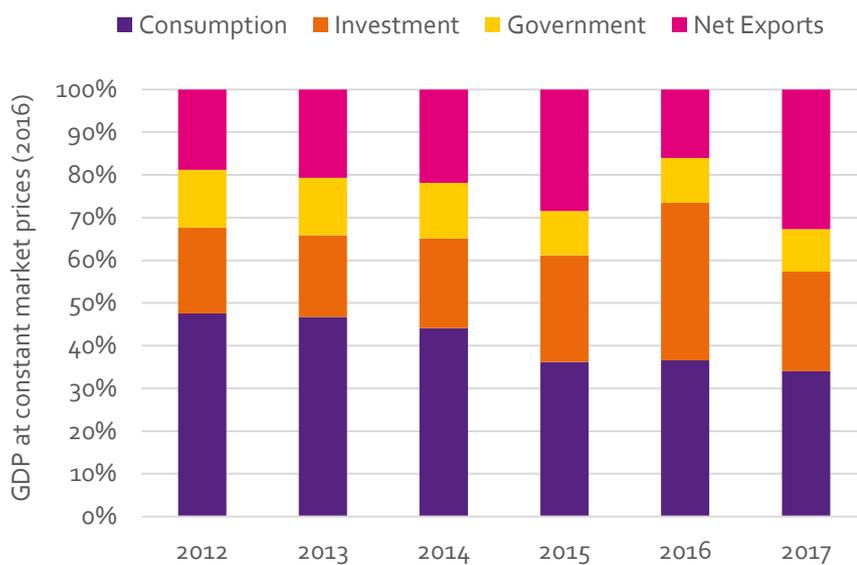
OECD rank: 12th

Source: World Bank, World Governance Indicator (WGI)

⁴⁵ Reflects perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.

5.2 Macroeconomic Sustainability

Fig. 5.2.1 Components of Gross Domestic Product (GDP), Ireland 2012–2017

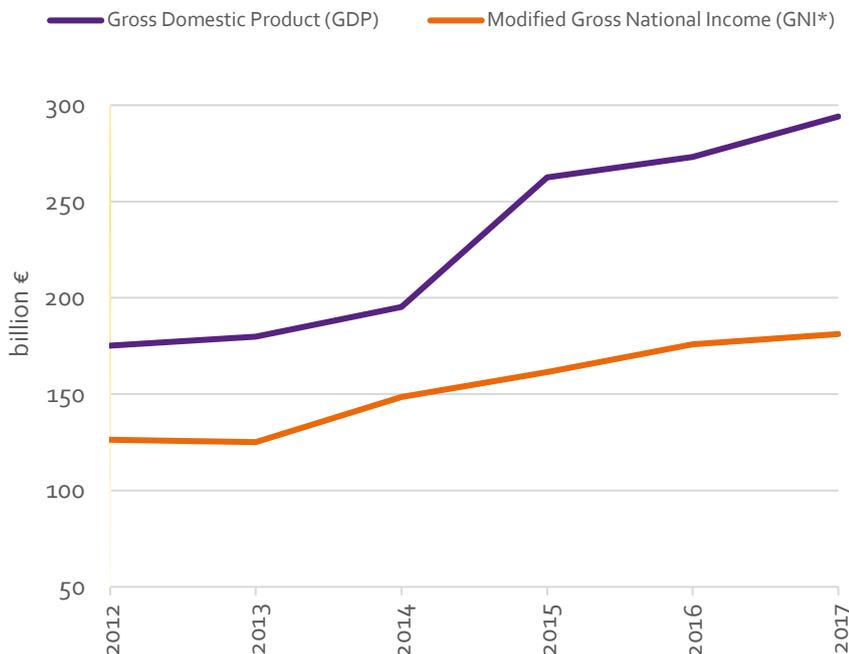


This figure shows the relative contributions of the expenditure components to Irish GDP. In 2017, Irish GDP was largely driven by consumption spending and net exports and accounted for 33% and 32% of the total GDP respectively. Exports increased by 7.8%, imports reduced by 9.4%, and investment in physical capital decreased 31.9% in 2017.

rank: n/a

Source: CSO, National Income and Expenditure

Fig. 5.2.2 Gross Domestic Product and Modified Gross National Income (GNI*)⁴⁶, Ireland 2012-2017



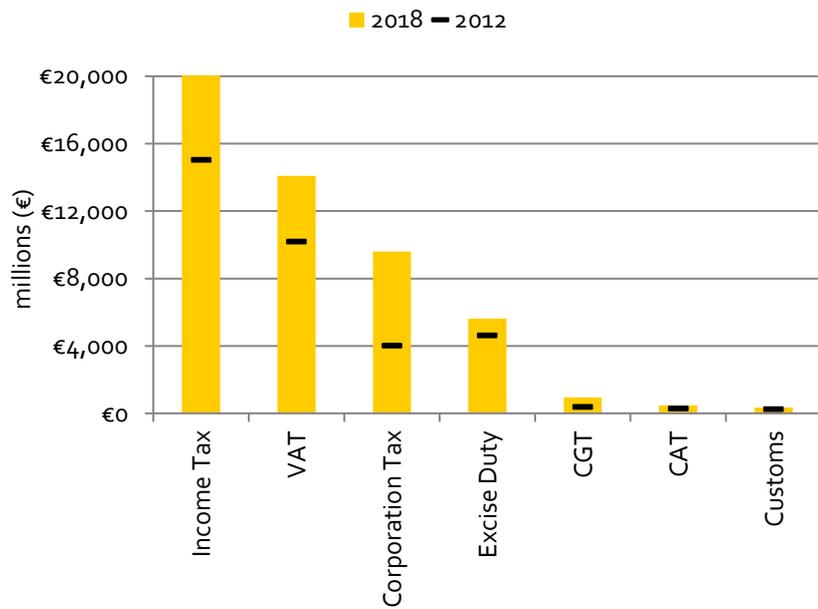
GDP at current market prices and GNI* have trended upwards in recent years. GDP has increased from €175.2 billion in 2012 to over €294 billion in 2017. Similarly, GNI* was €181.2 billion in 2017, an increase of just under €55 billion since 2012 (€126.4 billion).

rank: n/a

Source: CSO, National Income and Expenditure

⁴⁶ Modified GNI means GNI adjusted for- factor income of redomiciled companies, depreciation on R&D service imports and trade in IP, and depreciation on aircraft leasing.

Fig. 5.2.3 Tax revenue in Ireland by category, 2018

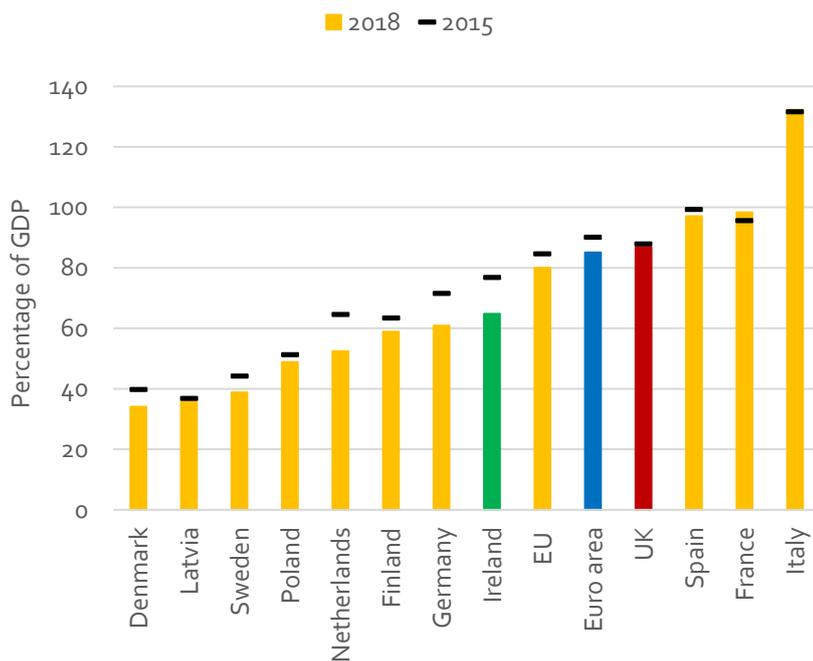


Income tax remains the main source of tax revenue for government as shown in the graph. Tax receipts in all category has gone up since 2012 with Income tax, VAT and Corporation tax accounting for 39%, 25 % and 17% of overall tax revenue (€55bn) generated in 2018.

rank: n/a

Source: Department of Finance

Fig. 5.2.4 General Government gross debt, 2018

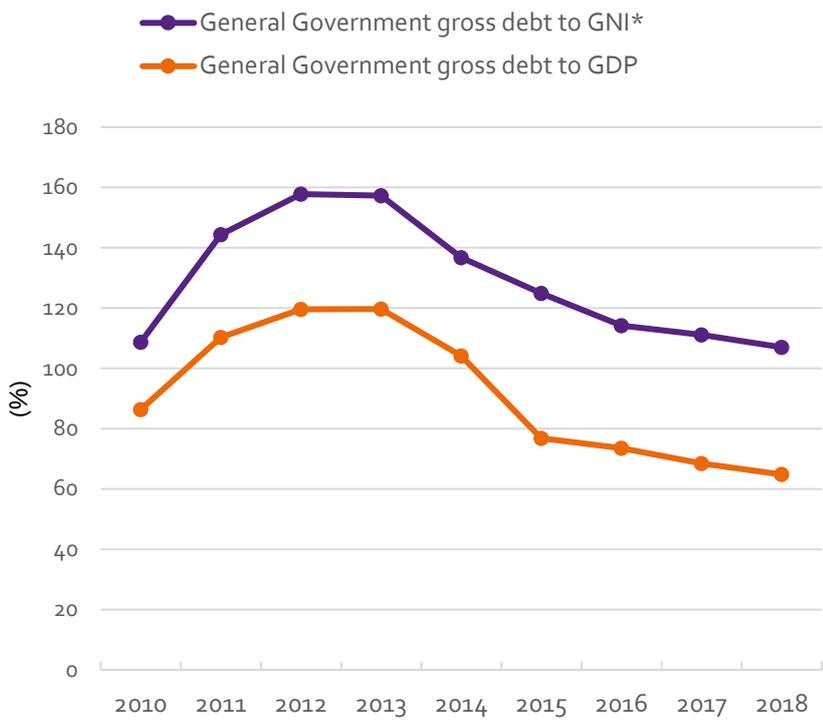


Ensuring that the debt level is sustainable is critical for the future of the Irish economy. One of the most common ways of estimating the sustainability of Government debt is to look at debt as a proportion of GDP. On this metric, the situation in Ireland has improved in the last three years, and debt/ GDP was at 65% in 2018, below the UK (86.8%) and the euro area average (85.1%). However, given the distortions in GDP this chart needs to be considered in a wider context (Fig 5.2.5 and Fig 5.2.6)

rank: n/a

Source: Eurostat, Government Finance Statistics

Fig. 5.2.5 Government gross debt to National Income ratio, 2018

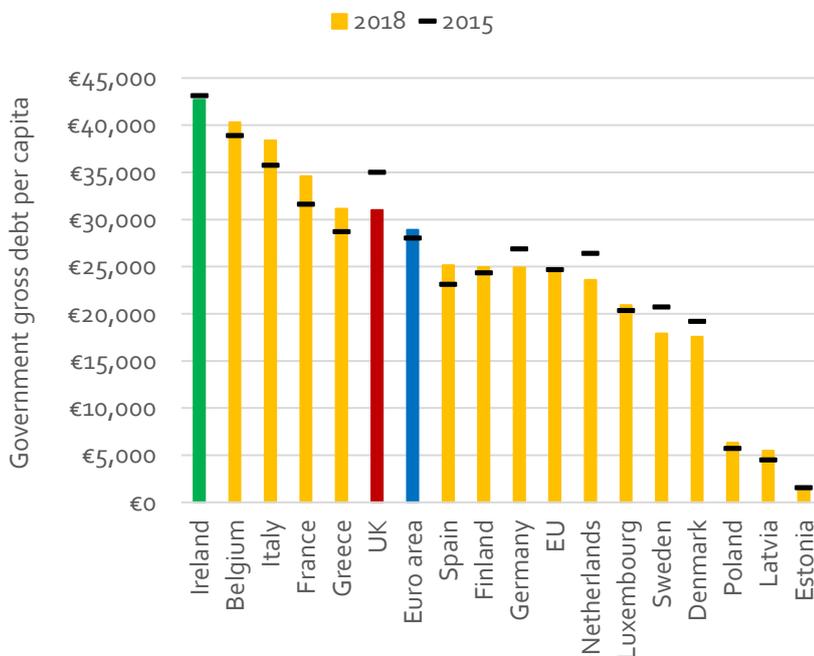


The general government gross debt to GNI* and GDP both trended upward in the period 2010-2013, peaking at 157.8% and 119.7% respectively in 2013. Since then, both have fallen significantly and in 2018, the debt to GNI* ratio stood at 107% and debt-to-GDP ratio stood at 64.8%.

Rank: n/a

Source: CSO, Department of Finance

Fig. 5.2.6 Government consolidated gross debt per capita, 2018

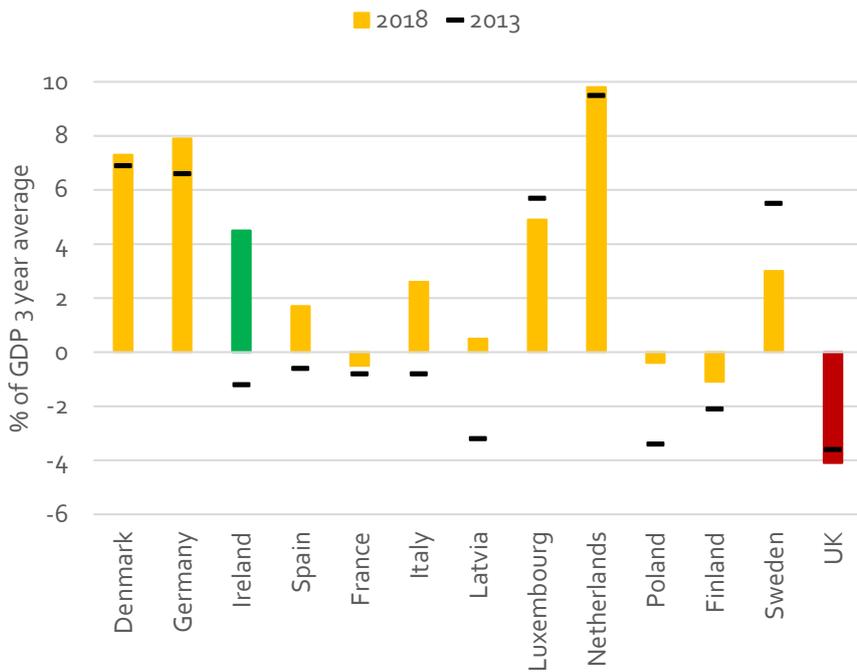


The Government consolidated gross debt per capita in Ireland remains high but has fallen slightly (0.9%) in the last three years. In 2018, debt per capita in Ireland was €42,691, significantly higher compared to the euro area (€28,900) and the UK (€30,995).

rank: n/a

Source: NCC calculations based on Eurostat data, Government Finance Statistics

Fig. 5.2.7 Balance of Payments Current Account as percentage of GDP 3- year average

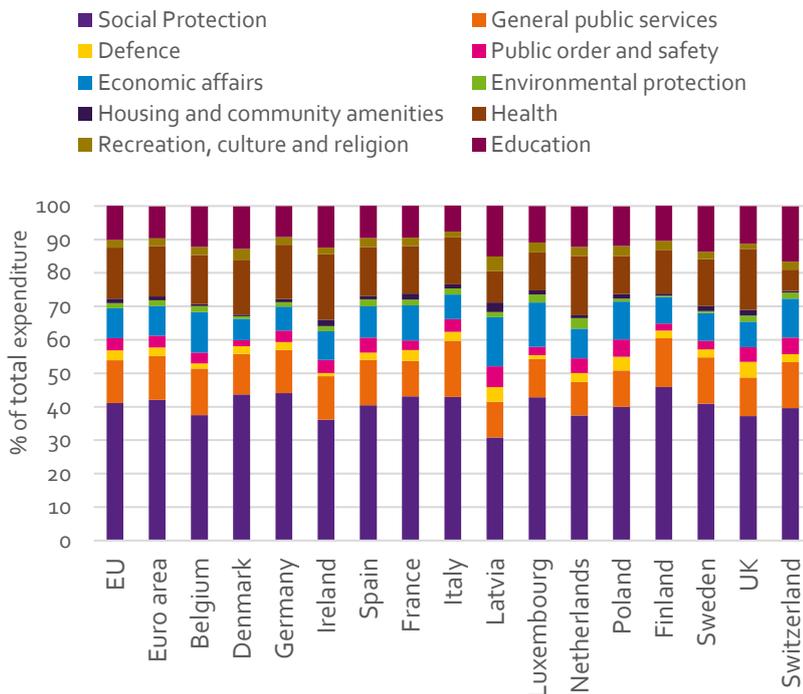


Ireland current account balance has improved markedly since 2013 as shown in the figure. Ireland’s current account as a percentage of GDP has moved from deficit (-1.2 %) in 2013 to surplus (4.5%) in 2018. In the UK, the deficit has increased from -3.6% in 2013 to -4.1% in 2018.

Euro area rank :n/a

Source: Eurostat, National Accounts, BOP, Current Account Balance

Fig. 5.2.8 Total general government expenditure by area, 2017

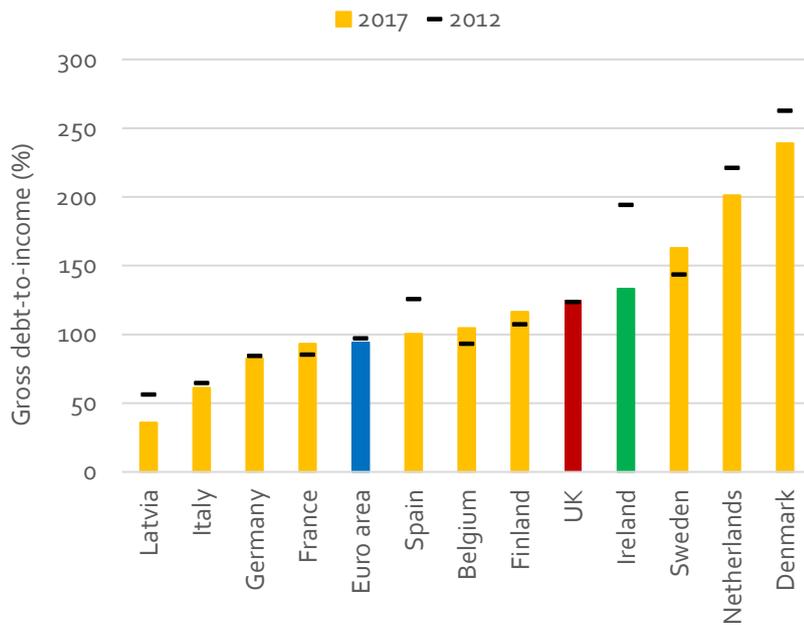


Social Protection (36.1%), Health (19.6%) and Education (12.4%) were the three big areas accounting for 68.1% of the total government expenditure in Ireland in 2017. As a share of total Government spending, the expenditure on Social Protection was lower in Ireland compared to the euro area (42.1%) and UK (37.2%) but significantly higher in Health and Education. Health and Education accounted for 15% and 9.6% in the euro area and 18.2% and 11.3% in the UK.

Rank: n/a

Source: Eurostat, General Government Expenditure by Function (COFOG)

Fig. 5.2.10 Gross debt to income ratio of households, 2017

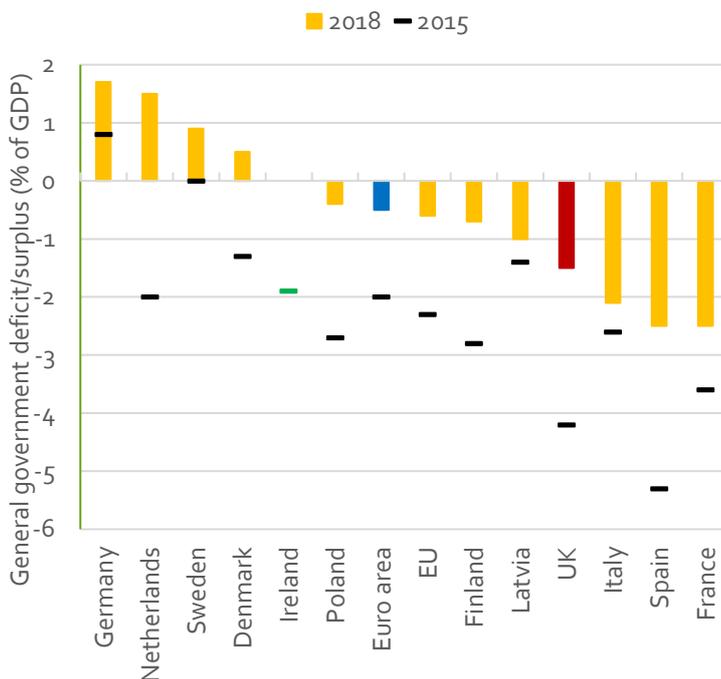


Aggregate household indebtedness has fallen significantly in Ireland in the five year to 2017 as shown in the figure. However, household debt remains significantly higher in Ireland compared to the euro area and the UK. In 2017, the household debt to income ratio in Ireland stood at 133%, compared to 125.1% in the UK and 94.1% in the euro area.

Euro-17 rank: 4th (Highest)

Source: Eurostat, National Accounts

Fig. 5.2.11 General government deficit/surplus (% of GDP), 2018⁴⁷



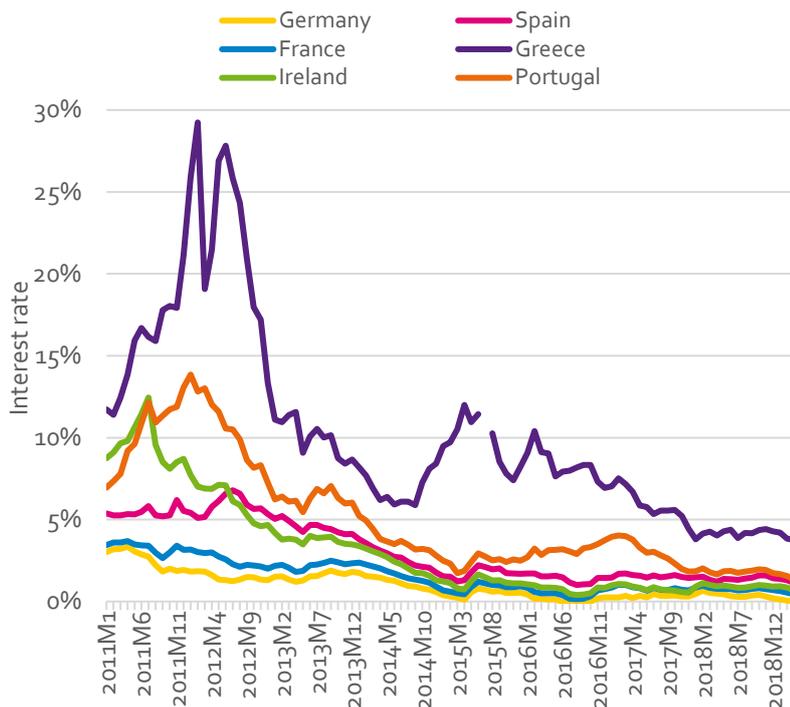
This chart depicts the development in the general government balance sheet of selected countries between 2015 and 2018. The Irish government deficit as a percentage of GDP has fallen significantly in the last three years from a deficit of 1.9% in 2015 to 0% in 2018 reflecting the significant improvement in the Irish Government's fiscal position. In 2018, overall euro area deficit stood at 0.5% with seven states recording a surplus and eleven states recording a deficit.

Euro area rank: 9th

Source: Eurostat, Government Finance Statistics (GFS)

⁴⁷ In 2018 Ireland balance is 0 per cent.

Fig. 5.2.12 Ten-year government bond (Yields)⁴⁸

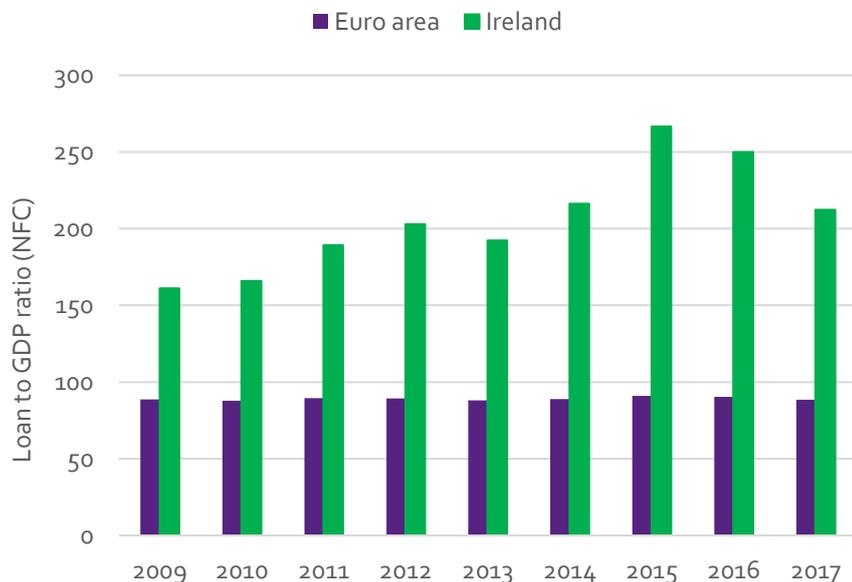


This figure depicts the 10-year sovereign bond yields for selected countries. The 10 year bond yield has come down significantly across EU countries since the height of the financial crisis reflecting the strong market confidence in the euro area economy. The Irish sovereign bond yield has fallen dramatically since the peak of July 2011 (12.45%) and was 0.67% in January 2019.

Rank: n/a

Source: ECB

Fig. 5.2.13 Business (non-financial counterparties) Loan-to-GDP ratio, 2009-2017



Ireland's business sector's loan to GDP ratio continues to be significantly higher compared to the euro area as shown in the figure. While the euro area business sector loan ratio has remained stable, the Irish business sector's indebtedness has started to fall only since 2015, reversing the trend of the previous 6 years. In 2017, the Irish business sector's loan-to GDP ratio was 212.3%, significantly higher compared to the euro area (88.5%).

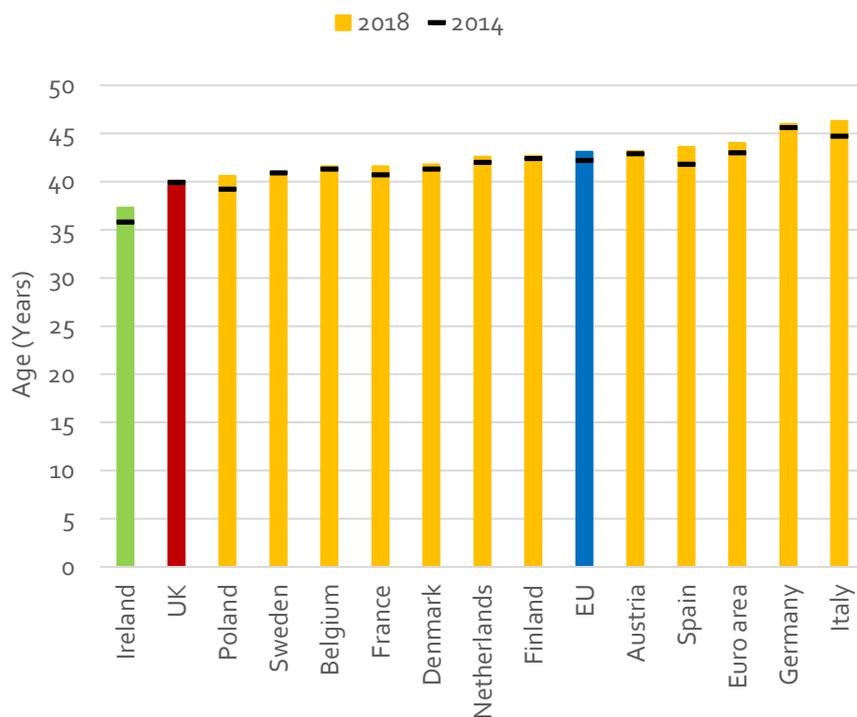
Rank: n/a

Source: Eurostat, Financial Balance Sheets

⁴⁸ The gap in series for Greece for July 2015 is due to the lack of data owing to the market closure.

5.3 Endowments

Fig. 5.3.1 Median Population age, 2018

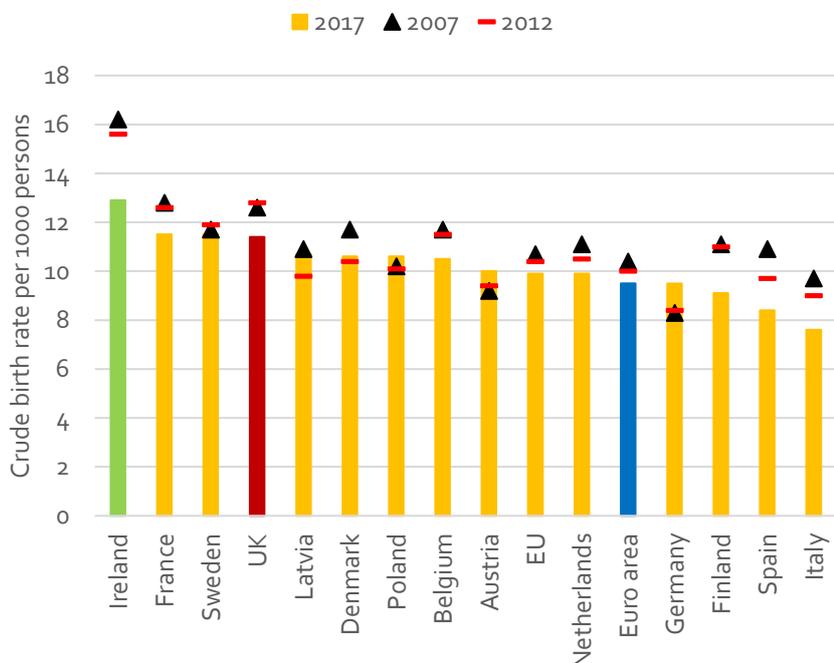


In 2018, Ireland's population had a median age of almost 37.3 years - up from 35.8 years in 2014. In comparison, the median age of UK, EU and euro area population was 40.1, 43.1 and 44 years respectively.

Euro area rank: 1st

Source: Eurostat, Population Structure

Fig. 5.3.2 Crude Birth Rate, 2017

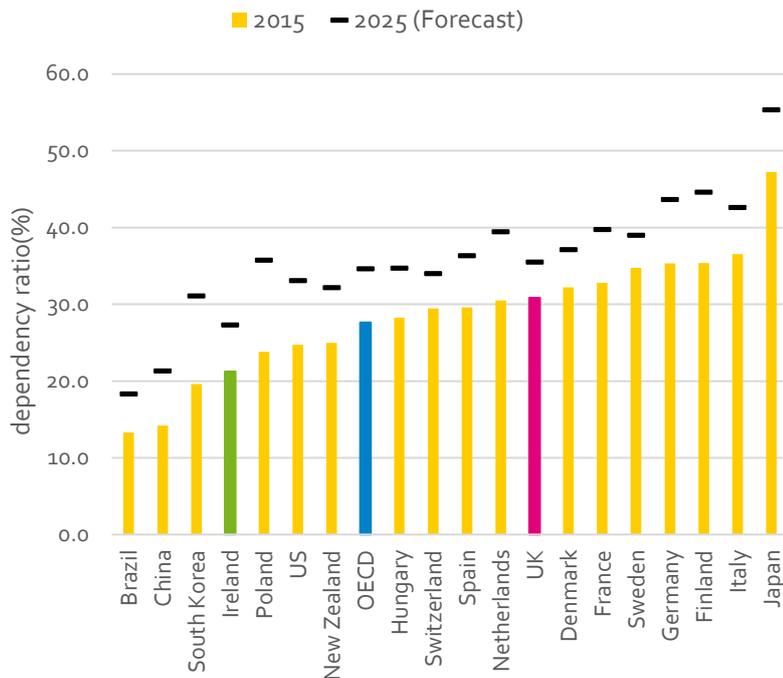


The crude birth rate is measured by the rate of births among a population of 1,000 without differentiating age or sex differences among the population. The rate has fallen across almost all benchmarked countries in the last five years including Ireland. However, in 2017, Ireland (12.9) still recorded the highest birth rate compared to the UK (11.4), the EU (9.9) and the euro area (9.5).

Euro area rank: 1st

Source: Eurostat, Population, Fertility

Fig. 5.3.3 Old age dependency ratio

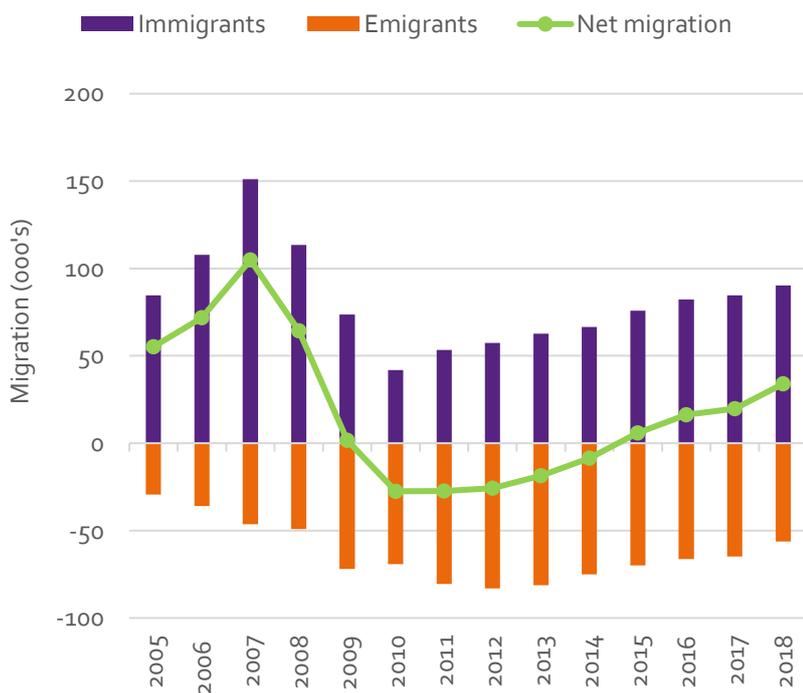


This figure plots the projected change in age dependency ratios for selected OECD countries from 2015 to 2025. The old age dependency ratio is the sum of the elderly population (age 65 and over) relative to the working-age population (ages 15 to 64). As the figure shows, the dependency ratio is projected to rise across the OECD countries in the next 10 years including Ireland. In 2025, the dependency ratio in Ireland (27.3) is expected to be lower than the OECD (34.6) average.

OECD rank: 7th

Source: OECD, Demographics Statistics

Fig. 5.3.4 Net Migration (thousands), 2005-2018

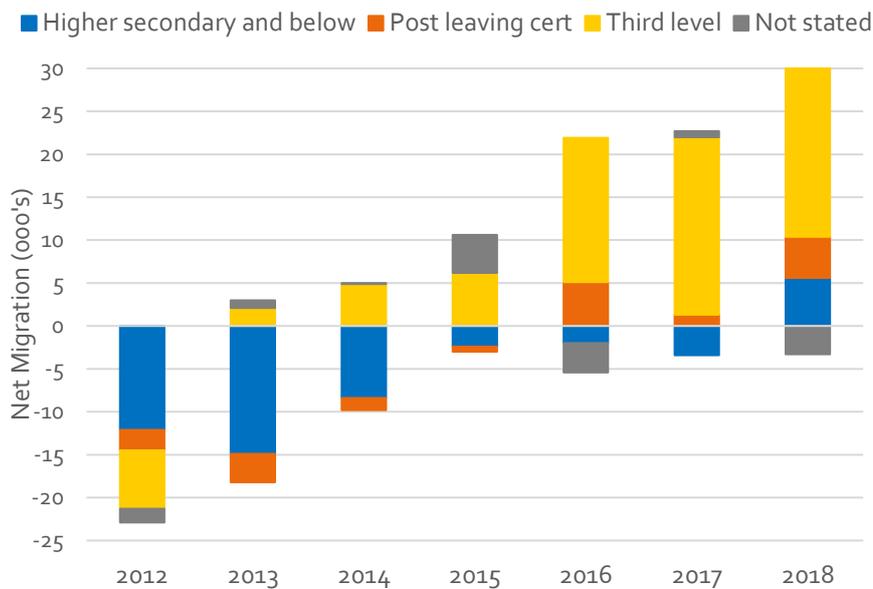


Since 2005, there has been three broad trends regarding net migration figures. From 2005 to 2007, there was an increase in net migration. This was followed by declines in net migration, and ultimately net emmigration, which peaked in 2010. Since then the figures have been slowly improving with net migration turning positive again in 2015, and growing since then.

Rank: n/a

Source: CSO, Components of Population Change

Fig. 5.3.5 Net Migration 15 years and over by educational attainment, 2012-2018

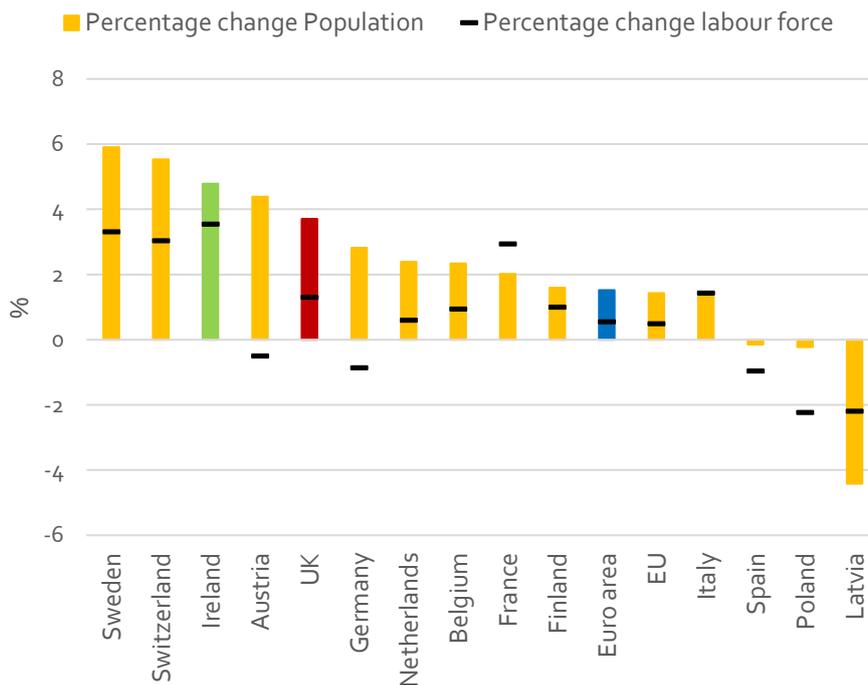


This figure shows the net migration into Ireland by educational attainment. Since 2013, there has been a significant positive trend in net migration among third level qualified people. In 2018, net migration for persons with third level qualifications was 22,700, an increase of over 9% from 2017.

Rank: n/a

Source: CSO, Population and Migration Statistics

Fig. 5.3.6 Population and labour force growth, 2013-2018



The figure shows that Ireland experienced a higher rate of population growth in the last five years to 2018 compared to the UK and the euro area. While Ireland's population grew by 4.7% in the period, the population of the UK and the euro area increased by 3.7% and 1.5% respectively. Similarly, more people entered the labour force in Ireland (3.5%) than in the UK (1.3%) and the euro area (0.5%) in the last five years.

Euro area rank:

Population: 3rd

Labour Force: 3rd

Source: Eurostat, Labour Force Survey

Fig. 5.3.7 Labour Force Activity Rate⁴⁹, Q1 2015 – Q4 2018

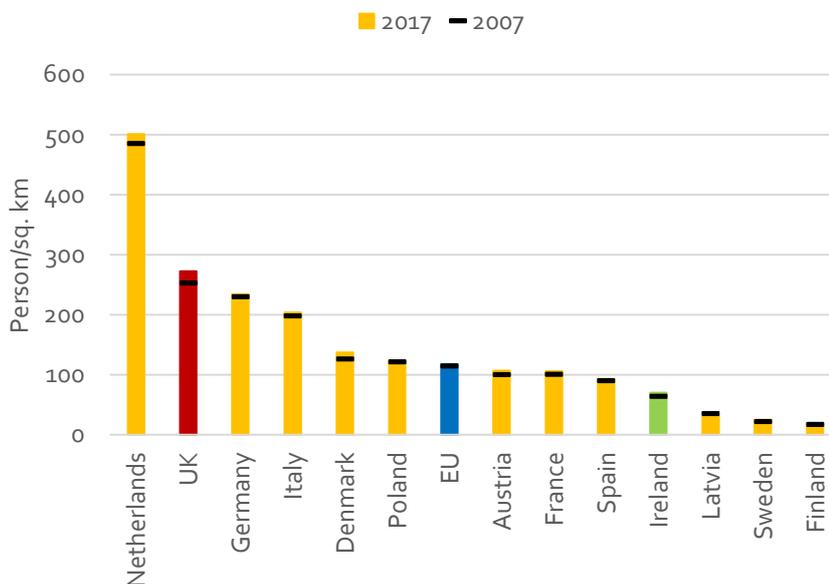


In Q4 2018, the total activity rate in Ireland (73.1%) was lower than the euro area (73.6%). In terms of gender, the male activity rate in Ireland was similar to the rate in the euro area (78.8%) but the female rate in Ireland (67.5%) was lower than the euro area (68.3%). Both the male (0.5%) and female (4.2%) activity rates have increased in the last 3 years in Ireland.

Euro area Rank: 13th (Total)

Source: Eurostat, Labour Force Survey

Fig. 5.3.8 Population density, 2007-2017



Population density in Ireland has risen from 64.3 person/km² to 70 person/ km² in the last 10 years. However, Ireland remains one of the most sparsely populated countries in the EU with the Irish population density in 2017 (70/ km²) significantly below the density level in the UK (272/ km²) and the EU (118/ km²).

EU-28 rank: 22nd

Source: Eurostat, Demography, Population and Migration Statistics

⁴⁹ Activity rate is defined as the percentage of active persons in relation to the total population (includes employed & unemployed)

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