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Country Report Ireland 2019
Including an In-Depth Review on the prevention and correction of macroeconomic imbalances

Accompanying the document

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN CENTRAL BANK AND THE EUROGROUP

2019 European Semester: Assessment of progress on structural reforms, prevention and correction of macroeconomic imbalances, and results of in-depth reviews under Regulation (EU) No 1176/2011

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CONTENTS

LIST OF TABLES

LIST OF GRAPHS

LIST OF BOXES

EXECUTIVE SUMMARY

The sustained strong economic growth in Ireland allows for a further increase in the resilience of the public and domestic private sectors while addressing investment challenges ([1]). Further reducing government deficit and debt could increase the economy's capacity to adjust to external shocks. Moreover, not basing spending on potentially volatile revenue and addressing over-spending in health could ensure the long-term sustainability of public finances. Improvements in the balance sheets of households and banks reflect progress in resolving non-performing loans. Addressing investment challenges and ensuring that growth is broad-based and socially and environmentally sustainable remain key policy challenges.

Economic growth remains robust and is expected to moderate. Real GDP grew by 7.5 % year-on-year in the first three quarters of 2018, well above the euro area average, but inflated by multinational companies. Real GDP is estimated to have grown by 6.8 % in 2018 and forecast to moderate to 4.1 % in 2019 and 3.7 % in 2020. The economic outlook continues to be clouded by heightened uncertainty, relating to the terms of the UK's withdrawal from the EU and to changes to the international taxation and trade environment as well as to possible domestic overheating. Given the uncertainty over the terms of the UK's future relations with the EU, this report does not speculate on the possible economic implications of different scenarios. Given the ongoing ratification process of the Withdrawal Agreement in the EU and the UK, projections for 2019 and 2020 are based on a purely technical assumption of status quo in terms of trading relations between the EU27 and the UK. This is for forecasting purposes only and has no bearing on the talks underway in the context of the Article 50 process.

Although the economy continues to strengthen, improvements in the budget balance are stalling. The deficit is expected to remain broadly stable in the near future. Risks to the budgetary projections are mainly overall economic uncertainties, the volatility of some sources of government revenue (notably corporate income taxes) and over-spending (notably within the health sector). The public debt situation is improving.

Employment continues to perform strongly. The unemployment rate is approaching pre-crisis levels and wage growth is accelerating. Skills and labour shortages are increasingly apparent. Shortages of information and communication technology professionals remain challenges. The relatively low rate of activity, notably for women, shows under-used human capital and the importance of developing adequate policies on work-life balance and childcare. Major reforms were passed to facilitate work-life balance and childcare access, but these will take time to translate into more women working or looking for a job. The employment rate of people with disabilities continues to be one of the lowest in the EU.

Regional differences in skilled labour, competitiveness and productivity are sizeable. This is mostly due to the concentration of multinationals in Dublin that employ large numbers of highly-skilled employees by offering higher salaries. The resulting lack of qualified employees and skilled managers in small and medium-sized enterprises reduces their innovation capacity and competitiveness. The lack of access to ultrafast broadband in more than 95 % of rural areas further aggravates this problem.

Prioritising both public and private investment in infrastructure, decarbonisation, housing, innovation, skills and social inclusion is essential for sustainable and long-term inclusive growth. Investment in research and development, skills and digitalisation is needed to address the lagging productivity of domestic firms and reduce the increasing reliance on multinationals. Sustainable growth will also require an investment push in clean energy, transport, water, broadband and housing as well as to decarbonise sectors with

([1]) This report assesses Ireland's economy in the light of the European Commission's Annual Growth Survey published on 21 November 2018. In the survey, the Commission calls on EU Member States to implement structural reforms to make the European economy more productive, resilient and inclusive. In so doing, Member States should focus their efforts on the three elements of the virtuous triangle of economic policy — delivering high-quality investment, focusing reforms efforts on productivity growth, inclusiveness and institutional quality and ensuring macroeconomic stability and sound public finance. At the same time, the Commission published the Alert Mechanism Report (AMR) that initiated the eighth round of the macroeconomic imbalance procedure. The AMR found that Ireland warranted an in-depth review, which is presented in this report.

high emissions. The resilience of the economy to international economic shocks could also be increased by diversifying maritime transport and energy connections with Europe. Other key issues are improving access to employment for all jobseekers, including by providing affordable childcare, as well as investing in social housing to address rising homelessness. Annex D identifies key priorities for support by the European Regional Development Fund and the European Social Fund over 2021-2027, building on the analysis of investment needs and challenges outlined in this report.

Ireland has set out policies to address these investment challenges, but their implementing them depends on several factors. The National Planning Framework and the National Development Plan 2018-2027 address the challenges outlined above, but their successful implementation depends on factors such as the administrative capacity and coordination of the departments involved, the removal of capacity constraints, especially in the construction sector, and market barriers, particularly for legal and judiciary services. The announced Future Jobs Programme could help small and medium-sized enterprises invest more in research and development and encourage them to take up new technologies. It could also support small and medium-sized enterprises in diversifying exports, integrating themselves in global value added chains and increasing workers' skills.

Overall, Ireland has made some progress ([2]) in addressing the 2018 country-specific recommendations.

There has been substantial progress in the following areas:

- Reducing long-term arrears, helped by restructuring activities and portfolio sales.

There has been some progress in the following areas:

- Decreasing tax expenditure and broadening the tax base, with the measure with the biggest positive impact being an increase in the lower value-added-tax rate on tourism activities. However, some 2019 budget measures actually go in the other direction.

- Implementing the National Development Plan, where a robust monitoring system, adequately resourced departments and a sound system for selecting projects remain essential for its timely and effective delivery.

- Upskilling the adult working-age population, with a focus on digital skills.

There has been limited progress in the following areas:

- Addressing the expected increase in age-related expenditure where despite some measures to increase the cost-effectiveness of healthcare, expenditure has continued to increase rapidly.

- Enhancing the productivity of domestic firms by stimulating research and innovation and promoting cooperation between foreign companies, local firms and public research centres.

Regarding progress towards its national targets under the Europe 2020 strategy, Ireland is performing well on employment, early school leaving and tertiary education targets and the effectiveness of social assistance in reducing poverty. It needs to do more to invest in research and development, reduce greenhouse gas emissions, increase the proportion of renewable energy, improve energy efficiency and reach its national target on reducing poverty.

Ireland fares relatively well on most indicators of the Social Scoreboard supporting the European Pillar of Social Rights, although challenges remain. The effectiveness of the Irish tax and benefits system in reducing poverty and inequalities remains high. The labour market has recovered well from a very sharp economic downturn a decade ago on the back of successful employment policy choices. Real disposable income per person continues to grow but remains slightly below its 2008 level. While Ireland

([2]) Information on the level of progress and actions taken to address the policy advice in each respective subpart of a country-specific recommendation is presented in the overview table in Annex A.

performs well in many education- and social-related indicators, the low percentage of the workforce with basic digital skills reflects the insufficient integration of digital skills in the education and training system. Finally, housing remains a very pressing issue, given increasing homelessness due to shortages of social housing.

The main findings of the in-depth review contained in this report and the related policy challenges are as follows:

- **Private debt levels continue to fall, improving the resilience of households and businesses.** A large part of the stock of private debt is attributed to multinational corporations. Debt of Irish companies, including debt of redomiciled public limited companies, and households, relative to GDP, fell below the indicative macroeconomic imbalance procedure threshold in 2017. However, relative to modified gross national income, domestic debt remains relatively high. Hence, total private debt levels continue to overstate this imbalance. Rising housing prices increased households' net worth and reduced the number of those in negative equity.

- **Domestic banks have reduced non-performing loans, and have remained profitable and well-capitalised.** Non-performing loan ratios are down to single-digit levels and banks are well on track to meet their reduction targets, supported by portfolio sales and rising property prices. Long-term mortgage arrears (over two years past due) remain relatively high, helping to keep the non-performing loan ratio above the euro area average. Banks remain well-capitalised and high lending rates continue to support profitability. There are policy measures for vulnerable households. Take-up rates of these schemes are mixed. Insolvency procedures and the use of in- and out-of-court options for arrears resolution remain limited. Applications for the enhanced mortgage-to-rent scheme are picking up. The credit register became fully functional for consumer loans in 2018 and will be crucial for assessing whether borrowers are capable of servicing their debts.

- **The public debt ratio has come down, but remains high.** The ratio of public debt to GDP fell to 68.4 % in 2017. However, a range of alternative metrics shows that public debt remains high by EU and historical standards, exposing Ireland to economic shocks.

- **Ireland's net international investment position keeps improving.** Its highly negative net international investment position is bloated by some large multinational companies located in Ireland and the markedly negative net position of the International Finance Service Centre, although there is strong evidence that neither constitute vulnerabilities in domestic sectors. The international position of the domestic sectors has been improving over the past two years, and is expected to continue so in the near-term on the back of current account surpluses and robust economic growth. Overall, the level of the domestically relevant external position is hard to gauge although vulnerabilities are abating. Some of the activities of large multinationals were also responsible for the recent swings in the current account. Excluding these effects, the current account is less volatile and remains positive, implying that Ireland maintains a strong competitiveness position overall.

- **The government has implemented a broad range of measures to tackle the undersupply of housing, but results will take time.** Housing supply is rapidly recovering from very low levels but is still falling short of demand. As a result, house price inflation remains high, even if it has recently moderated. The system of rules intended to protect the stability of the financial system, known as the 'macro-prudential framework', remains crucial to ensure that new credit is extended under prudent conditions, preventing credit bubbles.

Other key structural issues analysed in this report, which point to particular challenges for Ireland's economy, are the following:

- **Tax revenue continues to increase but the volatility of corporate tax remains a concern.** The high proportion of corporate tax in total taxation and the dependence on a small number of taxpayers are a concern from a fiscal stability perspective.

- **Ireland's tax rules appear to be used by multinationals engaged in aggressive tax planning structures, but some steps are being taken to limit such practices.** Some elements that may facilitate tax planning include the limited application of withholding taxes on royalties and dividends. However, Ireland has taken steps to amend aspects of its tax system to curb aggressive tax planning, in particular by implementing European and internationally agreed initiatives. Consultation has also started on further changes.

- **The performance of the Irish economy is increasingly dependent on the activities of a limited number of foreign firms.** The diversification of exports and productivity performance can improve the resilience of the local production base. This would require more effective public research and innovation efforts. Removing obstacles to the functioning of some key markets (e.g. legal services or retail) would also help increase the flexibility and resilience of the Irish economy.

- **The long-term fiscal sustainability of the healthcare and pension systems is a challenge.** The ambitious Sláintecare reform represents a credible vision for making the health system universally accessible and sustainable. However, its implementation is endangered by the difficulties in improving budget management in the health system to avoid recurrent overspends. The perverse incentives generated by the coexistence of a public and private insurance market should also be addressed to avoid preferential treatment of privately-insured patients in publicly-funded hospitals. The envisaged Roadmap for Pension Reform, published in 2018, aims to address the long-term sustainability of the state pension system.

- **Economic growth and greenhouse gas emissions are yet to be decoupled.** The government still needs to define a technological pathway and the policy and investment needs to ensure environmentally and socially sustainable development, while also using the economic opportunities arising from the EU's ambitious climate objectives.

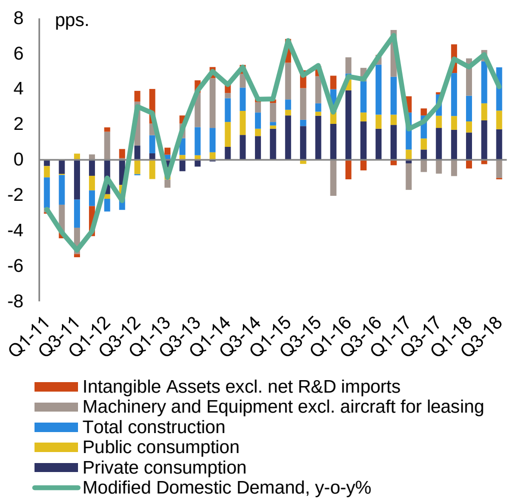
1. ECONOMIC SITUATION AND OUTLOOK

GDP Growth

The Irish economy maintains momentum. Ireland reported 7.5 % GDP year-on-year (y-o-y) growth in the first nine months of 2018, a level well above the euro area average. However, the headline figures remain inflated by the activities of multinational companies operating in the country. The economy is expected to have grown by 6.8 % in 2018 and real GDP is forecast to grow by 4.1 % in 2019 and 3.7 % in 2020 (European Commission, 2019a).

Employment developments and investment underpin domestic economic growth. *Modified domestic demand*, a measure of domestic activity that strips out some of the effects of multinationals, grew by 5.1 % year-on-year in the first three quarters of 2018 (Graph 1.1). It is expected to expand at an average rate of over X % between 2018 and 2020. Private consumption, sustained by increasing disposable income on the back of strong employment growth, and investment have been the main drivers behind domestic demand. In particular, investment has been bolstered by construction and investment in machinery and equipment.

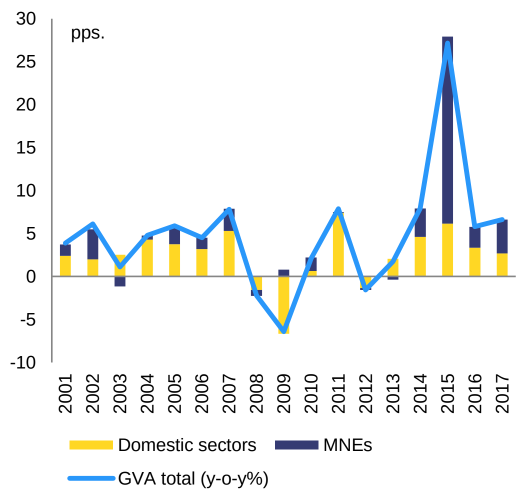
Graph 1.1: **Domestic demand and contributions**



Source: CSO

The strong underlying activity is also reflected by the value added in the domestic sector. Gross value added (GVA) in the sectors not dominated by multinationals grew by 4.3 % in 2017, after a 5.6 % growth in the previous year, contributing substantially to the total GVA (Graph 1.2). Within this category, the construction sector grew the most in 2017, by 15.2 %.

Graph 1.2: **Gross value added and contributions**



(1) According to data from CSO, GVA is split between sectors dominated by multinationals, where multinationals' turnover exceeds 85 % of the sector total, and 'Other Sectors' which are non-MNE dominated. Constant prices.
(2) The jump in multinationals' value added in 2015 is due to the relocation of some large multinationals to Ireland
Source: CSO

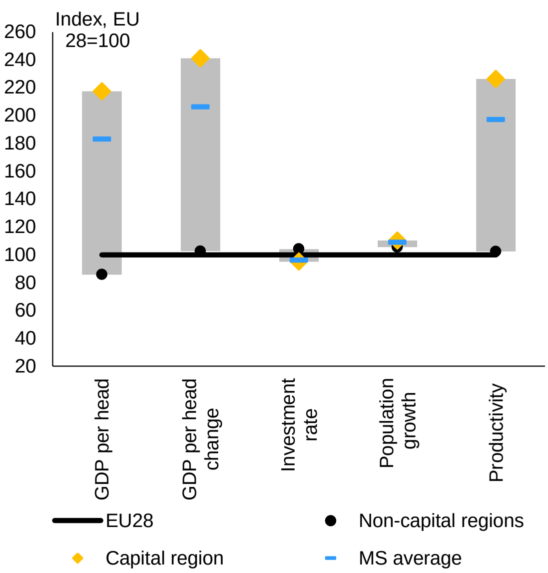
Downside risks continue to cloud the economic outlook. Primarily external in nature, these risks relate to uncertainties regarding the terms of the UK's withdrawal from the EU as well as changes to the international taxation and trade environment. On the domestic side, signs of overheating could become more apparent going forward. A large degree of unpredictability, linked to the activities of multinationals, could drive headline growth in any direction.

Regional disparities

Regional disparities in Ireland are significant and have been increasing over the last decade. Ireland has rather high regional economic disparities compared to other EU countries in terms of GDP per capita (Graph 1.3). Between 2000 and 2016, GDP per capita in the Southern and Eastern region increased by 74 %, 63 percentage points more than in the Border, Midland and Western region and the increase accelerated after 2012. By 2016, GDP per capita in the Southern and Eastern region was 2.6 times higher than in the Border, Midland and Western region. The Dublin area, with 40 % of Ireland's population, contributed by 62 percentage points to GDP growth between 2000-2016.

Where multinationals decide to locate increases regional disparities. Productivity growth varies substantially across regions (see Section 4.4.2). These regional disparities are very much influenced by the concentration of multinationals, which out-perform domestic firms in terms of productivity (see Section 4.4.1), in the Southern and Eastern region.

Graph 1.3: **Regional Convergence in Ireland**



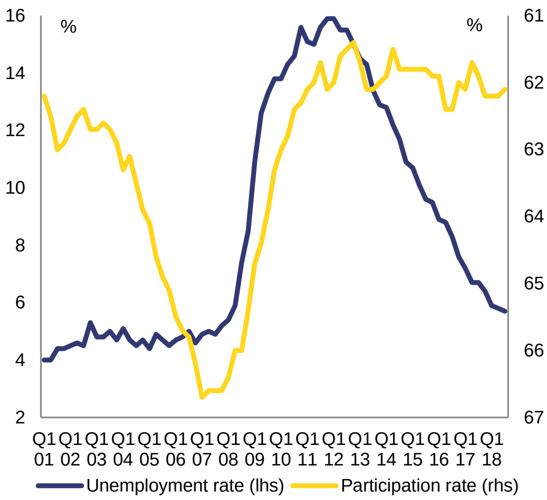
(1) Some explanations of the statistics
Source: Regional Convergence in Ireland

Labour market

Robust labour market performance continues to accompany economic growth. In the first three quarters of 2018, employment grew by 3.1 % and has now surpassed its pre-crisis level with job creation taking place across most sectors. Against this background, labour income is bolstered by the slight acceleration in average hourly and weekly earnings, which, combined with subdued inflation, supports household real disposable income.

The labour market is tightening and skill shortages are becoming more apparent. Unemployment is approaching pre-crisis levels (5.7 % on average in 2018), with long-term unemployment representing 35.0 % of total unemployment (third quarter of 2018), below the EU average of 42.8 %. Job vacancy rates are trending upward in most economic sectors, while skills shortages are becoming increasingly apparent in fast growing sectors, most notably for information and communication technology, construction and property professionals (see Section 4.3.1). This is becoming a more pressing challenge for employers. Furthermore, the level of basic digital skills in the workforce remains relatively low. Yet the participation rate remains low (see Box 1.1) and has recovered slowly, with marginal increases of 0.3 percentage points to 62.1 % over the year to the third quarter of 2018 (Graph 1.4). In particular, there is scope for more female employment.

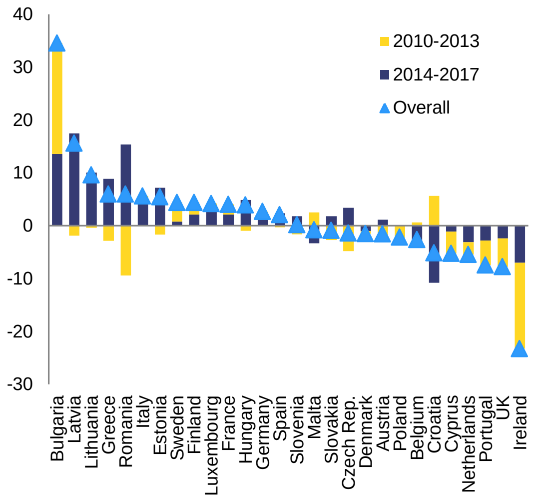
Graph 1.4: **Unemployment rate and labour market participation rate**



Source: CSO

Wage growth remains moderate, but upward pressures are emerging in certain sectors. Nominal compensation per employee grew by 0.9 % in 2017, and it is estimated to have reached 2.7 % in 2018. This remains slightly lower than could be expected, given developments in inflation, productivity and unemployment, as it has been systematically the case in the post-crisis period. This has resulted in the largest shortfall in wage growth across Member States in the period 2010-2017, with the shortfall being higher in 2010-2013 than in 2014-2017. However, upward pressures are emerging in certain sectors with wages in the second quarter of 2018 growing above 4 % in the information and communication sector (5.4 %), the professional, scientific and technical activities sector (5.3 %), the financial services and insurance sector (5 %), and the building and construction sector (4.3 %).

Graph 1.5: **Cumulated gap between actual and predicted wage growth, EU28, 2010-2017, percentage points**



(1) Prediction based on specification without country effects over the period of 1995-2017.
(2) The wage '"benchmark"' represents the wage growth that would be expected given developments in inflation, productivity and unemployment, in an average EU country in an average year. In Ireland, the shortfall in wage growth is not caused by the 2015 revision of GDP, which increases labour productivity. The effect was neutralised by replacing productivity growth in 2015 with the average of 2014 and 2016.
Source: Labour Markets and Wage Developments 2018, European Commission.

Social developments

The strong redistributive effect of the tax and benefit system still reduces high market income inequality to levels below the EU average. Before taxes and transfers, household income in Ireland is among the most unequally distributed in the EU, with the richest 20 % having close to 30 times the market income of the poorest 20 %. This reflects the high variation in productivity across the economy, in particular between the tradable and non-tradable sectors. In 2017, the share of household disposable income of the richest 20 % was 4.6 times higher than that of the poorest 20 %, marking a slight increase from 4.4 in 2016. Nevertheless, the inequality ratio after taxes and transfers still remains below the EU average (5.1 in 2017) thanks to both high progressivity in personal income taxes and a high level of cash benefits.

The population at risk of poverty and social exclusion continues to fall in line with the recovery. The at-risk-of-poverty-or-social exclusion rate was at 22.7 % in 2017 close to the EU average of 22.4 %. A key driver was the high proportion (16.2 %) of people living in households with very low work intensity. However, this number has been falling in recent years and labour market data suggests that this trend continues. The high level of cash benefits significantly reduce poverty: the at-risk-of-poverty rate is 52.6 % lower after social transfers. However, this should be treated with caution, due to the low level of in-kind benefits relative to the high cost in the economy.

Wealth inequality is high, in part due to the effects of the financial crisis on households in negative equity. In 2014, the wealthiest 10 % of households controlled 54 % of net wealth, a larger share than the euro area average. The Gini coefficient — a measure of statistical dispersion — of net wealth, which also takes into account households in negative equity, was among the largest in the euro area. In the near term, rising property prices are expected to dampen net wealth inequality, given the large number of households in negative equity. However, as the rate of home ownership continues to fall in favour of a larger tenant population, continued increases in property prices have the potential to exacerbate wealth inequalities in the longer term.

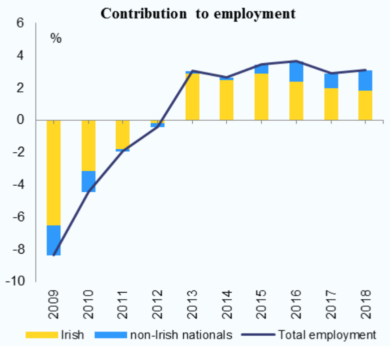
Rapidly rising rents, insufficient residential construction activity and a lack of affordable and social housing have driven up homelessness especially, in Dublin. The shortage of housing has led to a 23.4 % rent increase since 2015, the highest in the EU. Demand for social housing stands at circa 72 000 homes with just 10 000 planned for delivery in 2019. While a further 17 000 persons are to be assisted through Housing Assistance Payment or the Rental Accommodation Scheme, this risks exacerbating rent increases in the already supply-constrained private rental market. A large number of social homes are under-occupied, (notably in the Dublin area), in part due to current succession practices, thus further aggravating the situation (Melia, 2018).

Box 1.1: Labour force participation rate

While the unemployment rate is approaching pre-crisis levels, the participation rate has followed the rise in employment only sluggishly. According to the Central Statistics Office, the participation rate — the fraction of the working-age population either working or looking for a job — of individuals over 15 has hovered around 62 % since 2010 and remains 4.5 percentage points below its 2007 peak. Given the role of labour supply in determining actual and potential growth, it is crucial to understand why labour force participation has not bounced back with the recovery.

The pre-crisis upward trend in females' participation rate resumed after the cyclical downturn, whereas male participation has not recovered. Two factors accounted for the pre-crisis rise in total participation: a gradual rise in females' participation from a low base and a surge of males participation during the construction boom. Female participation declined only marginally during the recession (-2 percentage points from peak to trough) and has returned to its 2007 peak. However, females participation remains low and has room to increase (see Section 4.3.1). By contrast, males participation shrunk (-8 percentage points), as jobs in construction and manufacturing were hard hit, and has hovered around its 2013 level since then. The 2007 peak in male participation was probably unsustainable and reflected the enlargement of the labour force through immigration (Byrne et al., 2016). Between 2002 and 2008, net inward migration accounted for 60 % of the growth of the annual working age population on average. As the participation rate of the Irish provided limited scope for further improvement, net migration met increased labour demand during the 2000s boom. In turn, outward migration worked as a safety valve during the downturn by limiting the rise in unemployment.

Net inward migration has provided an important source of labour since it turned positive in 2015. The share of non-Irish nationals in the labour force has returned to its 2008 peak of 16.3 %. Further increases in the participation rate will likely be driven by immigration as skills and labour shortages emerge (see Section 4.3.1). In recent years, the overall participation rate has been sustained by the pick-up in non-Irish nationals' participation rate, which is much higher than that of the Irish (74.3% vs 60.3 % in 2018), and has been increasing since 2015 (+3 percentage points), while that of the Irish remains flat. While the employment rate of both Irish and non-Irish nationals has picked-up since 2015, the gap in favour of non-Irish nationals has widened to 10 percentage points. As migrants' qualifications have improved—49 % of immigrants had tertiary education in 2018—immigration may play an important role as a source of skilled labour in a tightening labour market. Hence, migration will likely play an increasing role in driving economic growth. Significant net inward migration in the future could also increase the strain on the already tight housing market in the short term. In particular, high-skilled migration will likely contribute to increasing price pressure on the more expensive rental and housing markets, such as Dublin.



Source: CSO

Inflation

Consumer price inflation is rising, but remains subdued. The Harmonised Index of Consumer Prices rose by 0.7 % in 2018. Inflation was modest in the first half of 2018 but accelerated in the third quarter as global oil prices rose. Services prices keep being bolstered by rents and catering services. However, core inflation remains dampened by the weakness of non-energy industrial goods, which reflects both low import prices due to appreciation of the real exchange rate towards sterling and a downward bias related to quality adjustments methods (Keating et al., 2018). The higher prices for services are expected to remain the main positive driving force behind inflation, in line with strong domestic demand.

Competitiveness

The Irish economy has maintained its external competitiveness, but risks persist. In 2017, the real effective exchange rate based on unit labour costs remained unchanged from the previous year. The sterling depreciation in relation to the euro continued to negatively affect the competitiveness of the economy in 2017 but was partly offset by continued weak consumer price inflation. The underlying trade balance also shows that the external competitiveness of the country has been maintained (Section 4.4.1). As the labour market tightens, associated wage pressures and increasing activity in construction, non-tradable in nature, should be monitored in order to maintain competitiveness over the medium term. Also, supply constraints in the housing sector could negatively affect competitiveness by restricting mobility of labour and by putting upward pressure on housing costs (Department of Finance, 2018a). Rising commercial and residential rents, along with higher electricity, legal and insurance costs could also affect competitiveness. The activities of multinationals continue to inflate overall productivity figures with significant productivity gaps between low-productivity domestic firms and high-productivity foreign companies (see Section 4.4.1. for more competitiveness challenges).

External position

Sustainability risks to the domestic economy stemming from external debt seem to be diminishing. The net international investment position (NIIP)([3]) has improved over the last three years and is expected to strengthen further in 2019 and 2020 on the back of current account surpluses and economic growth (European Commission, 2019a). The high level of net external liabilities is to a substantial extent due to the operations of some multinationals and the negative net position of the International Financial Services Centre (IFSC), to which domestic sectors have only limited exposure (European Commission, 2018a). Domestic sectors have improved their external position over the last two years. Furthermore, the riskier instruments of the NIIP are to a large extent owned by multinationals and by IFSC entities. The level of the domestic NIIP remains hard to gauge.

Financial sector

The banking sector is gradually improving its assets while maintaining solid capital buffers. The common equity tier 1 ratio - a measure of bank solvency that gauges a bank's capital strength - stood at 23.0 % in the second quarter of 2018, similar level to one year earlier. While the non-performing loans ratio fell to 8.5 % in the second quarter of 2018, down from 11.6 % a year earlier, it remains above the euro area average of 4.2 %. The decline in non-performing loans was helped by the sales on secondary markets, but long-term mortgage arrears remain relatively high. Provisioning levels have remained broadly stable over the year leading up to the second quarter of 2018, but are below the EU average. Profits benefit from the high lending rates prevailing in Ireland, pushing return on equity to levels above the EU average.

Deleveraging of the domestic private sector is ongoing. Demand of households for credit is increasing, helped by rising property prices. New mortgage lending stood at EUR 2.6 billion in the fourth quarter of 2018, up from EUR 2.2 billion a year earlier. While the flow of new mortgage lending has increased, it is still well below the EUR 9 billion per quarter observed in 2005-2007. Macro-prudential measures have been tightened (see Section 4.2.1) and appear to be holding back demand. The stock of household credit appears to have reached a trough in 2018, but due to positive growth in gross disposable household income (GDHI), the household debt-to-GDHI ratio is declining. The debt of domestic companies, including debt of redomiciled public limited companies, also declined in 2017 and stood at 135% of modified gross national income([4]).

Investment and housing

Volatility in headline investment figures masks robust domestic activity. In the first nine months of 2018, headline investment increased by 2.8 % year-on-year (y-o-y) driven largely by a fall in intellectual property investment in the first half of 2018, which then increased in the third quarter. However, these fluctuations were matched by similar swings in imports and therefore with a neutral impact on GDP. On the other hand, core investment, i.e. investment without aircraft and intangibles, grew by 22.0 % y-o-y. Construction activity increased by 17.9 % y-o-y and is expected to remain strong in the short term as housing supply is still catching up with demand, and supported by various government measures.

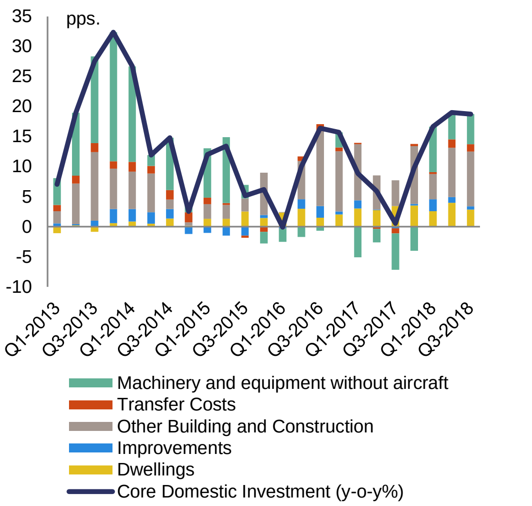
Public investment is on an upward path. Capital spending by the government declined considerably in the aftermath of the crisis in the context of fiscal consolidation, but has been growing gradually since 2014. It is now expected to reach 4 % of modified gross national income by 2024 (up from 2.7 % in 2017) and to remain around this level until 2027, according to the National Development

([3]) The NIIP is defined as the stock of a country's external assets minus its foreign liabilities.

([4]) Modified gross national income (GNI*) is published by the Irish Central Statistics Office and excludes from the standard gross national income the globalisation effects that are disproportionally impacting the measurement of the size of the Irish economy.

Plan. This plan sets out an allocation of EUR 116 billion over the period 2018-2027 aimed at meeting the infrastructure and investment needs, focusing on housing, transport, education, health and water services (Section 4.4).

Graph 1.6: **Core investment and contributions**



Source: CSO

Housing price inflation continues to be high but has eased recently. Housing prices increased by 10.9 % in 2017, i.e. 4 percentage points (pps) above the macroeconomic imbalance procedure threshold. In 2018, after an increase to 13.3% in April 2018, annual housing price inflation fell 6.3 pps in the seven months to November 2018. Decline has initially been driven by Dublin but since June affected almost every county in Ireland. It is likely that more binding macro-prudential rules (Section 4.2.1) have contributed to dampening housing demand (European Commission, 2019). A more dynamic housing supply may have also helped curb housing price inflation.

Inflation in rents seems chiefly determined by the gap between housing supply and demand. In Ireland, annual rent inflation in December 2018 was 6.2 %. Since 2015, rents have increased by 23.4 %, the fastest pace of increase in the EU. National growth rate was highly influenced by Dublin which accounted for 37 % of tenancy agreements. Rents appear to be chiefly determined by supply conditions and, to a lesser extent, by supportive macroeconomic conditions. ([5])

Public finances

Although the economy continues to strengthen, improvements in the budget balance are stalling. The general government deficit is forecast to have fallen to 0.1 % of GDP in 2018, an improvement of 0.1 % of GDP compared 2017. With the measures announced in the 2019 Draft Budgetary Plan, the deficit is expected to remain broadly stable in 2019. Risks to the budgetary projections remain on the downside. They relate mainly to macroeconomic uncertainties, the volatility of some sources of government revenues (notably corporate income taxes) and over-spending (notably within the health sector).

Aggregate 2018 revenues were helped by an unexpected temporary surge. Exchequer returns in 2018 exceeded expectations. In particular, corporate income tax receipts were 26.6 % above target, with international accounting changes a contributor to the surge. Expenditure outpaced budget targets, with a current expenditure overrun of 1.6 %.

Debt dynamics are improving, although its stock is relatively high. Ten years after the onset of the global financial crisis, the gross general government debt overhang remains high. It is expected to have declined to 63.9 % of GDP in 2018, from 68.4 % of GDP in 2017, and to further decline to 61.1 % in 2019 and 56 % of GDP in 2020. This is contingent on continued stable medium-term economic growth and positive primary balances. A range of alternative metrics, including an interest-to-revenue ratio, show that Ireland's stock of public debt remains high by international and historical standards (Section 3). Estimated exchequer receipts of EUR 4.3 billion over 2018-2021 arise from the funds set aside for the resolution of the financial crisis and winding down of the National Asset Management Agency. The government plans to direct these towards lowering the elevated stock of debt. Almost 60 % of the debt has a maturity of more than five years.

([5]) Estimate based on an error-correction model where rents are considered to be in equilibrium with the level of supply and real disposable income in the long-term (Based on European Commission calculations).

While debt sustainability has improved, long-term fiscal sustainability risks related to the cost of ageing remain (Section 4.1.1).

Table 1.1: **Key economic and financial indicators - Ireland**

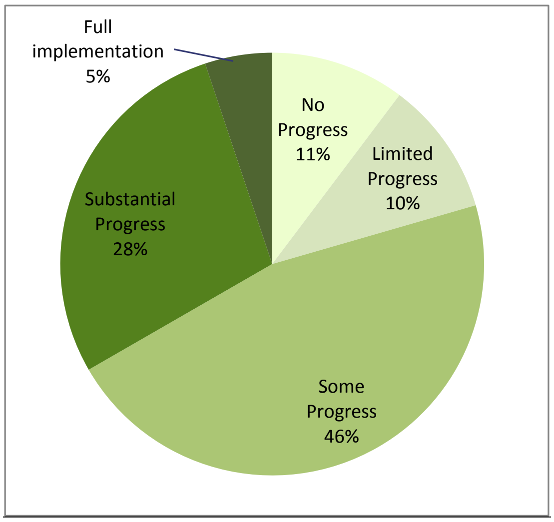
	2004-07	2008-12	2013-15	2016	2017	forecast 2018	2019	2020
Real GDP (y-o-y)	5.6	-0.8	11.3	5.0	7.2	6.8	4.1	3.7
Potential growth (y-o-y)	4.5	0.4	10.0	6.2	8.0	7.6	3.9	3.5
Private consumption (y-o-y)	6.0	-1.4	1.8	4.1	1.6	.	.	.
Public consumption (y-o-y)	4.4	-2.0	1.6	3.5	3.7	.	.	.
Gross fixed capital formation (y-o-y)	8.3	-6.2	19.7	51.4	-31.0	.	.	.
Exports of goods and services (y-o-y)	6.7	1.8	18.0	4.4	7.8	.	.	.
Imports of goods and services (y-o-y)	8.2	-0.5	15.5	18.5	-9.4	.	.	.
Contribution to GDP growth:								
Domestic demand (y-o-y)	5.6	-2.7	5.3	14.2	-10.1	.	.	.
Inventories (y-o-y)	0.0	0.0	0.3	1.7	-1.1	.	.	.
Net exports (y-o-y)	-0.3	2.0	5.7	-11.9	19.1	.	.	.
Contribution to potential GDP growth:								
Total Labour (hours) (y-o-y)	1.2	-2.0	1.3	2.6	2.4	2.2	1.8	1.3
Capital accumulation (y-o-y)	2.2	0.8	6.3	1.4	-0.1	-0.3	-0.1	0.0
Total factor productivity (y-o-y)	1.1	1.6	2.5	2.3	5.8	5.7	2.2	2.2
Output gap	2.4	-2.5	-0.1	0.7	0.0	0.2	0.8	1.1
Unemployment rate	4.8	13.0	11.9	8.4	6.7	5.6	5.1	4.9
GDP deflator (y-o-y)	2.1	-1.6	2.8	-0.8	0.4	1.7	1.9	2.1
Harmonised index of consumer prices (HICP, y-o-y)	2.5	0.6	0.3	-0.2	0.3	0.7	0.9	1.4
Nominal compensation per employee (y-o-y)	5.1	0.4	0.9	2.1	0.9	2.7	3.0	3.4
Labour productivity (real, person employed, y-o-y)	1.3	2.4	8.0	1.2	4.2	.	.	.
Unit labour costs (ULC, whole economy, y-o-y)	3.8	-2.0	-6.6	0.9	-3.2	-1.8	1.1	1.6
Real unit labour costs (y-o-y)	1.7	-0.4	-9.1	1.7	-3.6	-3.5	-0.7	-0.4
Real effective exchange rate (ULC, y-o-y)	3.5	-4.1	-8.7	1.2	-2.3	-1.4	-2.0	-0.4
Real effective exchange rate (HICP, y-o-y)	1.4	-2.3	-2.1	1.0	0.3	1.3	-2.4	-0.7
Savings rate of households (net saving as percentage of net disposable income)	0.2	6.8	4.4	3.8	6.6	.	.	.
Private credit flow, consolidated (% of GDP)	30.7	7.1	-0.4	-15.6	-7.5	.	.	.
Private sector debt, consolidated (% of GDP)	177.1	260.6	284.0	283.3	243.6	.	.	.
of which household debt, consolidated (% of GDP)	85.7	107.6	77.4	52.2	47.7	.	.	.
of which non-financial corporate debt, consolidated (% of GDP)	91.4	153.0	206.6	231.1	196.0	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (2)	.	.	15.4	10.3	8.1	.	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	2.3	8.2	4.3	-4.8	-1.0	5.4	6.4	7.0
Corporations, gross operating surplus (% of GDP)	34.4	34.6	45.0	52.8	54.0	55.1	55.4	55.7
Households, net lending (+) or net borrowing (-) (% of GDP)	-9.0	1.6	1.9	1.1	2.0	-0.9	-1.5	-2.0
Deflated house price index (y-o-y)	8.3	-13.3	8.3	6.6	9.5	.	.	.
Residential investment (% of GDP)	12.3	3.9	1.6	1.7	2.0	.	.	.
Current account balance (% of GDP), balance of payments	-3.9	-3.3	2.3	-4.2	8.5	11.7	11.6	11.4
Trade balance (% of GDP), balance of payments	10.4	14.9	21.9	15.5	30.4	.	.	.
Terms of trade of goods and services (y-o-y)	-1.1	-0.7	0.8	-0.4	-1.9	0.0	0.1	0.2
Capital account balance (% of GDP)	0.2	0.1	-1.5	-1.6	-9.6	.	.	.
Net international investment position (% of GDP)	-31.4	-120.2	-165.4	-170.7	-149.3	.	.	.
NIIP excluding non-defaultable instruments (% of GDP) (1)	1.3	-224.8	-301.6	-246.4	-259.1	.	.	.
IIP liabilities excluding non-defaultable instruments (% of GDP) (1)	951.0	1384.0	1497.9	1328.4	1299.3	.	.	.
Export performance vs. advanced countries (% change over 5 years)	9.9	-1.2	8.8	55.3	61.0	.	.	.
Export market share, goods and services (y-o-y)	.	.	16.5	4.2	-0.1	.	.	.
Net FDI flows (% of GDP)	11.2	-3.8	-9.5	-3.1	-11.4	.	.	.
General government balance (% of GDP)	1.5	-14.7	-3.9	-0.5	-0.2	-0.1	-0.1	0.2
Structural budget balance (% of GDP)	.	.	-3.6	-1.0	-0.2	-0.2	-0.5	-0.3
General government gross debt (% of GDP)	25.5	84.1	100.2	73.4	68.4	63.9	61.1	56.0
Tax-to-GDP ratio (%)	31.8	29.2	27.6	24.0	23.5	22.7	22.6	22.3
Tax rate for a single person earning the average wage (%)	21.9	19.8	19.8	19.3	.	.	.	.
Tax rate for a single person earning 50% of the average wage (%)	7.1	4.5	3.4	3.1	.	.	.	.

(1) NIIP excluding direct investment and portfolio equity shares
(2) domestic banking groups and stand-alone banks, EU and non-EU foreign-controlled subsidiaries and EU and non-EU foreign-controlled branches.
(3) The tax-to-GDP indicator includes imputed social contributions and hence differs from the tax-to-GDP indicator used in the section on taxation
Source: Eurostat and ECB as of 31-1-2019, where available; European Commission for forecast figures (Winter forecast 2019 for real GDP and HICP, Autumn forecast 2018 otherwise)

2. PROGRESS WITH COUNTRY-SPECIFIC RECOMMENDATIONS

Since the start of the European Semester in 2011, 79 % of all country-specific recommendations addressed to Ireland have recorded at least some progress. 21 % of these country-specific recommendations (CSRs) recorded 'limited' or 'no progress' (Graph2.1). Labour market policies supporting job creation and life-long learning have been among the most successful.

Graph 2.1: **Ireland - Level of implementation today of 2014-2018 CSRs**



(1) The overall assessment of the country-specific recommendations related to fiscal policy excludes compliance with the Stability and Growth Pact
(2) The multiannual CSR assessment looks at the implementation until 2019 Country Report since the CSRs were first adopted.
Source: European Commission

Rapid improvement in the fiscal situation has been supported by implementation of country specific recommendations since 2014. Ireland has achieved success in stabilising its public finances. Public investment is on an upward path. Efforts to limit tax expenditures and broaden the tax base have been mixed. Expenditure ceilings now take into account demographic pressures and carry-over effects, although their repeated changes are still a concern for budgetary execution. Measures have been taken to address the expected increase in age-related expenditure, but some remain in their infancy.

Ireland has introduced a range of labour market reforms supporting the country specific recommendations over recent years. Reforms aimed at improving the skills of the adult working-age population and the acquisition of digital skills are promising, yet it is too early to assess their positive impact. The lack of basic digital skills among those in employment remains a concern and requires further investments. Ireland has taken steps to make quality childcare more affordable with the Early Childhood Care and Education universal free preschool programme and the Affordable Childcare Scheme. The insufficient provision of affordable childcare remains the main impediment to increasing activity rates. Recent reform efforts have tried to tackle the problem of weak work incentives for low-income groups. Most of the measures foreseen in the Action Plan for Jobless Households are yet to be implemented. In particular, integrated support for people furthest from the labour market needs to be improved. In addition, people with disabilities are still facing considerable challenges, although support is being enhanced.

Progress has been made since 2014 in implementing financial sector country specific recommendations. The pace at which non-performing loans are being reduced has picked up, helped by a combination of portfolio sales and restructuring activities. Long-term mortgage arrears have proven to be the most difficult to restructure, but they have also fallen, although at a slower pace than the overall stock of non-performing loans. The supervisor is closely monitoring the banks' non-performing loan reduction strategies and their restructuring practices. Several policy measures have been introduced to support debtors in distress and increase the number of personal insolvency arrangements, but the take-up of these measures is only slowly gaining traction. The credit register is up and running for consumer loans. It is planned to become fully operational in 2019.

Table 2.1: **Annual assessment of the 2018 CSRs**

Ireland	**Overall assessment of progress with 2018 CSRs: Some progress**
CSR 1: *Achieve the medium-term budgetary objective in 2019. Use windfall gains to accelerate the reduction of the general government debt ratio. Limit the scope and the number of tax expenditures, and broaden the tax base. Address the expected increase in age-related expenditure by increasing the cost-effectiveness of the healthcare system and by pursuing the envisaged pension reforms. (MIP relevant)*	**Limited progress*** • Limited progress made in reducing the debt-to-GDP ratio. • Some progress made in limiting tax expenditure. • Limited progress in addressing the expected increase in age-related expenditure.
CSR 2: *Ensure the timely and effective implementation of the National Development Plan, including in terms of clean energy, transport, housing, water services and affordable quality childcare. Prioritise the upskilling of the adult working-age population, with a focus on digital skills. (MIP relevant)*	**Some progress** • Some progress made in ensuring the timely and effective implementation of the National Development Plan • Some progress in prioritising the upskilling of the adult working-age population, with a focus on digital skills
CSR 3: *Foster the productivity growth of Irish firms, and of small and medium enterprises in particular, by stimulating research and innovation with targeted policies, more direct forms of funding and more strategic cooperation with foreign multinationals, public research centres and universities. Promote faster and durable reductions in long-term arrears by the use of secondary markets, building on initiatives for vulnerable households and, where necessary, using write-offs of non-recoverable exposures. (MIP relevant)*	**Some progress** • Limited progress in fostering the productivity growth of Irish firms and of small and medium enterprises in particular. • Substantial progress in promoting faster and durable reductions in long-term arrears.

* This overall assessment of CSR1 does not include an assessment of compliance with the Stability and Growth Pact.
Source: European Commission

Ireland has made some ([6]) progress in addressing the 2018 country-specific recommendations (see table 2.1). Scope of important tax expenditure has been limited, but Ireland has not yet implemented the envisaged measures to accelerate the reduction of public debt or address the expected increase in age-related expenditure. This means that limited progress has been made on country specific recommendation 1, which reflects euro area recommendation 2. With regards to country specific recommendation 2, Ireland has made some progress in implementing the National Development Plan, in line with euro area recommendation 1. However, the set-up of a performance and monitoring framework, the improvement of the system for project selection and the assessment of the capacity of the government departments for the implementation of the plan are pending. Ireland has made some progress in the upskilling of the adult working-age population. The new pilot programme EXPLORE aimed at increasing lifelong learning and offering upskilling opportunities for adults was launched in 2018, while the Agency for upskilling those in employment (SkillsNet) was also reinforced. Ireland has also made some progress on country specific recommendation 3. Given the scale reforms needed, progress on fostering the productivity growth of Irish firms has been limited. While the Government has announced the ambitious 'Future Jobs' programme and made operational the Disruptive Technologies Innovation Fund (see Section 4.4.1 and Annex A), the use of direct policy instruments remains to be explored and tax credits remain the main instrument of public R&D. On the other hand, the promotion of faster and durable reductions in long-term arrears has made a substantial progress.

([6]) Information on the level of progress and actions taken to address the policy advice in each respective subpart of a country specific recommendation is presented in the Overview Table in Annex A. This overall assessment does not include an assessment of compliance with the Stability and Growth Pact.

Box 2.1: EU funds and programmes contribute to addressing structural challenges and to fostering growth and competitiveness in Ireland.

The financial allocation from the European Structural and Investment Funds (ESI Funds) to Ireland amounts to EUR 3.36 billion in the 2014-2020 Multiannual Financial Framework, potentially representing around 0.2 % of GDP (0.3 % of modified gross national income) annually. The allocation supports Ireland in overcoming increasing challenges in competitiveness and regional disparities due to a dual economy in the country. At the end of 2018, EUR 2.3 billion (70 % of the total ESI Funds) had been allocated to specific projects supporting, in particular, closer cooperation between businesses and research institutions and R&D investment in the public and private sectors.

ESI Funds have helped to address policy challenges identified in the 2018 Country Specific Recommendations (CSRs). By the end of 2018, around EUR 207 million from the European Regional and Development Fund had contributed to fostering R&I and small and medium-sized enterprises' competitiveness (CSR3) by providing financial support to 47 000 businesses, assistance to 1 500 start-ups and training to around 50 000 participants and 42 500 businesses. Funds also supported 860 researchers and 370 new industrial partners to engage in innovation activities and collaborate with research centres. As a result, 4 700 new jobs and over 70 new start-ups and spin-offs were created and some 250 patent licences were granted. Horizon 2020 and European Agricultural Fund for Rural Development (EAFRD) respectively contributed with an additional EUR 621 and EUR 39 million to promote R&I in Ireland. The EAFRD financed 17 European Innovation Partnerships and provided training to 68 000 beneficiaries. Furthermore, in the framework of the National Broadband Plan, the European Regional and Development Fund is helping to bring high-speed broadband speeds to the mostly rural intervention area and help Ireland to progress in the achievement of the EU 2025 Gigabit Society objectives.

EU funds have also addressed the upskilling and investment challenges in Ireland (CSR 2). For instances, because of the European Social Fund investments, some 56 000 people were engaged in education or training, 79 000 gained a qualification and 6 600 were employed at the end of their training. The Connecting Europe Facility has committed EUR 80 million to a number of energy network projects with the participation of Ireland. The European Agricultural Fund for Rural Development has promoted investments in environmentally friendly agricultural production methods. At the end of 2018, more than EUR 1 billion had been paid out through the Irish Rural Development Programme for environmental and climate change actions.

The Commission can provide tailor-made technical support upon a Member State's request via the Structural Reform Support Programme to help Member States implement growth-sustaining reforms to address challenges identified in the European Semester process or other national reforms. Ireland, for example, is receiving support to improve the fiscal transparency of public finances, enhance strategic human resource management and to establish a modern regulatory environment for gambling and betting with a view to the establishment of an independent regulatory authority. In addition, work has started on the development of an authorisation and supervision framework for a central securities depository.

In Ireland, the overall volume of approved operations by the European Investment Bank with European Fund for Strategic Investments backing amounted to EUR 1.4 billion in February 2019, which is set to trigger a total of EUR 6.5 billion in additional private and public investments. So far, 21 projects involving Ireland have been approved under the infrastructure and innovation window of this fund. They amount to EUR 1 billion in total financing, which should, in turn, generate EUR 4.9 billion in investments. Under the SME component, 9 agreements with intermediary banks have been approved for a total of EUR 279 million, which should mobilise around EUR 1.5 billion of total investment. 14 188 SMEs and mid-cap companies are expected to benefit from this support. The European Investment Bank is for instance providing EUR 70 million to a public-private partnership for the construction of 14 new health centres across Ireland. This investment will increase access to primary healthcare and social services, make services more cost-effective and improve facilities.

More information at: https://cohesiondata.ec.europa.eu/countries/IE.

3. SUMMARY OF THE MAIN FINDINGS FROM THE MIP IN-DEPTH REVIEW

The 2019 Alert Mechanism Report concluded that a new in-depth review should be undertaken for Ireland to assess the persistence or unwinding of the imbalances. (European Commission, 2018). In spring 2018, Ireland was identified as having macroeconomic imbalances (European Commission, 2018m). The imbalances identified related in particular to large stocks of public and private debt and net external liabilities. High stock of non-performing loans and rapidly rising house prices also warranted close monitoring. This chapter summarises the findings of the analyses in the context of the Macroeconomic Imbalance Procedure (MIP) in-depth review that is contained in various sections in this report. ([7])

3.1. IMBALANCES AND THEIR GRAVITY

Private sector debt remains high, at 243.6 % of GDP at the end of 2017, despite continued efforts to reduce it. Overall indebtedness is heavily affected by multinational companies. While the debt of all non-financial corporations (NFCs) fell from 231 % to 196 % of GDP during 2017, debt of Irish NFCs, including debt of redomiciled public limited companies (PLCs), fell from 90.1 % of GDP in 2016 to 83.6 % in 2017. Relative to modified gross national income (GNI*), debt of domestic companies, including debt of redomiciled PLCs, amounted to 136 % in 2017. Total debt of households and domestic NFCs amounted to 131.3 % of GDP in 2017, slightly below the indicative MIP threshold of 133 % of GDP. Although rising housing prices are putting upward pressure on household debt, households have continued to reduce their debt-to-GDP ratio and brought it down to 47.7 % of GDP in 2017. Relative to disposable income, household debt declined to 135.7 %. This is relatively high compared to other EU countries and suggests that households remain relatively more vulnerable to interest rate and income shocks. Although an increasing share of new mortgages has interest rates fixed for more than one year, around 90 % of the stock of loans is with variable rates.

The public debt ratio has come down, while remaining elevated. Public debt as a share of GDP has significantly declined, reaching 68.4 % in 2017. The improvement (of 5.0 % of GDP) compared to 2016 is due to the denominator effect of strong GDP growth. At 111 % of GNI* in 2017, the debt burden is *de facto* among the highest in the EU. However, financial markets' perceptions of sovereign risk remain favourable, reflected in low sovereign bond yields and credit default swap spreads.

The stock of non-performing loans decreased in the year to June 2018, helped by portfolio sales. While the aggregate non-performing loans ratio was 8.5 % at the end of June 2018, down from 11.6 % a year earlier, it remains higher than the euro area average of 4.2 %. The reduction in the stock of non-performing loans is the result of a combination of restructuring activities and portfolio sales, with varying degrees of success among individual banks. Long-term arrears continue to be relatively high, accounting for more than half of total non-performing loans.

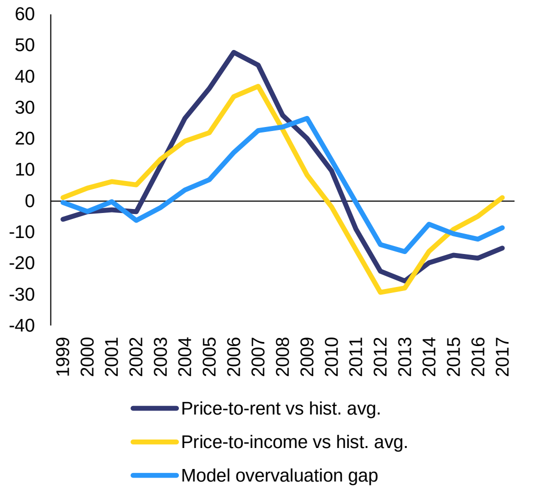
The external position of the economy is still rather negative, but risks to the domestic sector seem to abate. The net international investment position stood at 134.5 % of GDP in the third quarter of 2018, a significant improvement from the 2015 peak of 242.7 %. Furthermore, the net external position of some domestic sectors has improved over the last two years. The external risks of the domestic sector seem contained but it remains difficult to assess them fully due to the impact of multinationals on headline statistics. Nevertheless, there is strong evidence that the net international investment position is boosted beyond fundamental levels by the large negative position of multinationals and International Finance Service Centre ([8]), to which the domestic sector has only very little exposure. The current account balance remains extremely volatile and heavily influenced by some large multinationals

([7]) Analyses relevant for the in-depth review can be found in the following sections: public debt in Section 4.1.1, financial sector imbalances in Section 4.2.1, private indebtedness in Section 4.2.2, volatility of the external position in Section 4.4.1 and the property market in Section 4.4.2

([8]) The International Finance Service Centre is a hub for international financial transactions that has little connection with the financing of the domestic economy.

(Graph 4.4.1). The modified current account balance, which discounts for these effects, remains positive and displays less volatility around a moderately declining trend. The Irish economy appears to have maintained its external competitiveness.

Graph 3.1: **Overvaluation gap with respect to price/income, price/rent and fundamental model valuation gaps**



(1) Overvaluation gap with respect to price/income, price/rent and fundamental model valuation gaps
Source: European Commission

Annual house price inflation has moderated notably since April 2018 but remains high. The recent sharp pickup in construction coupled with more stringent macro-prudential rules appear to have eased pressure on house prices, notably in Dublin. However, despite the expansion in housing supply, a gap between demand and supply persists and continues to be the main driver of house price increases. Although there are not yet consistent signs of overvaluation, the price-to-income ratio is already above its fundamental value, indicating affordability issues (Graph3.1). In addition, the number of years of gross disposable income required by an average household in Ireland to buy a 100 square metres dwelling amounted to 16 in 2017. This period was above the prudential benchmark equal to 10 and one of the longest in Europe. (European Commission, 2018d)

3.2. EVOLUTION, PROSPECTS AND POLICY RESPONSES

Ireland's general government debt-to-GDP ratio is projected to continue declining from its peak of almost 120 % in 2012. The government expects to use the proceeds from the return of funds set aside for the resolution of the financial crisis, notably the winding down of the National Asset Management Agency, and any windfall receipts to accelerate its reduction. The authorities had set a target of debt-to-GDP of 45 % to be achieved by the end of the next decade and an intermediary one of 55 % until major capital projects are completed. However, these are no longer referenced in the latest budget.

Insolvency procedures as well as in-court and out-of-court arrears resolutions remain under-used. The number of personal insolvency applications has increased since the *Abhaile* aid-and-advice scheme was set up. However, there has been an increase in creditors' rejections of the proposed insolvency arrangements, which transfers the cases to court, thereby reducing the number of concluded arrangements. The number of successful arrangements between debtors and lenders has been stagnating since end-2017. Collateral repossessions are still quite rare. On the other hand, the credit register should become fully operational in March 2019.

The external position of some domestic sectors is improving. In 2017 and 2018, the net external position of domestic banks improved after banks restored their access to market funding in 2016, with positive impact also on the Central Bank's position. The net international investment position of the general government remains negative but it follows a continuous upward path; furthermore, a substantial part of this debt comprises long-term debt towards official creditors, from the financial assistance programme, with long-term maturity and subject to extension (European Commission, 2019), therefore they do not constitute a vulnerability. The situation of the non-financial corporations appears to be significantly driven by intergroup credits of multinationals to which domestic sectors have only limited exposure. There is however no conclusive evidence on the level of the domestically relevant net international investment position. (see Box 3.1 for more detailed analysis)

The government has taken a range of measures to support housing supply, including the construction of social housing. The establishment of the Land Development Agency, the Serviced Site Fund and the Regeneration Development Fund may increase the availability of land serviced with the necessary infrastructure. The new planning rules for apartment design, the announced removal of blanket restrictions on building heights and the increase in the vacant site levy could further boost housing supply. However, there are concerns over the construction sector's capacity to deliver the required level of housing and infrastructure in a timely manner as well as regarding incentives for house ownership created by property taxes based on below-market house valuations. The Construction Sector Group (CSG), established by the government following the launch of Project Ireland 2040, may help assess the supply of necessary skills and measures enhancing this sector’s capacity.

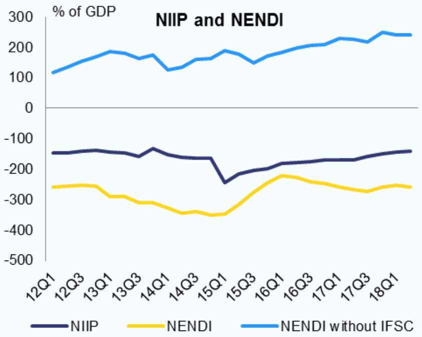
3.3. OVERALL ASSESSMENT

Public and private debt, as well as rapidly rising housing prices, are a source of vulnerability for the economy. Debt of households and domestic companies, including redomiciled public limited companies, relative to GDP, fell below the indicative macroeconomic imbalance procedure threshold in 2017. However, relative to modified gross national income, debt of the domestic private sector remains elevated. Although new lending with interest rates fixed between one and five years is increasing, 90 % of household debt is on variable interest rates. Rising property prices should support banks' efforts to advance non-performing loans reduction plans, although the share of long-term arrears remains relatively high. The public debt-to-GDP ratio is on a firm downward trajectory and a balanced government position is expected by 2020. Some windfall gains are planned to reduce government debt. The activities of some large multinationals companies operating in Ireland and the markedly negative net position of the International Finance Service Centre complicate assessment of Ireland’s highly negative net international investment position, even though there is strong evidence that neither constitute vulnerabilities of domestic sectors. The government has repeatedly intervened to tackle the undersupply of housing, but it will take time for the measures to have an effect. Insufficient capacity in the construction sector and housing ownership tax incentives remain a concern.

Box 3.1: **Net international investment position - additional instruments**

Complementary indicators assessing the stability of the net international investment position (NIIP) instruments can offer further insights. The NIIP sustainability is contingent on how risky its components are. In this respect, the *NIIP excluding non-defaultable instruments* (NENDI) is a useful complementary indicator in assessing the external sustainability. The NENDI excludes direct investment and portfolio shares from the NIIP, in theory non-defaultable, and thus it comprises purely arms-length debt and any other instruments that may be subject to default such as insurance, mutual fund shares and derivatives (European Commission, 2018h). Nonetheless, it should be noted that due to the large occurrence of debt-equity conversions in Ireland, the NENDI figure is volatile. This makes the interpretation not straightforward.

The riskier instruments of the NIIP are owned largely by multinationals and International Finance Service Centre entities. At the end of 2017, the NENDI stood at -259 % of GDP driven by the investment fund shares with a net position of -661 % of GDP, largely associated with the International Finance Service Centre sector. ([1]) ([2]) Debt instruments had a positive net position of 269 % of GDP. Debt liabilities are mostly attributed to the sectors other than monetary financial institutions and government (in proportion of 77 %). In this category, the debt attributed to non-financial corporations belongs largely (more than 75 % ([3])) to non-financial corporations with a foreign parent and it is linked to the non-resident funding of intellectual property assets (Central Statistics Office, 2017). This is due to some multinationals borrowing money abroad to finance their investment by purchasing intellectual property from the parent company, and is therefore not a liability of the Irish sector (Central Statistics Office, 2018b). The equity instruments (excluding investment fund shares) had a net position of 110 % of GDP).



Source: European Commission

The underlying NIIP appears to have improved but is still relatively elevated. In order to discount for the impact of multinationals on headline figures, the underlying NIIP can be estimated by adding cumulated modified current account balance (CA*) ([4]) to earlier NIIP figures that are known to be less affected by offshore activities than current data. These estimates suggest that the underlying NIIP would be around -80 % to -110 % of modified gross national income (GNI*) (-51% to -68% of GDP) ([5]).

([1]) The investment fund shares are owed in proportion of 23 % by the money market funds sector and 77 % by the financial corporations other than monetary financial institutions (MFIs). When looking at the position of other financial corporation than MFIs, divided by IFSC and non-IFSC, only the ones part of the IFSC sector hold liabilities, therefore the investment fund shares liabilities belonging to the financial corporation other than MFIs can be associated with the IFSC sector.
([2]) When looking at the total liabilities of other financial corporations than MFIs subsector, they increased substantially in 2014 and 2015 as a source of new available data source in that period and an increase in the balance sheet size of treasury companies (CSO (2018), Macroeconomic Scoreboard 2017, December 2018)
([3]) Excluding redomiciled public limited companies (PLCs) as there is no data showing which part of their debt is to the domestic or external sectors.
([4]) The modified current account balance (CA*) is published by the Irish Central Statistics Office and excludes from the standard current account balance the globalisation effects that are disproportionally impacting the measurement of the size of the Irish economy.
([5]) Based on European Commission calculations. This estimate is constructed by taking 2007-2013 as base years for the NIIP and subsequently adding cumulated CA* numbers. Data before 2015 and the constructed CA* is accepted to be much less biased by the operations of multinational firms. Positive and negative valuation effects are assumed to cancel out.

Table 3.1: **MIP assessment matrix (*) — Ireland 2018**

	Severity of the challenge	Change and prospects	Policy response
	Imbalances (unsustainable trends, vulnerabilities and associated risks)		
Private debt	Private sector consolidated debt stood at 243.6 % of GDP in 2017, down from 283.3 % in 2016.It remains still among the highest in the EU, mainly due to high indebtedness of multinational companies. Debt of households and Irish companies, including the debt of redomiciled public limited companies (PLCs), has fallen to 131.3 % of GDP. Relative to modified gross national income (GNI* [1]), debt of the private sector stood at 213 %. Corporate debt (196 % of GDP at the end of 2017) figures are strongly influenced by the activities of multinationals. Debt of domestic companies, including the debt of redomiciled PLCs, stood at 83.6 % of GDP (or 135 % of GNI*) Household debt fell to 47.7 % of GDP in 2017. Household debt, relative to gross disposable income, still remains among the highest in the EU (136 % of disposable income at the end of 2017, down from 218 % in 2009). The judicial procedures for mortgage arrear settlement are slow and cumbersome while insolvency and bankruptcy are underused. Long-term defaulted mortgages remain unresolved and a burden for both banks and debtors.	Household debt continued to decrease, by 10 percentage points of GDP in 2017. The decline was the result of active deleveraging. The economic recovery is facilitating debt repayment and supporting the recovery in collateral value. SMEs have borne the brunt of the deleveraging in the corporate sector.	The Abhaile aid-and-advice scheme for mortgage debtors in distress could lead to a broader use of personal insolvency. The Central Bank of Ireland proposed measures to enhance the protection of mortgage holders, including a greater transparency of mortgage products and switching. Moreover, macro-prudential measures have been recalibrated, incentivising more prudent lending standards
Public debt	Gross general government debt remained high at 68.4 % of GDP in 2017. A range of alternative metrics, including an interest-to-revenue ratio, show that Ireland's stock of public debt remains high by international and historical standards. At 111 % of GNI* in 2017, the debt burden is *de facto* among the highest in the EU.	Gross general government debt fell by 5.0 percentage points in 2017, mostly due to a high nominal GDP growth. It is expected to have declined to 63.9 % of GDP in 2018, from 68.4 % of GDP in 2017, and to further decline to 61.1 % in 2019 and 56 % of GDP in 2020. While the general government deficit fell in 2017, the pace of fiscal consolidation has slowed in recent years following several in-year expenditure increases. It is not forecast to improve much in 2018 and 2019. The structural deficit is expected to increase to around 0.5 % of GDP in 2019 from 0.2 % in 2018. The risks to the fiscal outlook relate mainly to macroeconomic uncertainties, the volatility of some sources of government revenue (notably corporate income taxes) and over-spending (notably within the health sector). In 2018, Ireland is projected to have respected its medium-term budgetary objective. If compliance with the medium-term budgetary objective can no longer be established at the time of the ex-post assessment, an overall assessment of compliance will need to take into account a possible deviation from the adjustment requirements. In 2019, Ireland is projected to remain at its medium-term budgetary objective.	Budget 2019 estimates exchequer receipts of EUR 0.8 billion in 2018 from the return of funds set aside for the resolution of the financial crisis. It is the stated position of the government that these and further estimated exchequer receipts of EUR 3.5 billion, spread over 2020 and 2021, arising from the winding down of the National Asset Management Agency will be directed towards lowering the debt. While it is important to bear in mind a possible trade-off with faster debt reduction, the planned rainy day fund could contribute to prudent management of public finances. The target of debt-to-GDP of 45 % by the end of the next decade and an intermediary one of 55 % until major capital projects are completed, while still government policy, are no longer referenced in the latest budget.
Financial sector challenges	The non-performing loans ratio fell to 8.5 % at the end of June 2018, down from 11.6 % registered one year prior. There are significant differences in asset quality among banks. Provisioning levels are lower than the EU average. At the end of June 2018, 15.0 % of the total mortgage balance was in arrears, down from a high of 26.3 % in 2013. 60 % of mortgage arrears are past due for more than two years. The number of repossessions remains low, while there has been some increase in the number of insolvency procedures initiated (although from a low base).	The pace at which non-performing loans are declining has picked up, supported by the sales of bad loans. The amount of long-term arrears indicates an insufficiently effective judicial route and a propensity of lenders and debtors to delay the process. Bank profitability continues to recover, however potential spillovers from the UK make the outlook uncertain. Provision write-backs that had previously contributed to profits are less likely to happen again on a large scale (Section 4.2.1). The banks meet capital requirements, with an average commom equity tier 1 (CET1) ratio of 23.0 % at the end of June 2018. Following positive growth in new lending in mortgages, consumer and corporate loans since mid-2017, credit stabilised in the mid of 2018. On the aggregate, the economy is still in a deleveraging mode.	The marked increase in personal insolvency applications could be the result of the Abhaile aid and advice scheme for the support of distressed debtors. By end-June 2017, the total lending by the Strategic Banking Corporation of Ireland (SBCI) including risk-sharing guarantee schemes, was EUR 920 million to over 22 000 Irish SMEs. A new Agriculture Cashflow Support Loans Scheme was successfully launched in 2016. The central credit register became operational for consumer loans in 2018.

[1] Modified gros national income is published by the Irish Central Statistics Office and excludes from the standard gross national income the globalisation effects that are disproportionally impacting the measurement of the size of the Irish economy.

(Continued on the next page)

Table (continued)

External sustainability	The net international investment position (NIIP) is improving although the underlying, domestically relevant NIIP remains hard to gauge. Ireland had a negative NIIP of 149 % of GDP in Q4-2017. Non- International Finance Service Centre (IFSC) financial intermediaries held 62.8 % of GDP in net assets at the end of 2016. Non-financial companies net liabilities were 140.3 % of GDP The general government sector's negative net external position stood at 41.9 % of GDP. The International Financial Services Centre's net position was negative at 48.5 % of GDP along with gross positions of over 1200 % of GDP.	The NIIP deteriorated significantly in 2015 primarily due the very sizeable on-shoring of intellectual property assets to Ireland, arising from the tax optimisation strategies of a small number of multinational enterprises. Some of these companies are very large compared to the Irish economy. The incurrence of these liabilities has only limited implications for the external sustainability of the underlying domestic economy. The external position of the domestic sectors, such as the Central bank, commercial banks and general government, has improved in recent years. The maturity profile of external debt is generally favourable, in particular for external liabilities vis-a-vis official creditors. Approximately 40 % of medium/long-term external debt will mature from 2026 onwards. The riskier instruments of the NIIP belong largely to multinationals and IFSC sector, to which domestic sector has little exposure. The NIIP without non-defaultable instruments (NENDI – see Box 3.1 for details) is negative but if IFSC sector is excluded then the NENDI would turn positive (Section 4.4.1). Net equity position is positive.	
Property market	Residential property prices increased by 10.9 % in 2017 [provisional data- Eurostat]. Annual housing price inflation accelerated further in the first quadrimester of 2018 to 13.3 % in April 2018 and declined afterward to 8.2 % in September 2018. Rents increased 5.8 % y-o-y in September 2018, reaching a new all-time high in 2018. (see Section 1) At this stage, average national housing prices do not look unsustainable according to standard measures but some indicators such as the price-to-income (affordability) index exceeded its annual long-term average in 2017. If not addressed, constraints limiting the construction sector and the supply of housing could contribute to imbalances building up.	The steep increase in construction coupled with more binding macroprudential rules, appear to have curbed price inflation in recent months. Despite improvements, housing supply still falls short of demand, fuelling property and rent prices.	The government has actively intervened to address housing supply constraints but measures will take time to generate effects. Updated guidelines for planning authorities on design standards for new apartments were published in March 2018.The public consultation on the draft guidelines on urban development and building heights was launched in August 2018. These planning reforms are expected to support housing delivery by reducing construction costs and promoting a more compact urban growth. The National Development Plan (NDP), launched in February 2018 expects to support the provision of 112 000 social houses by 2027. The Serviced Site Fund and the Regeneration Development Fund, set-up by the NDP, should support the delivery of infrastructure to unlock local authority-owned land as well as urban and rural regeneration interventions. The Land Development Agency launched in September 2018 may facilitate the release, assembly and effective use of strategically located land banks suitable for public and private housing provision (see section 4.4.3)

Conclusions from IDR analysis

- Large stocks of public and private debt make Ireland vulnerable to adverse shocks but the flow variables have continued to improve. While the stock of non-performing loans is falling, long-term mortgage arrears remain relatively high. Banks are well-capitalised, which makes them well placed to intensify restructuring efforts. Provisioning levels, however, remain low. Housing supply shortages persist and, together with increasing demand, translate into price increases.
- Following a recovery in credit demand in 2017, the stock of household credit have been broadly stabilised since the mid of 2018. Household debt fell to 47.7 % of GDP in 2017. Household debt relative to modified GNI however is elevated and among the highest in the EU. While the situation of non-financial corporations is more difficult to interpret given the weight of multinationals on total corporate debt, it is clear that most domestic companies keep reducing their deb relative to GDP. Public debt is on a firm downward trajectory and a balanced government position is expected by 2020. The pace at which non-performing loans are declining has picked up, supported by disposals. While the high negative net international investment position appears to be driven to a substantial extent by factors that are unrelated to the domestic economy, the external sustainability of the domestic sector is gradually improving due to current account surpluses. The marked increase of property prices and rents, on the back of a still insufficient supply response, makes it urgent to address any constraints limiting the construction sector and the supply of housing.
- Comprehensive policy measures have been taken in recent years to address all the vulnerabilities highlighted above. These include measures to reduce the amount of non-performing loans although those aimed at reducing long-term arrears have been subject to a slow start. Some windfall gains are planned to be used to reduce government debt. The government has repeatedly intervened to tackle the undersupply of housing, but it will take time for the measures to have an effect. Furthermore, macro-prudential policies have been tightened and help to ensure the resilience of households and banks. High uncertainty surrounds the final outcome of the negotiations between the UK and the EU.

(*) first column summarises 'gravity' issues, aiming to put the imbalances in order of magnitude. The second column reports findings concerning the 'evolution and prospects' of these imbalances. The third column reports recent and planned measures. Findings are reported for each source of imbalance and adjustment issue. The final three paragraphs summarise the overall issues, in terms of their gravity, developments and prospects and the policy response to them.
Source: European Commission

4. REFORM PRIORITIES

4.1. PUBLIC FINANCES AND TAXATION

4.1.1. FISCAL POLICY* (9) (PUBLIC DEFICIT AND DEBT DEVELOPMENTS)

It could be prudent to accelerate deficit and debt reduction, in particular as indicators suggest that the economy is operating close to its potential. In the run-up to the economic and financial crisis, Ireland employed a pro-cyclical budgetary policy approach, with public spending and taxation adding fuel to the fire when the capacity of the economy was constrained. Approaching full employment, the government has acknowledged the need to manage budgetary policy to improve living standards in a way that does not contribute to overheating the economy (Department of Finance and Department of Public Expenditure and Reform, 2018). However, including the pre-committed expenditure increases, the total Budget 2019 package was worth around 1 % of GDP (close to EUR 3.5 billion), a considerable stimulus to the economy.

Public debt continues to fall, but remains significant. As warned by the Irish Fiscal Advisory Council, the improvements in the primary budget balance have stalled since 2015, despite the favourable environment (Irish Fiscal Advisory Council, 2018). Other metrics, like the interest-to-revenue ratio, at 7.6 % in 2017, highlight that debt remains high by EU standards (see Section 3). Contingent liabilities continued to decline. In Ireland, a major part of the guarantees is towards financial institutions. They fell to 0.5 % of GDP in 2017, from 1.9 % in 2016.

Government financing has benefitted from the low interest rate environment and supportive bond market conditions. Euro area sovereign bond yields remain low by historical standards. The ten-year rates in Ireland stood at 0.91 % in December 2018 ([10]). This also reflects Ireland's continuing strong economic and fiscal performance. At the same time, the lion's share of Irish sovereign debt, over 95 % of the total, is at fixed rates (Department of Finance, 2018) ([11]). Hence, the risks to debt projections mainly relate to changes to the economic outlook. Almost EUR 17.3 billion in nominal benchmark bonds were issued in 2018, well in the EUR 14-18 billion range targeted at the start of the year. Issuance included EUR 3 billion in Ireland's first-ever sale of sovereign green bonds to diversify the issuance, accessing a new category of investor and providing a new debt instrument that meets untapped investor demand (National Treasury Management Agency, 2018). They are designed to be aligned to the Green Bond Principles, published by the International Capital Market Association.

Ireland's market activity has extended the maturity profile of its debt. At the end of 2017, public debt amounted to EUR 201 billion, with the weighted average maturity at around 10 years remaining one of the longest in the EU. Around 25.4 % of long-term marketable and official debt represented official loans from the financial assistance programme partners. Redemptions of European Financial Stability Facility and European Financial Stabilisation Mechanism loans currently extend until 2042. The maturities of loans to Ireland under the latter have been extended. It is therefore not expected that Ireland will have to repay any of these loans before 2027. This extension and the ensuing operations entail financial benefits for Ireland, linked to the EU's favourable funding conditions. Together with sensible debt management operations, these have contributed to the decline in the effective interest rate. It was estimated at around 2.9 % in 2017, 0.2 percentage points lower than in 2016, and is projected to have further declined to 2.6 % in 2018.

Debt sustainability analysis and fiscal risks

Although improving, debt sustainability remains vulnerable to unfavourable shocks. Short-term sustainability does not appear to be a cause for concern. In principle, Ireland also faces low fiscal sustainability risks in the medium term, as measured by both the debt sustainability

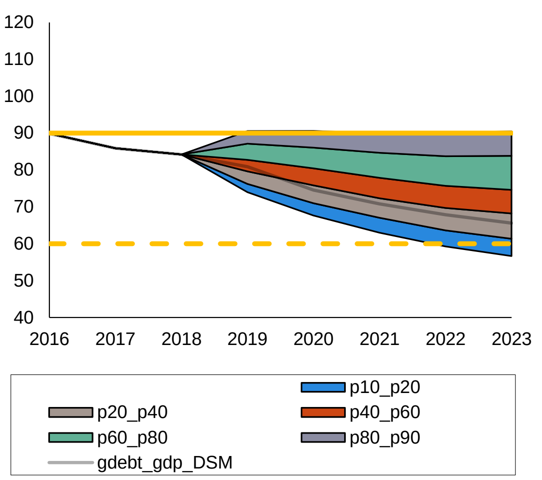
([9]) An asterisk indicates that the analysis in the section contributes to the in-depth review under the Macroeconomic Imbalances Procedure (see Section 3 for an overall summary of main findings).

([10]) 10-year bond yields, 24 October 2018. Source: Bloomberg

([11]) When account is taken of the interest rate hedging that is in place to protect against floating rate exposures.

analysis and the S1 indicator.([12]) This reflects a relatively strong initial budgetary position and a debt ratio already close to 60 % of GDP in 2020 (Annex B). When debt metrics are measured relative to gross national income, however, most of the distribution of the debt burden lies above the 60 % threshold over the projection period (Graph 4.1.1), and this analysis still underestimates vulnerabilities in the Irish context. Furthermore, in case of combined negative shocks (corresponding to the 90th percentile rank of the debt distribution), the debt ratio would lie close to or above the threshold of 90 % of gross national income.

Graph 4.1.1: **Government debt projections, % of gross national income**



Source: see Box 3.1 in European Commission (2019), Fiscal Sustainability Report 2018

Spending on long-term care, pensions and healthcare is projected to increase over the next decades as a result of an ageing Irish population. According to the 2018 Ageing Report, long-term care expenditure would increase by 1.9 percentage points (pps) of GDP between 2016 and 2070, with an increase of 1 pp of GDP for healthcare spending, both above EU average expenditure growth (see Section 4.3.4). Outlays for pension benefits are projected to rise by 1.6 pps of GDP over the same period, compared to a slight decrease of 0.2 pps of GDP for the EU as a whole. The demographic factor alone would lead to an increase of 4 pps of GDP in pension expenditure by 2070. Other factors such as coverage and benefit level soften the overall impact on pension spending, though.

The pension expenditure-to-GDP ratio would peak at 7.5 % of GDP in 2053 up from 5 % in 2016. It would nevertheless fall back to 6.6 % in 2070, compared to 11.0 % for the EU as a whole. However, if fertility rates were 20 % lower than the baseline assumption during the entire projection period, ageing would be more pronounced and pension expenditure would rise by 2.9 pps of GDP between 2016 and 2070, 1 pp higher than the baseline projection. If the employment rate of workers aged 55-74 were to rise by 10 pps on top of the baseline assumption, the increase in pension expenditure by 2070 would be 0.4 pps of GDP lower. The introduction of a link between legal retirement ages and gains in life expectancy would reduce the baseline projection by 0.5 pps of GDP. ([13]) The Roadmap for Pension Reform, published in 2018, aims to address the long-term sustainability of the state pension system and will build on a reform already introduced in 2014, to move the state pension eligibility age to 68 by 2028. However, the remaining envisaged reforms have not yet been finalised.

4.1.2. FISCAL FRAMEWORKS AND SPENDING REVIEWS

Expenditure overruns in some departments are a cause for concern. The pace of fiscal consolidation has slowed in recent years, following several in-year expenditure increases. Expenditure ceilings have kept drifting up on the back of better-than-expected (but possibly temporary) revenue. In some departments, slippages of EUR 810 million in total emerged in 2018, driven by expenditure in healthcare and, to a lesser extent, the department of housing. This was offset mainly by lower than expected spending in other departments and debt interest payments. Overall, the purse strings have been loosened in 2018, with expenditure up by

([12]) The medium-term sustainability indicator S1 shows the additional adjustment required, in terms of improvement in the government structural primary balance over five years to reach a 60 % public debt-to-GDP ratio by 2033, including financing for future additional expenditure arising from population ageing.

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([13]) At unchanged policy, state pension age is set to rise to 68 years in 2028 (for both men and women) with no possibility of receiving old-age pension benefits before that age.

7.2 % y-o-y. Within this, current primary expenditure increased by 6.5 %, while capital expenditure was up sharply, by 31.1 % (see Section 4.4.3).

The rolling nature of the spending review puts equal emphasis on the existing level of public expenditure and incremental amounts to be made available in future budgets. This is a welcome shift in the focus away from the year-on-year incremental increases in spending. The spending review process has in its second three-year cycle continued to focus on key priority areas of expenditure, in terms of the amount of expenditure and the significance of the emerging policy challenges. This includes staffing and pay bill trends to guide future workforce projections and planning. However, it remains to be seen how the budget preparations will actually benefit from the spending review process. Concerning capital expenditure, the multi-annual allocations agreed in the 2018 budget are being extended under the National Development Plan for a further year and so will now underpin each department's capital planning process for a five-year period from 2018 to 2022. These five-year allocations will be reviewed and extended annually on a rolling basis to include a fifth year, as part of the annual budgetary process. The government's capital allocation for 2019 is broadly in line with the overall allocation set out in the National Development Plan.

The planned rainy day fund could contribute to prudent management of public finances. To this end, the government has published the draft law to establish the fund, which will formally be known as the *National Surplus (Exceptional Contingencies) Reserve Fund*. The bill is currently before the parliament. So far, the allocations for the fund for 2019-2023 in the 2019 budget remain unchanged from the Stability Programme 2018 (at EUR 500 million per annum). However, the legislation provides for a facility to add potential windfall tax receipts or income to the fund where the parliament so approves.

Timely publication of all finance bill measures would increase transparency. In principle, Finance Bills give effect to tax measures announced in the Budget. However, the latest Finance Bill includes some measures, with a possible budgetary impact, which were not announced in advance, as part of Budget 2019. The Parliamentary Budget Office has highlighted that, while some are only technical in nature, it would be useful if all measures, and associated costings, were published in advance of consideration of the proposal by the parliament, where practicable (Parliamentary Budget Office, 2018).

4.1.3. TAXATION

Tax revenue continues to increase but the volatility of the corporate income tax remains a concern. Corporation tax revenue in 2018 increased by EUR 2.2 billion (or 27 %) compared to 2017, with EUR 0.7 billion linked to non-recurring factors, including changes in international reporting standards. This increase comes after a surge of 11.6 % in 2017. Corporation tax revenue also remains highly concentrated. In 2017, 10 companies accounted for 39 % of tax revenue and foreign-owned multinational enterprises paid 80 % of corporate taxation. Corporate income taxes as a percentage of total taxation continued to increase, amounting to 12.2 % of total taxation in 2017. This is the highest level since 2003 and an increase of 3.9 pps. since 2014. The high proportion of corporate taxes and the dependence on a small number of major taxpayers make Irish public finances dependent on a small number of multinationals. The Minister of Finance has announced that he plans to propose measures in 2019 to address the increased concentration of overall taxation revenue on corporation tax receipts.

The measures of budget 2019 will moderately broaden the tax base and decrease tax expenditure. The measure with the biggest impact is an increase in the lower value-added-tax rate on hospitality, from 9 % to 13.5 %. Furthermore, the vehicle registration tax relief granted for certain leased vehicles will be suppressed and the scope of the sugar sweetened drinks tax will be widened. The tax mix will also be slightly changed, including increased betting duties, higher excise duty on tobacco products and higher employer contributions to the National Training Fund levy. At the same time, personal income tax is lowered by changing bands and increasing certain tax credits, while universal social charge is also lowered through bands and rate changes. A timely review of the property tax has been announced for

2019. It is an opportunity to broaden the tax base and change the tax mix in a more sustainable way less detrimental to growth (see Section 4.4.2).

High capital flows, coupled with limited application of withholding taxes on royalties (14) and dividends (15) may be an indication that Ireland's tax rules are used by companies to engage in aggressive tax planning. Ireland has a very high level of outbound royalties and dividends as a share of GDP (European Commission, 2018a). Changes to tax residence rules implemented since 2015 have reduced opportunities for aggressive tax planning, although companies incorporated before 2015 are grandfathered until the end of 2020. (16) Intangibles worth billions of euros were on-shored in 2015, while companies were allowed to offset capital allowances for intangible assets against 100 % of the income arising from the use of those intangibles purchased or developed between 2015 and October 2017. Following recommendations from the Coffey Review, the quantum was reduced back from 100 % to 80 % but only for new capital allowances on intangible assets.

Ireland is acting to curb aggressive tax planning through the implementation of European and internationally agreed initiatives. Some provisions of the Anti-Tax Avoidance Directive have been transposed into national law, such as the exit tax since October 2018 or the Controlled Foreign Company rules (option B) since January 2019. Ireland has provided for a specific anti-abuse rule to prevent the risk that the exit tax at 12.5 % could be used to circumvent the capital gain tax, whose rate is at 33 %. Public consultations are ongoing on the interest limitation and hybrid rules. In September 2018, the government published a Corporation Tax Roadmap, which announces consultations in 2019 on the transfer pricing methodology and on the possibility of a transition from a worldwide to a territorial tax system. A possible review of the withholding tax system, as mentioned in the Roadmap, could be instrumental in stopping payments leaving the EU potentially untaxed. Ireland has now fully ratified the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting, which provides for a minimum level of protection against treaty abuse. Ireland has chosen to apply it to the vast majority of its treaty partners, even though it has, similar to a majority of countries, put in a number of reservations not forming part of the minimum standard. The actual changes will depend on the combined effect of reservations by Ireland and its partners. Ireland has published in November 2018 a Competent Authority Agreement with Malta to make sure that the bilateral tax treaty between Ireland and Malta is not used for aggressive tax planning practices through the so-called ‘Single Malt’ structure. (17) It is too early to assess the effect of these various measures, as well as of the US tax reform, in limiting aggressive tax planning.

The potential of environmental taxation to support environmental objectives in a socially fair manner has not been fully exploited. Revenue from environmental taxes are above EU average as a percentage of total taxes (7.6 % v 6.1 % in 2017), but fossil fuel subsidies remain significant and have in fact been rising over the past decade. Peat production and consumption remain subsidised and other subsidies and exceptions exist for petroleum, natural gas and coal (OECD, 2018c). Diesel is still taxed at a lower rate both in terms of carbon and energy content, even though it emits more air pollutants. The different tax treatment of diesel and gasoline for road use is nevertheless beginning to be addressed with a 1 % vehicle registration tax surcharge for diesel engine passenger vehicles registering in Ireland from 1 January 2019. In addition, fiscal measures are being extended in 2019 to support the purchase of electric, hybrid and plug-in hybrid vehicles.

The government decided against raising the carbon tax in the 2019 budget. The Climate Change Advisory Council strongly advocated

(14) The withholding tax on royalties only applies to patents. Furthermore, in the case of patents, exemptions exist.

(15) There is a broad range of exemptions of outbound withholding taxes on dividend payments.

(16) A company is deemed to be resident for tax purpose in Ireland if it was incorporated in Ireland on or after 1 January 2015. If a company was incorporated before 1 January 2015, there is a transition period up to 31 December 2020.

(17) Tax arrangement that consists in having a firm registered in Ireland but managed from Malta, whereby its profits would automatically be taxed in Malta (where corporate taxation for foreign income can be between 0 and 5 %) based on the tie-breaker rule in the current double tax convention between Ireland and Malta.

(Climate Change Advisory Council, 2018) an increase in the tax from EUR 20/ton of CO2 to EUR 30 as a first signal towards further increases to EUR 80 by 2030. The government seriously considered the measure and commissioned a study by the Economic and Social Research Institute (de Bruin and Yakut, 2018) to assess its impact, but decided against it in this budget pending further analysis of the impacts of multi-annual increases in carbon tax before commencing with the implementation of such a policy.. The increase would have been an important and much-needed signal to economic agents. The government indicated that it would again consider raising the carbon tax in future.

4.2. FINANCIAL SECTOR

4.2.1. BANKING SECTOR* ([18])

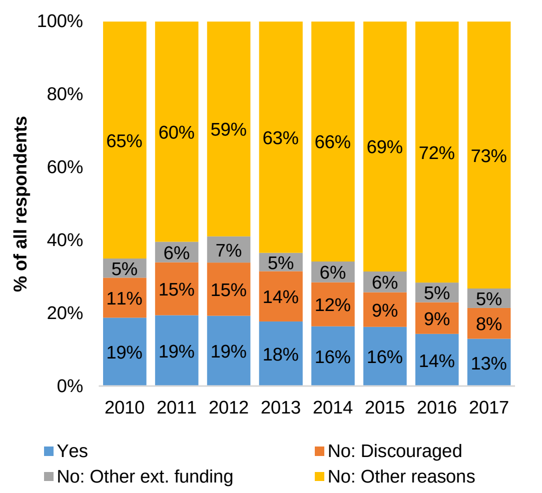
New lending continues to be subdued, which is mainly due to weak demand for loans. For the first three quarters of 2018, the flow of new loans to households and non-financial corporations was EUR 23.8 billion, up from EUR 22.7 billion for the same period a year ago, with newly issued mortgages, excluding renegotiations, expanding by over 40 %. Despite recent improvements, these figures are substantially below the pre-crisis levels, especially for small ticket (i.e. less than EUR 1 million) loans to non-financials, which have remained below one-fifth of their peak values in 2010.

External uncertainties undermine the market performances of Irish banks. Much like the rest of the Irish economy, domestic banks remain susceptible to external spill-overs, most notably from the UK's decision to leave the EU. As a result of these external sources of uncertainty, the stock prices of the Irish banks dropped, especially in the third quarter of 2018, trading well below the euro-area financial indices. Despite these conditions, the state-owned Allied Irish Banks (AIB) and Bank of Ireland (BOI) have maintained healthy capital ratios in the EU-wide stress test of 2018, even under the adverse scenarios.

Demand for loans among SMEs remains depressed. According to the Survey on the access to finance of enterprises (SAFE), loan applications by Irish SMEs have been declining since 2012 (Graph 4.2.1). Only 13 % of respondents applied for new loans in 2017, down from 19 % in 2012. Discouragement and external funding do not seem to be the main drivers, implying that an increasing share of SMEs either use internal funds or are deterred from investment altogether. Supplementary results show that applicants are increasingly likely to receive the full amounts they asked for in their loan applications (Graph 4.2.2), suggesting that credit supply factors are not driving the weak lending conditions.

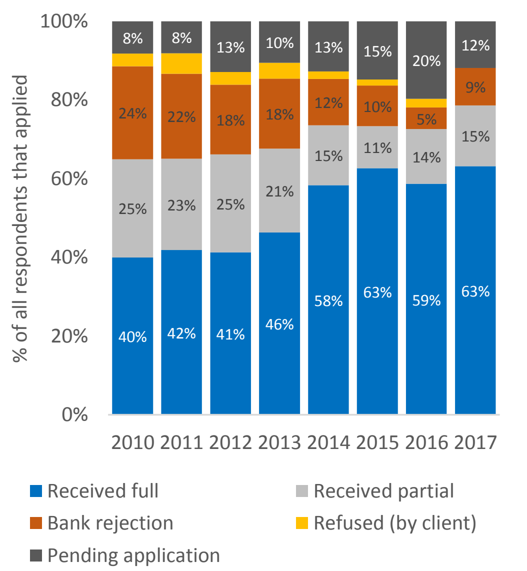
([18]) An asterisk indicates that the analysis in the section contributes to the in-depth review under the MIP (see Section 3 for an overall summary of main findings).

Graph 4.2.1: **Access to finance by SMEs — Have you applied for credit?**



Source: European Commission, SAFE survey

Graph 4.2.2: **Access to finance by SMEs — If applied, what was outcome**



(1) Figures provide averages for loan and credit line applications and allocations. For loan applications, the remaining responses correspond to other reasons for not applying, including sufficient internal funding and other unidentified reasons. "Other funding" include trade credit, loans from a related company, shareholders, family or friends, leasing and factoring, grants, issuance of equity or debt securities. "Discouraged" corresponds to possible rejection.
Source: European Commission, SAFE survey

Table 4.2.1: **Financial soundness indicators for domestic and foreign banks**

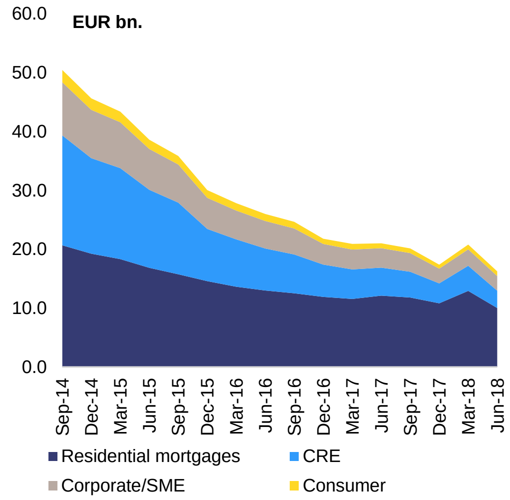
(%)	2012	2013	2014	2015	2016	2017	2018q1	2018q2
Non-performing debt	16.6	18.4	16.3	11.7	10.3	8.1	8.1	6.9
Non-performing loans (1)	-	-	21.6	14.9	13.1	9.9	9.8	8.5
to NFCs & households (1)	-	-	28.4	20.5	16.6	14.1	13.7	11.8
to NFCs	-	-	37.8	22.9	15.3	11.8	11.0	9.1
to households	-	-	22.8	19.1	17.4	15.5	15.4	13.4
Coverage ratio	53.2	57.2	46.7	40.2	35.5	29.9	33.3	32.1
Loan to deposit ratio (2)	128.7	113.6	99.4	84.3	78.5	79.5	79.0	77.9
Tier 1 ratio	16.7	17.3	20.5	23.2	23.0	23.4	22.6	23.5
CET 1 ratio	-	-	20.1	22.3	22.2	22.9	22.1	23.0
Return on equity (3)	-14.6	-13.2	8.5	6.8	6.3	5.0	6.3	6.9
Return on assets (3)	-0.9	-0.9	0.9	0.9	0.9	0.7	0.9	1.0

(1) Due to the sizeable exposures of banks to central banks and other financial institutions, the aggregate non-performing loan (NPL) ratio differs substantially from the NPL ratio for the private sector alone, comprising only of loans to non-financial corporates and households.
(2) ECB aggregated balance sheet: loans excl to gov and MFI / deposits excl from gov and MFI
(3) For comparability only annual values are presented
Source: ECB CBD

Increased portfolio sales are facilitating faster non-performing loans reduction in the banking sector. The three main domestic banks continue to improve their asset quality, (Graph 4.2.3). While the aggregate non-performing loans (NPL) ratio fell to 8.5 % of gross loans in the second quarter of 2018, down from 11.6 % one year earlier, it remains above the euro area average of 4.2 %. The non-financial private sector non-performing loans ratio remains nevertheless elevated, at 11.8 %, pushed up by still-high mortgage arrears. Asset quality improvements over the past year have been primarily driven by loan sales, which will continue in the upcoming months, assuming that the announced sales are fully implemented. The sales that have been executed so far have led to a significant reduction in mortgage arrears. Provisioning levels remain low at 32.1 % as of June 2018.

After a temporary rise in late 2017, repossessions have reverted to their downward trend. Voluntary repossessions peaked in the last quarter of 2017, driven by a temporary 'voluntary surrender' programme implemented by an Irish bank. Both voluntary and court-ordered repossessions declined in the first half of 2018. An analysis of the repossession data (Central Bank of Ireland, 2018a) reveals that banks are more likely to engage in repossessions than non-banks, including credit purchasers, although this result is partly driven by the rise in repossessions at end-2017 and may change over time as more loans are held by credit purchasers.

Graph 4.2.3: **Non-performing loans reduction by portfolio**



(1) Figures only cover the three main domestic banks (i.e. AIB, Bank of Ireland, and PTSB).
(2) CRE stands for Loans backed by commercial real estate.
Source: CBI

Long-term mortgage arrears resolution continues to be slow due to the inherent difficulty of restructuring these cases. Although the stock of long-term mortgage arrears (i.e. arrears of more than two years) has declined by EUR 1.4 billion in the year to September 2018, the share of these problem loans in the overall share of mortgage loans (8.5 %) and among 90+ days past due mortgage loans (72 %) remains high. Moreover, there is evidence that the pace of reduction in long-term arrears is slowing down (O'Malley, 2018). Since vulnerable households are more likely to be in long-term arrears, a positive development has been the increase in approvals for the *Enhanced Mortgage-to-Rent* scheme. ([19]) In particular, the number of approvals under the new scheme has already surpassed the number of approvals under the original scheme in 2012. The number of personal insolvency applications also continues to increase following the introduction of the *Abhaile* aid-and-advice scheme. However, the number of debtors successfully entering into an arrangement with their lender has been stagnating since end-2017.

A number of initiatives have been proposed that aim to address the social and economic impact of non-performing loan resolution may have consequences for the functioning of the financial sector. The Consumer Protection Bill (Regulation of Credit Servicing Firms) Act 2018, which came into effect on 21 January 2019, subjects authorisation and regulatory requirements on loan purchasers. Following a critical opinion from the European Central Bank (European Central Bank, 2018a), certain provisions of the original proposal, including the requirement to disclose the purchasing prices to borrowers were removed. Any inconsistencies of the bill with the European Commission’s March 2018 proposal for a directive on credit servicers, credit purchasers and the recovery of collateral will be addressed until the latter enters into force. ([20]) Another relevant initiative is the draft Mortgage Arrears Resolution (Family Home) Bill 2017, which sets up the Mortgage Resolution Office, to administer restructuring solutions and may potentially call into question agreed restructuring terms (European Central Bank, 2018b). Other recent initiatives may also have unintended consequences by generating undue obstacles to non-performing loan resolution, including the Courts and Land and Conveyancing Law Reform Bill 2018, which was sent to the European Central Bank for its opinion in January 2019, and the "No Consent, No Sale" Bill, which proposed in early 2019. Lastly, concerns remain that a draft bill enabling the Central Bank of Ireland (CBI) to cap interest rates on variable rate mortgages, if enacted, could have negative implications for the transmission of monetary policy, financial stability and bank competition.

The tracker mortgages examination is in its final phases. In 2015, the CBI initiated a systemic examination of borrowers that were wrongfully taken off a tracker rate ([21]) or received an incorrect margin on the tracker. As of the end of 2018, 39 800 customers have been identified as being impacted across several lenders. Around 97 % of these customers have received offers of redress and compensation, with EUR 650 million paid out by lenders.

The authorities have recalibrated the macro-prudential toolkit to increase the resilience of banks. Amendments to macro-prudential measures, which entered into force at the beginning of 2018, mean that first-time buyers (FTB) and second and subsequent buyers (SSBs) are treated differently for the purposes of the loan to income allowances. While up to 20 % of FTBs can still be exempted from the 3.5-loan-to-income (LTI) requirement, up to 10 % of SSBs can also benefit from this exemption. Required deposits remained unchanged at 10 % of FTBs and 20 % for SSBs. The third review of the framework currently in place was completed in November 2018 and without making any changes to existing parameters. Moreover, the CBI has introduced a 1 % countercyclical capital buffer in July 2018, effective from July 2019.

4.2.2. PRIVATE INDEBTEDNESS* ([22])

Private sector debt remains high, pushed up by large multinational companies in Ireland. The private sector has continued to reduce debt in 2018, driven by the corporate sector. The private debt-to-GDP ratio is heavily influenced by multinational corporations’ activities, affecting

([19]) The Mortgage-to-Rent scheme was revised over the course of 2017 with a range of amendments to its eligibility criteria and administration came into effect to enable more properties to qualify and to make the scheme more flexible and accessible to borrowers.

([20]) It is important to note that the principle of maintaining a level-playing field between loan purchasers, servicers and originators is also a crucial provision of the European Commission’s recent proposal for a directive on credit servicers, credit purchasers and the recovery of collateral, COM(2018)135.

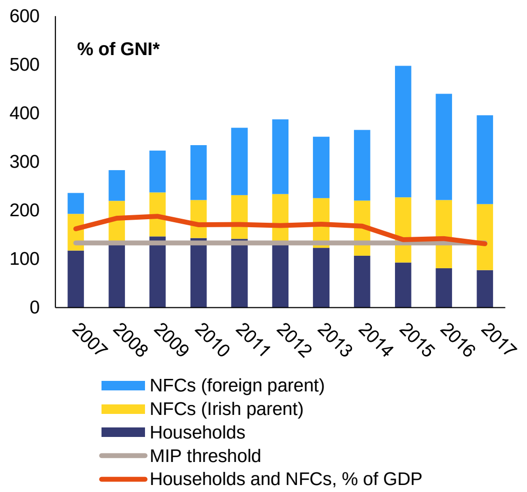
([21]) A tracker loan consists of a variable rate loan, which tracks a publicly available rate, typically the European Central Bank’s main borrowing rate, plus a margin. In turn, a standard variable rate loan is a loan where the interest rate is set by the issuing bank, usually in relation to the bank’s funding costs.

([22]) An asterisk indicates that the analysis in the section contributes to the in-depth review under the MIP (see Section 3 for an overall summary of main findings).

both the numerator and the denominator of the debt ratio. Debt of households and domestic companies, including that of redomiciled public limited companies, relative to GDP, fell below the indicative Macroeconomic Imbalance Procedure (MIP) threshold in 2017 (Graph 4.2.4). Relative to GNI*, debt of domestic companies and households stood at 213 % in 2017.

While high, the debt of non-financial companies has continued its downward trend. Debt of non-financial corporations fell from 231 % to 196 % of GDP in the course of 2017. Multinational companies located in Ireland are driving the trend, falling from 140.9 % of GDP in 2016 to 112.4 % in 2017. Debt of Irish companies, including that of redomiciled public limited companies, fell from 90.1 % of GDP to 83.6 % over the same period.

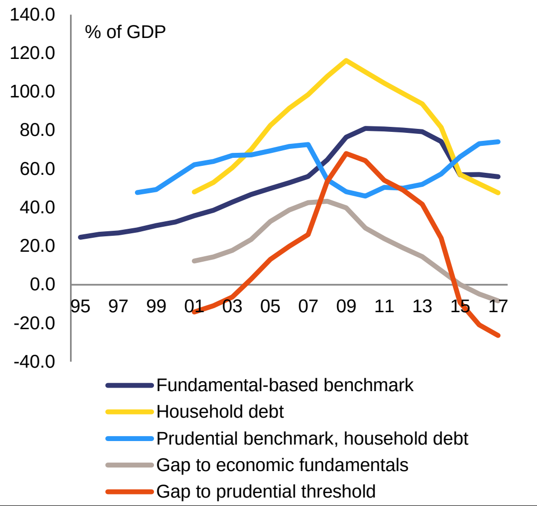
Graph 4.2.4: **Private indebtedness**



Source: CSO

Rising property prices put upward pressure on household debt. Household debt as a percentage of GDP has fallen from its peak of 116.2 % in 2009 and was 47.7 % in 2017 (Graph 4.2.5). While some of the decline is explained by the surge in GDP in 2015, active deleveraging efforts by households have also contributed significantly to the decline. However, household savings rate is low and to ensure debt sustainability over the medium term, households would need to increase their savings rate by 2.4 pps of GDP. Furthermore, increasing credit flows suggest that nominal household debt bottomed out in 2018. Household debt relative to gross disposable income, which is unaffected by the presence of multinational companies and comparable across countries, remains among the highest in the EU at 136 %, despite a significant reduction in that metric since it peaked in 2009 at 218 %.

Graph 4.2.5: **Household debt and estimated benchmark**



Source: European Commission

The debt servicing ratio of Irish households is currently at historically low levels, but still represents one of the highest in the EU. Despite a marked decline in household debt, relative to gross disposable income, from 215 % of disposable income in 2009 to 135.7 % in 2017, household indebtedness is among the highest in the EU. The high level of debt, together with the high lending rates prevailing in Ireland, is also reflected in a high debt servicing ratio, estimated at 7.9 % of disposable income. This is relatively high compared to other EU countries. ([23])

The composition of mortgages suggests that households are becoming more resilient to economic shocks. Given the still-high debt servicing ratio, Irish households remain vulnerable to sudden income shocks. Households are nevertheless becoming less exposed to interest rate shocks, as an increasing share of new mortgages is loans with interest rate fixation of one to five years. Moreover, CBI (Gaffney et al., 2018) shows that recent new loans with deferred amortisation are rarely related to primary dwellings. In 2007,

([23]) The debt servicing ratio follows the methodology outlined in Drehmann et al., (2015).

15 % of new mortgages were with deferred amortisation. While the composition of new mortgages is encouraging, its impact on the stock of mortgages remains limited. 90 % of the mortgage stock remains characterised by variable interest rates.

4.3. LABOUR MARKET, EDUCATION AND SOCIAL POLICIES

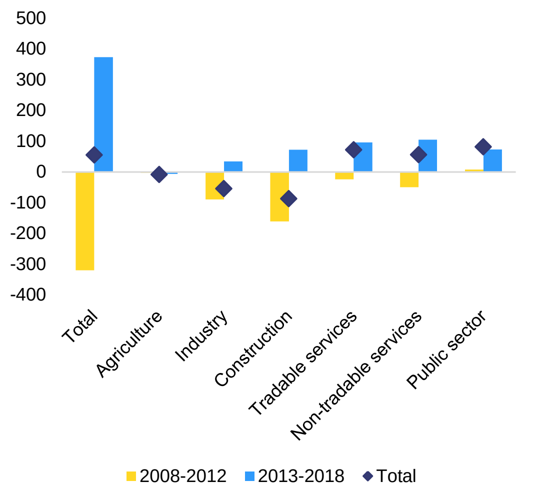
4.3.1. LABOUR MARKET

Labour market conditions continue to improve overall, but some groups are not fully benefitting from it. Job creation during the recovery has taken place across most sectors of the economy (Graph 4.3.1). In 2018, construction and accommodation and food services contributed most to the growth in employment, reflecting the strength of domestic activity. Unemployment kept on falling (5.4 % in the fourth quarter of 2018), as did youth unemployment (12.5 % in the fourth quarter of 2018). Wage pressures are emerging in certain sectors (see Section 1). Steady economic growth is positively reflected in the main employment and social indicators. Furthermore, other than in terms of skills, there are no significant disparities in the main labour and social indicators at regional level (Nomenclature of territorial units for statistics NUTS 2 ([24])). However, inactive people, low work intensity households, people with disabilities, and low-skilled individuals are still facing considerable challenges.

There are some labour shortages coupled with skill shortages emerging in certain sectors. Even though Ireland is one of the countries where employers report the least difficulty in hiring (ManpowerGroup, 2018), 78 % of employers report having experienced moderate to extreme skill shortages in 2017 (20 % labelled as extreme) (Hays, 2018). According to the survey on the access to finance of enterprises, the share of companies that consider the availability of skilled staff or experienced managers as their most pressing problem has increased from 15 % in 2017 to 22 % in 2018. The largest shortage occupations are information and communication technologies professionals, construction and property professionals. Skills needs are being tackled through training (see Section 4.3.2) and migration.

Digital skills of the wider workforce and shortages of information and communication technology (ICT) professionals remain challenges. Whilst the proportion of ICT specialists in the overall workforce (4.4 %) is slightly above the EU average of 3.7 % (European Commission, 2019b), there is a significant shortage of specific ICT skills, as highlighted in various reports (SOLAS, 2018). Roughly half of the enterprises who tried to recruit ICT specialists experienced difficulties (European Commission, 2019b). As for more universal digital skills, 52 % of the adult population lack even basic digital skills, well above the EU average of 43 %.

Graph 4.3.1: **Change in employment by sector**



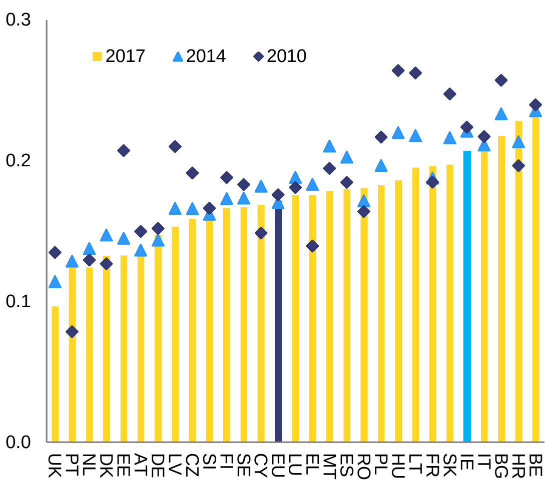
(1) Employment — domestic concept (thousand), sum of y-o-y changes based on non-seasonally adjusted data, first quarter of each year.
(2) Tradable services are: wholesale and retail trade, transport, accommodation and food service activities
Source: European Commission

Regional differences persist in terms of skilled and high-skilled labour and targeted training for small and medium enterprises needs. Ireland shows large regional differences in job skill levels. The Southern and Eastern region is among the top 20 % of the Organisation for Economic Co-operation and Development (OECD) regions (considered an appropriate comparison among industrialised countries in the absence of regional Eurostat data) and the Border, Midland and Western region in the bottom 20 %. Wages in multinationals of EU and US origin are 64 % and 74 % higher respectively than in domestic companies (OECD, 2018a). Hence, high-skilled human capital tends to gravitate towards working for the multinationals and towards the greater Dublin area and the Southern and Eastern region. Moreover, OECD findings show a shortage of managerial skills in small and medium enterprises (OECD, 2018a).

([24]) There are two NUTS2 regions in Ireland: Border, Midland, and Western region (IE01), and Southern and Eastern region (ie02)

Disparities persist in employment levels between different skill groups. The differences between the employment rates of low-, medium-, and high-skilled workers remain among the highest in the EU in 2017 (Graph 4.3.2), although it has decreased since 2014. Indeed, the employment rate of high-skilled workers (84.0 % in the third quarter of 2018) is significantly higher than that of medium- (72.3 %) and low-skilled workers (51.3 %). Ireland saw a rise in skills mismatches in recent years following considerable job destruction affecting primarily low-skilled workers in the construction sector. Efforts to raise the skills of the working age population are already ongoing (see Section 4.3.2) but are likely to require further investments to meet the size of the challenge.

Graph 4.3.2: **Relative dispersion of employment rates by education level, 2010, 2014 and 2017**



Source: Own calculations based on Eurostat. Annual average based on the average of four quarters

Underemployment and the quality of employment remain an issue. About a quarter of all part-time employees in 2017 would take full-time employment if they could find it (Eurostat). Bogus self-employment, zero-hour contracts and the status of individuals working within the 'gig economy' have been the focus of much policy debate. Atypical forms of work tend to be associated with higher income volatility and lower job security (European Commission 2018j). Precarious employment has risen in Ireland (Irish Congress of Trade Unions, 2017), with nearly 8 % of the workforce having significant variations in their hours of work. The social security system covers all people in employment, provided their income meets the income threshold indicating attachment to the workforce i.e. EUR 38 per week in the case of employees or EUR 5 000 per annum in the case of the self-employed.. The self-employed do not have formal coverage to unemployment benefits and to accident and occupational injuries, and are excluded from contributory sickness benefit schemes.

New measures are targeting the quality of employment. The Government published the 'Employment Miscellaneous Provisions' Bill in July 2018. It aims at tackling exploitative employment arrangements by providing better information on the nature of employment, strengthening provisions around minimum pay, prohibiting zero hour contracts, and protecting employees who wish to invoke their rights under the Act against being penalised.

Labour market participation remains relatively low. Whilst the activity rate in Ireland continues to increase (78.2 % in the third quarter of 2018 for individuals between 20 and 64), it has not yet reached its pre-crisis high and remains slightly below the EU average (78.4 %). The activity rate is particularly low for the low skilled and for women. According to recent research (OECD, 2018b), limited work experience, low levels of skills, and scarce job opportunities are the more common potential employment barriers amongst individuals with no or weak labour market attachment. Over 110,000 inactive people could benefit from non-standard working arrangements to transition from inactivity into the labour force (SOLAS, 2018).

The insufficient provision of childcare is the main cause of high female inactivity. In 2017, 54.2 % of inactive Irish females reported caring responsibilities as the main reason for inactivity, against an EU average of 31 %. This is the main reason behind the above-average gender gap in employment rates for the age group 20-64 (12.8 % in the second quarter of 2018 vs 11.9 % in the EU) (Graph 4.3.3).

Box 4.3.1: Monitoring performance in light of the European Pillar of Social Rights

The European Pillar of Social Rights is designed as a compass for a renewed process of upward convergence towards better working and living conditions in the European Union.[1] It sets out twenty essential principles and rights in the areas of equal opportunities and access to the labour market; fair working conditions; and social protection and inclusion.

SOCIAL SCOREBOARD FOR IRELAND		
Equal opportunities and access to the labour market	Early leavers from education and training (% of population aged 18-24)	Best performers
	Gender employment gap	On average
	Income quintile ratio (S80/S20)	To watch
	At risk of poverty or social exclusion (in %)	On average
	Youth NEET (% of total population aged 15-24)	Better than average
Dynamic labour markets and fair working conditions	Employment rate (% population aged 20-64)	On average
	Unemployment rate (% population aged 15-74)	On average
	Long-term unemployment (% population aged 15-74)	On average
	GDHI per capita growth	On average
	Net earnings of a full-time single worker earning AW	Better than average
Social protection and inclusion	Impact of social transfers (other than pensions) on poverty reduction	Best performers
	Children aged less than 3 years in formal childcare	On average
	Self-reported unmet need for medical care	On average
	Individuals' level of digital skills	To watch

Members States are classified according to a statistical methodology agreed with the EMCO and SPC Committees. The methodology looks jointly at levels and changes of the indicators in comparison with the respective EU averages and classifies Member States in seven categories (from "best performers" to "critical situation"). For instance, a country can be flagged as "better than average" if the level of the indicator is close to EU average, but it is improving fast. For methodological details, please consult the draft Joint Employment Report 2019, COM (2018)761 final.

NEET: neither in employment nor in education and training; GDHI: gross disposable household income.

Ireland performs relatively well on a number of indicators of the Social Scoreboard supporting the European Pillar of Social Rights, while challenges remain. The Irish tax and benefits system continues to be very effective in reducing poverty and inequalities, but with a slight increase in inequality recently. The labour market also shows relatively good employment-related outcomes. Real disposable household income per capita has been bolstered by accelerating wages and subdued inflation, but it remains below pre-crisis levels. Many people have yet to reap the social benefits of the economic upturn. The employment rate of people with disabilities is the lowest in the EU. Child poverty remains a concern with one in every ten children living in persistent poverty. At the same time, a low percentage of the population has at least basic digital skills.

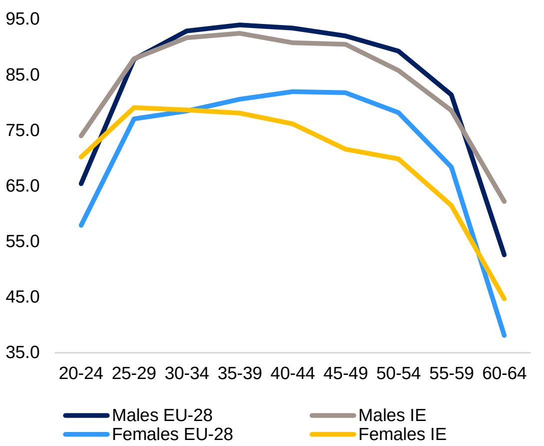
The rapidly rising number of homeless people as a result of rent increases and insufficient social housing merits urgent action. Insufficient levels of investment and construction over the last decade, including social housing, have led to a huge shortage of adequate accommodation for those most at risk. The bulk of the challenge is concentrated in the major urban areas and it is affecting different groups, notably single parents, single men, the elderly, people with disabilities and an increasing number of families and youth. Meeting social housing demand, in line with the Pillar principle on housing and homelessness, will take several years of sustained investment to address quantity, quality and variety of housing and to provide supporting services.

Ireland is delivering very well on education in general in line with the Pillar principle on education, training and lifelong learning. The education system in Ireland continues to show positive outcomes with the rate of early school leavers standing at 5.1%, one of the lowest in the EU. The level of tertiary education completion places Ireland among the top three EU Member States and the country ranks top in terms of the percentage of students attaining baseline proficiency by migrant background.

([1]) The European Pillar of Social Rights was proclaimed on 17 November 2017 by the European Parliament, the Council and the European Commission. https://ec.europa.eu/commission/priorities/deeper-and-fairer-economic-and-monetary-union/european-pillar-social-rights/european-pillar-social-rights-20-principles_en

Formal childcare remains unaffordable for many. While participation in early childhood education and care from age four is now well above the EU average at 98.8 %, the participation of children below three years of age in formal childcare is below the EU average. Childcare provision in Ireland (34.4 % in 2017) has caught up with the EU average (34.0 % in 2017), although Irish families avail of a much lower rate of formal childcare for children enrolled in childcare for 30 hours or more (10.6 % compared to 7.0 % for children under 3). Childcare costs are the highest in the EU: in 2015, the net cost for a lone mother with two children and low earnings amounts to 42 % of her disposable income (OECD, 2017e).

Graph 4.3.3: **Activity rate by gender and age, 2017**



Source: Eurostat

Several measures have been taken to enhance the provision of childcare, in line with the European Pillar of Social Rights. The bill establishing the Single Affordable Childcare Scheme was passed in 2018 and the information technology system is now ready to be deployed after some setbacks. Once implemented, this legislation will give parents a clear legal entitlement to financial support for childcare. The 2019 budget announced the allocation of EUR 0.5 million to create a team of Childminding Support Officers to assist with the registration of childminders with the national child and family agency Tusla and help them upskill to required regulatory standards to be developed in the coming years. Government estimates point to 35 000 childminding services caring for 88 000 children in the country but in November 2017 just 122 childminders were registered with Tusla (Children's Rights Alliance, 2018). In 2017, Ireland extended the 'free universal Early Childhood Care and Education year' for a second year (61 weeks in all). The scheme is open to all childcare providers who are registered with Tusla. Finally, a new paid parental leave scheme will come into effect in November 2019. This will provide two weeks non-transferable paid leave per parent in the first year of a child's life and will be increased to four weeks in 2020 and seven in 2021. The real impact of these measures remains to be seen, as several are announcements for future years and it is too early to assess them.

The rate of quasi-jobless households continues to represent an important challenge in terms of social inclusion and untapped human capital. Persistent joblessness mostly affects women, older adults, those with less education, adults with a disability and single-adult households (NESC, 2018). The population under 60 living in quasi-jobless households is falling, although it remains above the pre-crisis level (13.7 % in 2008). This suggests activation policies combined with improved labour market conditions are benefitting the most deprived. As a result, since 2012, the gap between the EU and Irish rates has narrowed and is expected to close further in 2018. However, Ireland has the highest share of people living in quasi-jobless households in the EU (16.2 % in 2017, vs 9.5 % in the EU), indicating that further investment needs exist. Ireland has one of the highest shares of children living in such households (13.4 % vs 10.5 % in the EU). Furthermore, the share of low-skilled people living in quasi-jobless households (36.9 % in 2016) is much higher than the EU average (21.5 %). This partly results from inactivity traps discouraging activity due to the loss of benefits.

Recent reform efforts have tried to tackle the problem of weak work incentives for low-income groups, including partners who are out of work. Ireland has addressed those disincentives by tapering the withdrawal of benefits when returning to work and through the Housing Assistance Payment Scheme. The Housing Assistance Payment Scheme has increased financial work incentives for jobless households as recipients remain eligible when they are in full-time employment, in contrast with the Rent Supplement Scheme. However, disincentives seem to have increased for second earners in a couple, since household income is expected to rise above the maximum qualifying threshold when they move into work ([25]). The government also committed itself to bringing in a Working Family Payment to promote work by supplementing on a gradual basis the income of households, at the same time incentivising more working hours and full-time work. However, analyses previously undertaken cast some doubt on the likelihood of it being effective (European Commission, 2018).

The Action Plan for Jobless Households is in place to further help jobless households. Unveiled by the Government in September 2017, it targets jobless lone parents and spouses of benefit recipients with children aged 7 to 14 who are judged fit to work, as well as people with disabilities. Two aspects are being prioritised. First, the family-focused case management system is being piloted in five areas with a full roll out taking place in the first six months of 2018. Second, in relation to disability support, the national consultation for 'early engagement' and the reconfiguration of the qualifying age for Domiciliary Care Allowance and Disability Allowance payments was conducted with the next steps still to be announced by the Government.

Despite considerable improvement in Ireland's Active Labour Market Policy framework, some scope for improvement remains. In line with falling unemployment figures, participant numbers dropped from 84 238 in 2014 to 59 333 in 2018 (-30 %), with 27 % of those wanting to work participating (2016). ([26]) The 2017 allocation for active labour market policies of EUR 925 million is one of the highest recorded levels of funding per 1,000 persons on the Live Register, thus highlighting the scope to reduce or reallocate funding requirements on a cyclical basis as the labour market improves. The low dominance of specific-skills training and a continued high reliance on second-chance education initiatives as well as the relatively weak linkages with work-based vocational training are areas that would benefit from a redesign and enhanced investment to make interventions more effective.

Policy measures to tackle long-term unemployment are having a positive impact. The JobPath activation programme has now been fully rolled out and the first results suggest that it has contributed significantly to the drop in long-term unemployment: 26 % of the 20 447 participants who completed the programme got a job (JobPath Performance Data, 2017). The chances of employment improved by as much as 42.5 % following participation in JobPath, according to a 2017 evaluation. However, long-term unemployment among youth remains high in the Border, Midland and Western region (5.2 % vs 4.2 % in the EU), indicating a need for further targeted efforts.

People with disabilities are still facing considerable challenges, although support is being enhanced. Ireland has one of the lowest employment rates for people with disabilities in the EU (26.2 % compared to 48.1 % in the EU in 2017) and one of the highest gaps between people with and without disabilities (45.1 percentage points). The Comprehensive Employment Strategy for People with Disabilities 2015-2024 aims at increasing the statutory target of 3 % of employees with disabilities in the public sector towards 6 % by 2024. In addition, a EUR 16 million Ability Programme (2018-2021) to invest in the employability of people with disabilities aged 15-29 has been announced. Additional funding totalling EUR 150 million has been allocated for disability services in the 2019 budget. How this money will be invested remains to be seen as details have so far not been released on specific measures and programs.

Social dialogue is characterised by its mostly consultative nature. In 2015 the government created a structured forum for national economic dialogue where social partners have the opportunity to raise concerns and share views ahead of the annual budget on key policy issues. However, they are rarely involved and consulted in relation to the European Semester process by the government.

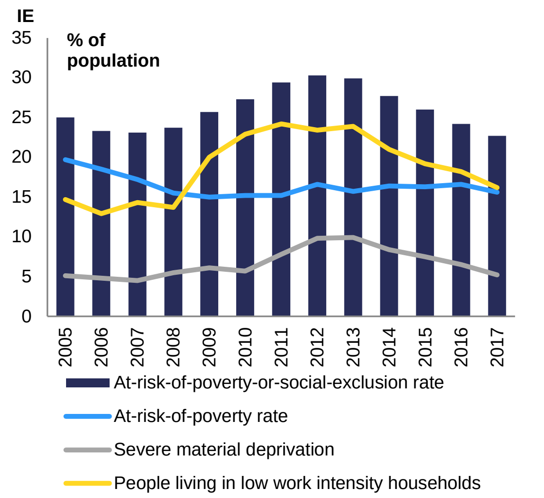
4.3.2. SOCIAL POLICY

The population at risk of poverty or social exclusion continues to fall, but child poverty remains a challenge. The decline from 24.2 % in 2016 to 22.7 % in 2017 is driven by improvements

([25]) Assessment based on OECD Tax-benefit model
([26]) Key performance indicator in the Benchmarking on Unemployment Benefits and Active Labour Market Policies conducted within the EMCO Committee. For details, see European Commission (2018m).

in all three dimensions ([27]) of the at-risk-of-poverty-or-social exclusion rate, in line with rising household incomes and robust labour market conditions (Graph 4.3.4). The population under 60 living in households with very low work intensity has fallen steadily since 2013, while severe material deprivation rates have continued to decline to 5.2 %, about half of the peak experienced in the wake of the crisis (9.9 % in 2013). Monetary poverty rates have also declined (15.6 % in 2017), and are now comparable with pre-crisis levels. Minimum income benefits are among the most adequate in the EU (91.3 % of the poverty threshold and 70.4 % of the income of a low wage earner). ([28])Furthermore, Ireland ranks close to EU average for indicators related to the adequacy of unemployment benefits (European Commission, 2018m). However, fighting child poverty remains a challenge. In 2017, 25.2 % of children in Ireland were at risk of poverty or social exclusion, highlighting potential investment needs. A national debate including all major stakeholders was launched in 2019 under the name No Child 2020. This initiative seeks to raise awareness and mobilise all concerned towards concrete policy and joint actions to eradicate child poverty.

Graph 4.3.4: **Main social indicators**



Source: Eurostat

Severe shortages in housing supply and social housing have created a very challengingsituation. The rapid increase in rents (see Section 1), combined with rising house prices, creates an affordability constraint for households which can increase poverty risk, in particular for women, and further exacerbate homelessness. ([29]) The 2019 budget has increased by 25 % the allocation to housing, bringing the total budget for 2019 to EUR 2.4 billion (European Commission, 2019). Whilst expenditure is envisaged to facilitate the delivery of 27 000 new social homes, this falls very short of the actual demand which in July 2018 stood at 71 858 homes (Housing Agency, 2018). The social housing needs of 27 400 households are expected to be met in 2019. Much work and investment remains to be done in order to provide a varied range of social housing that caters for different users and age groups. A large number of social homes are under-occupied (notably in the Dublin area), in part due to current succession practices, thus further aggravating the situation (Melia, 2018). Expenditure levels on housing and social housing, though growing, still stand at a level just below the 2008 peak, thus further contributing to the critical situation (DPER, 2018b).

Homelessness remains on a worryingly fast upward trend. In July 2018 there were circa 6 024 homeless adults and 3 867 homeless children in Ireland, an annual increase of 16 % and 25 % respectively. Approximately 1700 families are living in emergency accommodation as a result of evictions or rent hikes. Stark regional and urban differences exist, with 68 % of all homeless people concentrated in Dublin in July 2018. The South-West region accounted for 7 % of all homeless people and the Mid-West for 6 % (Graph 4.3.5). This population faces a high rate of unemployment, are considerably more likely to have a disability (27.1 % of homeless people had a disability, against 13.5 % of the general population) and were more likely to be male (58 %). A growing number of young people leaving state care are also increasingly exposed to homelessness with an 8 % annual rise in the number of 18-24 year olds living in emergency

([27]) Three dimensions of at-risk-of poverty or social exclusion rate are income poverty, work intensity and material deprivation.

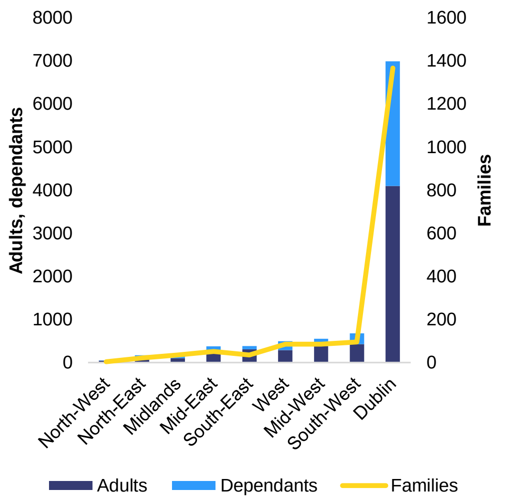
([28]) According to the Benchmarking Framework on Minimum Incomes conducted within the Social Protection Committee (SPC). For details, see European Commission (2018m).

([29]) In 2017, the at-risk-of-poverty (AROP) rate after deducting housing costs was 28.1 % (29.2 % for women), as against 15.6 % (16.5 %) before housing costs were taken into account.

accommodation. Temple Street Children's University Hospital reported discharging 29 % more children up to the age of 16 with 'no fixed address' in 2018 compared to 2017.

Policy measures are being taken to tackle homelessness but their effectiveness remains uncertain. As of November 2018, over 20 000 new homes have been made available within the Rebuilding Ireland Action Plan for Housing and Homelessness adopted in 2016 (Rebuilding Ireland, 2018). In addition, at the end of the third quarter of 2018, just under 64 000 housing solutions have been provided under Rebuilding Ireland programmes. A key focus of 2019 activity will be on prevention and the delivery of services for homelessness. An allocation of EUR 146 million (+ EUR 30 million on 2018) is expected to provide emergency homeless services and provide homeless households with long-term and sustainable housing solutions to 5 000 adults, including by extending the services provided by local centres coordinating family-related support. Further dedicated investments may be needed to help the 6 000 people estimated as homeless in Ireland and their children and to prevent further increases in the number.

Graph 4.3.5: **Homelessness statistics per region, July 2018**



Source: Ireland's Department of Housing, Planning & Local Government

Ireland's income inequality ([30]) is comparatively low, but concerns related to the opportunities for those from a disadvantaged background remain. While the high degree of income tax progressivity and high cash benefits are effective in equalising highly unequal market incomes (European Commission, 2017a), there is a high risk of poverty (57 % of the total cohort) for households with dependent children and very low work intensity. Access to tertiary education is also linked to socio-economic background (European Commission, 2018a).

The availability of medical cards for the unemployed and inactive significantly reduces health inequalities for the poorest households. However, middle-income households face a comparatively high level of unmet needs for medical examination due to the cost of meeting such needs (Statistics on Income and Living Conditions, EU-SILC). According to analysis carried out by the European Social Policy Network for the 2018 Pension Adequacy Report, social welfare pensions are very redistributive due to their flat-rate payments and earning-based contributions. Social transfers in Ireland effectively prevent older people from falling into poverty during their retirement: the at-risk-of-poverty or social exclusion rate (as a percentage of total population) was 16.2 % for people over 65 in 2017, considerably below the average in the EU (European Commission, 2018g).

New measures have been taken to fight poverty. Recently announced increases of EUR 5 in all weekly welfare payments, a national minimum wage increase setting the new rate at EUR 9.80 an hour and targeted support for some of the more vulnerable groups are important steps to consolidate the reduction in the at-risk-of-poverty or social exclusion rate. New measures to address child poverty will be implemented: the qualified child increase — an allowance paid to parents dependent on social welfare in respect of each qualified child up to age 18, which is extended to encompass older school/college going children to age 22— will be increased in 2019 for all children. The income disregard for Lone Parents in receipt of One-Parent Family Payment and Jobseeker's

([30]) Market income inequality is the highest in the EU but the tax/benefit system brings final income inequality below the EU average.

Transitional Payment are increasing by EUR 20 per week. The rates of payment for working age schemes (including One-Parent Family Payment and Jobseeker's Transitional Payment) also increased by EUR 5 per week. Poverty proofing has also been introduced through the Single Affordable Childcare Scheme by adjusting the lower income band. An interdepartmental group will be set up to improve synergies and policies across departments to further tackle child poverty. As many of these announcements will only materialise in the months and years to come, it is too early to assess their suitability and impact.

4.3.3. EDUCATION AND SKILLS

Ireland maintains a very good overall performance in education and the provision of basic skills. Pupil's performance is benefiting from Ireland's literacy and numeracy strategy, from investment in support for disadvantaged pupils and special educational needs, and from curricular reforms. DEIS (Delivering Equality of Opportunity in Schools) remains the policy instrument for addressing educational disadvantage. However, higher than average early school leaving rates for people with disabilities exist (27.8 % vs the EU average of 23.6 %). Ireland has one of the widest early school leaving gaps between people with and without disabilities in the EU (22.5 percentage points vs the EU average of 12.6 percentage points).

The tertiary attainment rate is very high and ambitious goals have been set for the future. In 2017, 53 % of 30-34 year-olds had tertiary qualifications, compared to an EU average of just below 40 %. The employment rate of these graduates is above the EU average (International Standard Classification of Education ISCED 5-8: 89.5 % vs EU 84.9 %). The tertiary education attainment gap between people with and without disabilities is much wider than the EU average (24.6 percentage points vs the EU average of 13.2 percentage points), which aggravates inequalities in terms of access to employment and participation in society by this group.

There is increased long-term investment in Irish higher education. Additional funding of more than EUR 150 million has been provided for higher education in budgets 2017-19 to support targeted initiatives including skills programmes, performance and innovation funding, technological university development and apprenticeships in the sector. The Department of Education and Skills has recently announced a new EUR 5.7 million 'Higher Education Access Fund' to help students from under-represented groups to access higher education. Contingency Human Capital investments plans have been devised. An initiative worth EUR 300 million from 2020-2024 to increase investment in higher education courses will be developed in the coming months. This seeks to cushion negative trade impacts on the Irish economy arising from the UK's withdrawal from the EU, whilst also addressing the future skills needs of the economy.

Reforms are ongoing in further education and training and adult learning. However, the employment rate of recent vocational education and training graduates, at 72.3 % in 2017, was still below the EU average of 76.6 %. Recruitment of new apprentices and trainees is progressing and should reach 30 500 for the period 2017-19. A new policy framework (SOLAS, 2018a) was officially launched in September 2018. Employees, particularly those in vulnerable jobs, will be able to access upskilling and reskilling opportunities directly at work, through engagement with companies, mainly small and medium enterprises, and as part of regional economic development strategies. Springboard+ 2018 was launched with an increase of 25 % in the number of places available on 2017. The agency for upskilling those in employment (SkillsNet) will also be reinforced. Also the new pilot programme EXPLORE, aimed at increasing lifelong learning participation rates and offering upskilling opportunities for adults, was launched in 2018 with a budget of EUR 1 million. It sets out to reduce the lack of digital skills among adults in work above 35 years of age. Together, these initiatives should help increase adult participation in learning which at 8.9 % is still well below the EU benchmark of 15 %. At the same time, the benchmarking on skills highlights an acute need to boost participation among low-qualified adults aged 25-64, currently at 3.1 % (European Commission, 2018m).

These specific initiatives remain insufficient to address the substantial digital skills gaps of adults. The EXPLORE pilot has a limited reach at this stage, Springboard+ focuses only on advanced information and communication technologies (ICT) skills,. The ICT apprenticeships offer training in specific ICT fields. Whilst funding has been made available for years [31] for introductory digital literacy courses across Ireland, this has not been sufficient to address the significant digital skills gaps, which persist among the wider population or indeed within the workforce where levels are below the EU average. This requires a comprehensive and coordinated policy action and sufficient investment, which complements the comprehensive digital skills policy and investment for primary and higher education already in place or planned.

Reforms and developments in relation to skills intelligence and governance are improving actions and policy coordination. New initiatives, such as the establishment of the National Skills Council and Regional Skills Fora, have the potential to provide a mechanism for ensuring a closer match between labour provision and demand. The new National Skills Council manages prioritisation of skills needs.

4.3.4. HEALTHCARE

The Irish healthcare system faces a crisis of cost-effectiveness. Year after year significant overspends are recorded in healthcare, yet process and output measurements do not reveal an improvement in performance. Neither are the persistent deficits attributable to any major expansion in service provision. Despite its relatively young population, Ireland is one of the highest per capita spenders on health in the EU and the ageing of the population is likely to lead to higher spending and fiscal sustainability concerns (see Section 4.1.1). Considerable scope exists for savings to be made (DPER, 2018e), potentially freeing up resources for ambitious reform plans.

The 'Sláintecare' ten-year plan for healthcare reform captures the holistic overhaul that the Irish health system requires. A Sláintecare Programme Implementation Office has been created, aiming to translate the 2017 cross-party Sláintecare Report into reality. There are serious implementation challenges to realising the original vision of universal entitlement, and investment needs remain in order to shift focus to primary and community care. Yet the costs of not implementing the Sláintecare vision would be much higher in the long run.

Ireland has the largest duplicate market across the EU. Its characteristic 'duplicate insurance' enables patients to jump the queue — providing faster private sector access to medical services where there are waiting times in the public system (OECD et al., 2018g). This creates perverse incentives in publicly-funded hospitals, where preferential treatment of privately-insured patients adds to doctors' private revenues. It is the Sláintecare vision to ultimately remove private practice from public hospitals, but Ireland has so far proven unable to confront the powerful stakes of the enormous insurance market. An independent review is underway, albeit constrained by lack of data on private practice.

Access to some core health services is still not universal in Ireland. An outlier in the EU, only around 50 % of the Irish population are covered for the costs of general practitioner visits (OECD et al., 2018g; European Commission, 2018o), and general practitioners are reluctant to see both coverage and service provision expanded without a commensurate change in remuneration. Without the expansion of coverage under Sláintecare, patients will continue to use hospital services for conditions that should normally be treated in primary care settings (OECD et al. 2017; OECD 2018f). Strong investment needs remain in order to deliver care at its lowest point of complexity.

Budget management is weak across all levels of the health system. The framework of accountability for expenditure under the Health Service Executive (HSE) to parliament is highly complex (Houses of the Oireachtas, 2018) and the HSE has repeatedly struggled to effectively manage a budget and stay within it, despite subsequent annual increases in expenditure (DPER, 2018b). Comprehensive planning and funding models are either non-existent, poorly functioning or unconnected locally and regionally. Governance and accountability are hampered by lack of data on health workforce and private practice. For 2019, the Department of Health plans

[31] For example the Digital Skills for Citizens scheme or the previous BenefIT scheme.

to increase the budget allocation for the HSE while requiring it to avoid overspends.

Public hospitals constitute an area where the cost-effectiveness crisis is most acute. Over the 2014-2017 period expenditure increased by 17 % while outputs remained relatively flat and waiting times increased sharply (DPER, 2018b). Compared with other EU countries, Ireland has the highest occupancy rate for one of the lowest numbers of hospital beds per 1000 population ([32]) (OECD et al., 2018g). Efforts to implement Activity-Based Funding, as well as Performance and Accountability Frameworks, have only had limited success so far (DPER, 2018b) and there has been little progress since the 2015 Flory Report, which stressed the need for hospitals to produce realistic annual efficiency improvement plans.

Ireland's system of long-term care also faces challenges. Spending on long-term care is projected to increase much faster than the EU average, leading to fiscal sustainability concerns (European Commission et al., 2018q). There is currently no statutory entitlement to formal home care, with long waiting lists and government plans to introduce a statutory scheme having been delayed (see Section 4.1.1 and European Commission, 2018n). Investing in a more developed formal home care sector could help reduce exchequer costs — reaching about EUR 1 billion in 2016 — while relieving the burden on (mostly female) informal carers, thus enabling them to return to the labour market.

Short-term cost containment will be needed to make the full Sláintecare vision a reality in the long run. There are a number of examples. Savings could be made from a higher uptake of biosimilar medicines, where Ireland lags behind (DPER, 2017). Realistic budgeting that avoids recurrent overspends is a necessary condition for the Health Service Executive to effectively manage their expenditure. Staffing costs and skill mix are not being actively managed and represent a risk of budget overspends and crowding out of other health expenditure (DPER 2018c; 2018d). Finally, good quality hospital performance data, through the planned deepening and extending of Activity-Based Funding, are necessary to get to the bottom of the budgeting and performance problems in public hospitals.

4.3.5. INVESTMENT NEEDS

Increased investment in skills, education and training as well as social inclusion are essential for improving Ireland's productivity and long-term inclusive growth. Emerging skills shortages and mismatches in certain sectors require investments in under-tapped human capital, as well as better alignment of education curricula to labour market needs. Using the full labour market potential requires investing in access to quality childcare facilities to further promote women's labour market participation, support for jobseekers and people with disabilities, and the activation of those living in jobless households. Investments in social housing infrastructure and social services are crucial to address the severe social housing shortages and rising homelessness and reducing the number of children at risk of poverty and social exclusion.

([32]) While the low capacity of the Irish hospital sector is well established, the comparability may be distorted by the exclusion of private hospital beds and other methodological differences in Irish data.

4.4. COMPETITIVENESS REFORMS AND INVESTMENT

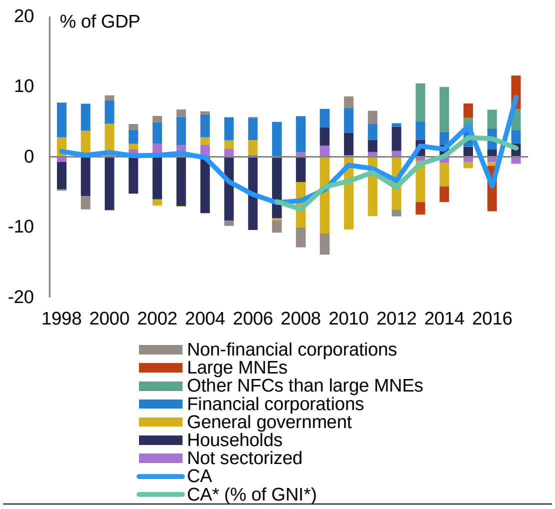
4.4.1. COMPETITIVENESS AND PRODUCTIVITY GROWTH

Competitiveness* ([33])

The current account balance remains volatile and heavily influenced by the activities of multinationals. In 2017, the current account surplus stood at 8.5 % of GDP following a deficit of 4.2 % in 2016. The headline figures are disrupted by the activities of multinationals both through the trade balance and income flows. To account for these effects, the Irish Central Statistics Office (CSO) publishes a modified measurement of the current account (CA*) (Central Statistics Office, 2018). This underlying balance fell from 2.6 % of modified gross national income (GNI*) in 2016 to 1.2 % in 2017 (Graph 4.4.1), as opposed to the strong increase in headline current account over the same period. A large part of the divergence between the two measures relates to the depreciation of foreign-owned domestic capital and activities related to trade in R&D, such as imports of intellectual property services, which are excluded from the headline current account balance.

The public sector has contributed most to the reversal of the current account balance in recent years. Before the crisis, households had been driving downwards the current account balance, mostly due to the large take-up of mortgages linked to the housing boom (Graph 4.4.1). After 2008, households have reduced their investments and preferred saving and deleveraging. The financial corporations sector seems to have been running a moderate surplus for more than a decade. The balance of non-financial corporations has been rather volatile over the years. Since 2013, these fluctuations seem to have been driven mostly by large multinationals, while the position of the other non-financial corporations was positive. The impact of multinationals is even more relevant over the period 2015-2017 contributing largely to the shift in the current account balance. Over the crisis period and in the immediate aftermath, the government balance was highly negative, in line with efforts to counterbalance the negative pressures of the economic downturn. In recent years, the improvement in the current account balance has been mostly driven by the declining government deficit, supported by economic recovery.

Graph 4.4.1: **Current account balance by sectors**



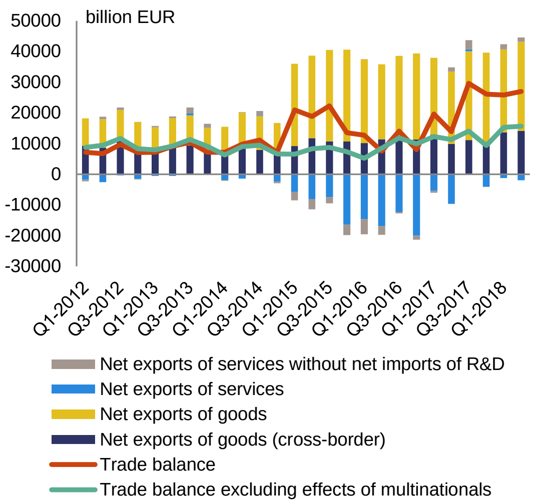
(1) The current account for various sectors is computed as savings-investment for each sector.
From 2013 onwards data allows to split the non-financial corporations sector into Large multinationals and Other non-financial corporations
Source: European Commission calculations based on CSO data

The underlying trade balance suggests that the Irish economy has maintained its external competitiveness. The trade balance is influenced by the activities of multinationals through, inter alia, contract manufacturing, merchanting ([34]) and imports of services related to R&D. When adjusting for these effects, the underlying trade balance remains positive and displays less volatility around a moderately increasing trend, implying that the country maintains a solid competitiveness position (Graph 4.4.2).

([33]) An asterisk indicates that the analysis in the section contributes to the in-depth review under the MIP (see Section 3 for an overall summary of main findings).

([34]) 'Contract manufacturing' is a process in which resident multinational companies issue contracts to foreign firms to produce goods on their behalf. As resident companies own these goods, their sales are recorded as exports of the resident country even though they do not enter the domestic economy. 'Merchanting' refers to the purchase and resale of goods which do not enter the merchant's economy.

Graph 4.4.2: **Headline trade balance vs. underlying trade balance**



Source: CSO

Even though Ireland remains one of the most competitive EU economies, it faces important challenges. ([35]) In the short run, cost competitiveness may deteriorate due to skills shortages and rising housing, electricity, legal and insurance costs. In the long term, the growth potential could be limited by the availability of talent and skilled labour, infrastructure deficits, and regional imbalances. Uncertainties linked to the global environment are also impinging on economic activity. In addition, Ireland has so far failed to decouple its economic growth from the emissions of greenhouse gases and air pollutants. This raises health, climate and environmental concerns and means that Ireland may miss opportunities linked to the EU's ambitious decarbonisation objectives.

Productivity

Ireland's competitiveness position is backed up by a sound overall productivity performance, but the duality of the economy is increasing. After the crisis, the Irish economy has performed remarkably well in productivity growth terms. However, there are big differences in the performance of domestic and multinational companies (European Commission, 2018a, Section 4.4.1). The latter have displayed substantial productivity growth following the re-domiciliation of some multinationals' headquarters, the development of contract manufacturing and significant foreign direct investment inflows. By contrast, the productivity growth of the predominantly domestic part of the economy has remained flat or even declined, although the current productivity is relatively high compared with other Member States (OECD, 2018c). The productivity gap between these two groups of firms continues to widen as labour productivity grew 10 times more in the foreign-dominated sectors compared to the domestic ones in 2017 (6 % vs 0.6 %) (Central Statistics Office, 2018c).

Excluding sectors dominated by the US multinationals, Ireland still performs well on productivity compared with other countries. However, there are considerable differences across firms. Firm-level analysis shows that the majority of businesses have experienced declining total factor productivity since 2006 particularly in the services sector (OECD, 2018c). The cumulative labour productivity growth of Irish small and medium sized enterprises (SMEs) between 2008 and 2017 shows a similar picture (Graph 4.4.3). Over this period, small firms increased their productivity by 28.4 %, above the EU average. In contrast, medium-sized firms in Ireland had actually experienced a negative cumulative growth in apparent labour productivity (-13.4 %, while the EU average was 16.9 %) (European Commission, 2018). In the context of a tightening labour market for a number of qualifications, the share of employment in SMEs is decreasing. In the period 2008-2017, while SMEs lost over 57 000 jobs, larger firms gained almost 43 000, probably due to higher wages. In relative terms, this is the largest transfer of jobs from SMEs to larger firms in the EU between 2008 and 2017.

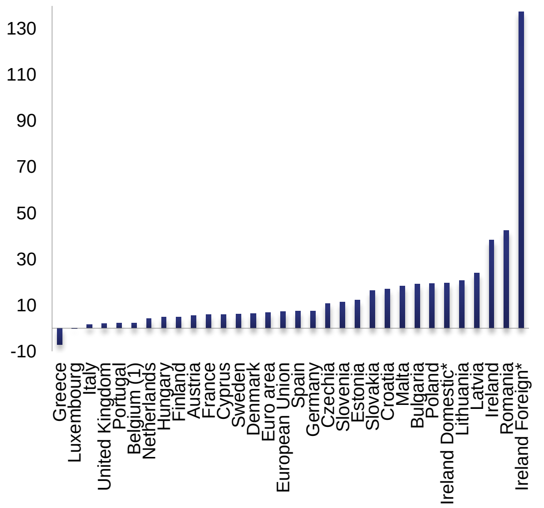
Concentration of economic activity is increasing with few sectors and firms driving the Irish economy. The foreign-domestic divide explains the differences in productivity growth, employment and wages within sectors. Within-sector productivity differences are particularly important in R&D, pharmaceuticals, telecommunications and wholesale and retail. Intra-sectoral labour productivity dispersion reaches 78 percentage points in pharmaceutical

([35]) The importance of these challenges led the International Institute for Management Development to relegate Ireland from 6th to the 12th position in the World Competitiveness ranking in May 2018 although the World Economic forum upgraded it from the 24th to the 23rd notch of its competitiveness ranking in October 2018.

products, where the top 10 % of manufacturing firms account for 70 % of aggregate productivity (Department of Finance, 2018b). Export concentration by products, firms and destinations is also very high. The top 50 firms account for 70 % of total turnover (McCarthy, 2018) and about 75 % of exports (National Competitiveness Council, 2018b). The top five industrial goods exports accounted for over 40 % of the total in 2015. Although there has been some diversification in export destinations, about 40 % of all exports went to the US and the UK in 2017.

The high concentration and increasing duality might impinge on the future sustainability and resilience of the economy (OECD, 2018, National Competitiveness Council, 2018b, ([36])). There is evidence of a fair level of efficiency ([37]) in the current allocation of resources in manufacturing. However, the heavy reliance on a limited number of firms and sectors makes the Irish economy vulnerable to international economic shocks, including in trade, and to the terms of the UK's withdrawal from the EU. Against this backdrop, increasing the productivity of domestic companies is crucial in strengthening the resilience of the economy and ensuring a sustainable growth. Deepening the innovation process remains equally important, either through increased R&D efforts or enhanced spill-overs from the cooperation with multinationals or research centres. Diversifying exports and integration in global value chains, and building up human capital are also means of attaining higher levels of resilience and sustainable growth. However, progress in these areas has been so far rather limited.

Graph 4.4.3: **Cumulative Labour Productivity Growth 2010-2017**



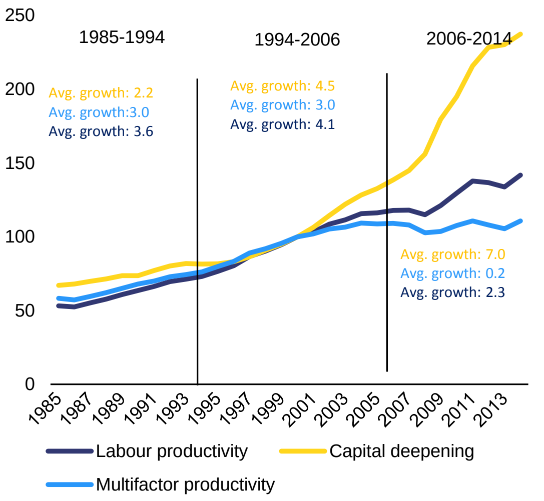
(1) 2016 data
Source: Eurostat and CSO (2018a)

Business R&D expenditure is increasing, while its intensity remains below the EU average. Business R&D expenditure increased from EUR 1.5 billion in 2006 to EUR 2.2 billion in 2017. However, 64 % of total business expenditure is by foreign firms operating in a few sectors. In contrast, the R&D efforts of most domestic firms remain moderate, albeit increasing. Business R&D intensity stood at 0.7 % of GDP (1.2 % of GNI*) in 2017, below the EU average of 1.3 %. Ireland is on target to reach both the goal of 1 200 R&D performers (i.e. firms spending over EUR 100 000 on research, development and innovation) with 1 184 companies in this category and the goal of 200 large R&D performers (where spend is over EUR 2 million on research, development and innovation), with 184 firms in this category. However, the most recent *Innovation in Irish Enterprises* survey shows no progress towards meeting the share of innovative enterprises target (Eurostat, 2017) of 73 % of enterprises (57 % of all Irish enterprises with more than 10 employees consider themselves R&D active in 2016, down from 61 % in 2014).

([36]) Following the 2016 Council Recommendation, Ireland has appointed the National Competitiveness Council as National Productivity Board in March 2018. National Productivity Boards are objective, neutral and independent institutions that can investigate the productivity challenges, contributing to evidence-based policy making, boosting domestic ownership of structural reforms. Reports and bulletins produced by the Productivity Board have been consulted extensively by the Commission including in the European Semester exercises.

([37]) According to Papa J. et al (2018), 54 % of aggregate labour productivity is accounted for by allocative efficiency, (i.e. the allocation of resources across firms of different productivity level) while the rest is accounted for by within -firm productivity in the 2006-2014 period.

Graph 4.4.4: **Trend productivity growth has slowed Index 2000= 100**



(1) Labour productivity is calculated as GDP per hour worked. Labour productivity growth can be broken down into the contribution from multifactor productivity growth and capital deepening, with the latter weighted by its income share. Growth in capital deepening is measured as the growth in the aggregate flow of capital services minus the growth in aggregate hours worked. Multifactor productivity growth is measured as the difference between the change in GDP and the change in measured inputs (capital and labour), where the inputs are weighted by their respective cost shares.
Source: OECD, 2018c

Foreign firms operating in Ireland tend to benefit more from public sector R&D support. Accounting for 80 % of total public R&D spending, tax credits are the main instrument of public R&D support in Ireland (Irish Government Economic and Evaluation Service, 2018). Although evaluations conclude that that tax credits have a considerable additional impact (60 %) (National Competitiveness Council, 2018b, OECD, 2018), they also report that multinationals account for 99 % of the tax credits claims for investments in intangible capital (45 % for physical capital). In cooperation with the OECD, the Irish authorities are currently exploring ways to improve the impact of public sector R&D on SMEs, both through direct and indirect measures.

Stronger linkages between multinationals and domestic firms could help improve the diffusion of innovation throughout the economy. Technology spillovers can increase the productivity of Irish firms through, inter alia, cooperation agreements with multinationals, but research has shown that spillovers may appear only if local firms engage in innovation activities themselves ([38]). This finding underscores the importance of policies aimed at increasing the R&D efforts of domestic firms. Although the Global Sourcing Initiative provides opportunities for Irish firms to connect into global supply networks, multinational firms are not always inclined to these cooperation agreements. Alternative and complementary ways of increasing spill-overs and promoting the integration of all capable local firms into the supply chains could further enhance linkages (OECD, 2018c).

In addition, cooperation between firms and public research centres is improving although much work lays ahead in this area. ([39]) The recently launched Disruptive Technologies Innovation Fund has been endowed with EUR 500 million to further encourage cooperation between domestic firms and research centres, as well as national and foreign firms. Other initiatives such as Science Foundation Ireland Research Centres and Enterprise Ireland and the Industrial Development Agency Ireland's Technology Centres help to foster this collaboration.

Low levels of public R&D remain a concern. It will be difficult for Ireland to reach its 2020 R&D investment target of 2.5 % of Gross National Product. In 2017, Ireland had an overall, public and private, R&D intensity of 1.05 % of GDP (1.7 % of GNI*) compared to an EU average of 2.0 %. Ireland's public R&D intensity declined from 0.5 % in 2010 to 0.3 % of GDP in 2017 ([40]). In absolute terms, although public expenditure in R&D grew from EUR 836 million to EUR 907 million over the same period, it decreased from EUR 951 in 2016. These relative low levels of expenditure may have a negative impact on the ability to sustain in the longer run the high quality of the Irish scientific production and the highly qualified human resources needed in the Irish economy.([41])

New initiatives are being launched to foster business research and innovation. A key step is

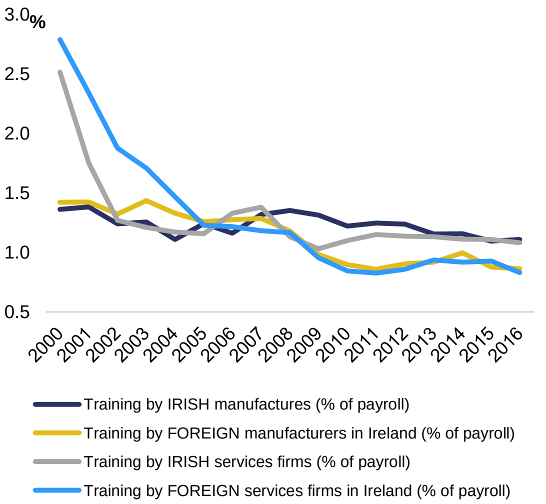
([38]) As shown by Schieldslag and others (2018)
([39]) The level of business enterprise funding of public R&D continues being one of the lowest in the EU (22nd)
([40]) This decrease was partly due to the upwards revision of Ireland's GDP from 2015 onwards.
([41]) Irish universities have already fallen down the latest international rankings. Six of the eight top-ranked Irish universities have lost ground in the QS World University Rankings 2019

the announcement of the EUR 3.16 billion capital funding under the 'Business, Enterprise and Innovation Priority Investments' to projects highlighted in Project Ireland 2040 over the five years to 2022. The third Innovation 2020 Progress Report outlines advances made in delivering the 140 actions. Ireland has revised the Research Prioritisation themes to align the research funding to 14 priority areas (so-called Smart Specialisation areas) (Department of Business, Enterprise and Innovation, 2018a). The 'Review of R&D&I Supports available to Businesses in Ireland to Maximise Business Expenditure on Research and Development' (Indecon, 2017) also provides policy recommendations.

In July 2018, the Irish authorities announced an ambitious programme to help domestic firms improve their productivity. Future Jobs Ireland includes a focus on 'raising productivity, particularly among SMEs and Irish-owned companies'. (Department of Business, Enterprise and Innovation, 2018) The framework includes various instruments to foster the diffusion of new technologies by Irish firms with a view to increasing their productivity. Future Jobs Ireland 2019 will be formally launched at the end of February 2019.

In the medium to long term, the availability of a diverse and skilled labour pool may be the main factor contributing in improving productivity. Despite public-sector sponsored programmes in fields such as digital skills, significant challenges remain (Section 4.3). Further efforts will be required to meet the need for skilled workers in areas of increasing demand such as construction and logistics. Irish firms might also increase their absorption capacity of new technologies by improving their staff training. Training activities within firms can help workers in foreign, technologically advanced firms to acquire skills that may be transferred later on to local firms when workers move across firms. In 2016, two out of three SMEs surveyed reported that their main priority was investing in training staff (Gargan et al., 2018). However, the share of payroll costs of firms' expenditure on structured training of employees has been falling both in Irish-owned and foreign firms operating in Ireland in the manufacturing and services sector (Graph 4.4.5). The number of sectors reporting more substantial reductions in training spending is quite significant: computer, electronic and optical products, publishing, broadcasting and communications, electrical equipment and other services. ([42])

Graph 4.4.5: **Training expenditure domestic firms and multinationals in Ireland. Manufacturing and Services 2000-2016**



Source: Department of Business (DBEI(2018a))

Digitisation

Digitisation plays a key role in achieving a resilient, knowledge-based economy. Due to the large presence of high-tech multinationals, the information and communications technology (ICT) sector accounts for 12 % of GDP, by far the highest share in the EU. About 16 % of public R&D expenditure is dedicated to the ICT sector, the second highest in the EU (European Commission, 2018c). Notwithstanding these high rates, strengthening the domestic ICT sector and its interlinkages with other parts of the Irish economy would be beneficial for the overall economy given the high productivity and export potential of this sector and well-paid employment it provides. Furthermore, the efficient adoption of digital technologies by domestic companies across a broader range of sectors, besides ICT, may help to improve their productivity, innovation capabilities and market reach.

([42]) Trading between Irish-owned firms and foreign multinationals could also facilitate technology transfer. However, survey data (DBEI(2018a)) suggest that the share of Irish inputs in the procurement of foreign firms has been falling in recent years as well.

A substantial share of beneficiaries of Ireland`s start-up support schemes are ICT companies, with Deeptech and Fintech being prioritised areas. Effective scale-up is critical for the long-term success of start-ups and Ireland ranks relatively high in the EU. However, Ireland produced only one of the 84 most significant EU 'scalers' (Start-up Europe Partnership, 2018) and only four of the top 100 'elite' start-ups (Start-up Europe Partnership, 2018a).

Irish small and medium-sized enterprises perform well in online trading indicators, but their adoption of digital technologies is uneven. In 2018, 31 % of Irish small and medium-sized enterprises (SMEs) traded online, the top two highest share in the EU (EU average is 17%) (European Commission, 2019b). Whilst a relatively high share of SMEs also use cloud computing and social media for their businesses, the adoption of other types of digital technologies (e.g RFiD, eInvoice, Enterprise Resource Planning and Supply Chain Management) is less widespread (European Commission, 2019b).

To date, the flagship policy scheme in Ireland has focused on helping small companies to start trading online. This has helped the scheme`s beneficiaries increase their sales and reach new markets (including export markets). Ireland has also launched a new scheme to support eligible SMEs in the retail sector specifically to develop a more competitive online offer. SMEs can also take advantage of the services offered by a number of recently established Technology Centres which focus on digital technologies, such as advanced manufacturing.

The first programmes to be launched in Ireland by the European Investment Advisory Hub will have a focus on the digitisation of Irish SMEs.([43]) European Investment Bank experts together with Irish authorities will identify the knowledge and funding gaps that are preventing the digitisation of Irish SMEs and will identify and develop funding mechanisms to address them.

Future-proof connectivity and sufficient digital skills remain crucial for the effective utilisation of digital technology by domestic companies and for a thriving domestic ICT sector. Digital skills gaps remain to be addressed (Section 4.3.1). As for connectivity, fast broadband coverage is above the EU average following significant progress in recent years. However, significant challenges remain with only 53 % of homes having access to ultrafast broadband, below the EU average of 58 %. The situation is much worse in rural areas (Section 4.4.2) (European Commission, 2018a, European Commission, 2018). Fixed broadband also remains relatively expensive in Ireland as compared to other EU countries (European Commission, 2018p).

4.4.2. PUBLIC AND PRIVATE INVESTMENT NEEDS

Evolution of investments

The total stock of capital in Ireland remained strong in 2017 compared to the previous years. The activities of multinationals operating in Ireland continue to be the main driver of investment (Section 1). In 2017, the net stock of direct investment fell to EUR -27 billion largely driven by withdrawals of investment by the US and the UK (Central Statistics Office, 2018a) while investment from the EU remained strong. The services sector remains the largest sector for inward investment. In 2017, flows of direct investment into Ireland registered a disinvestment of EUR 1 billion, compared to a positive inflow of EUR 36 billion in 2016. Reinvested earnings inflows were more than offset by equity withdrawals and other capital investment.

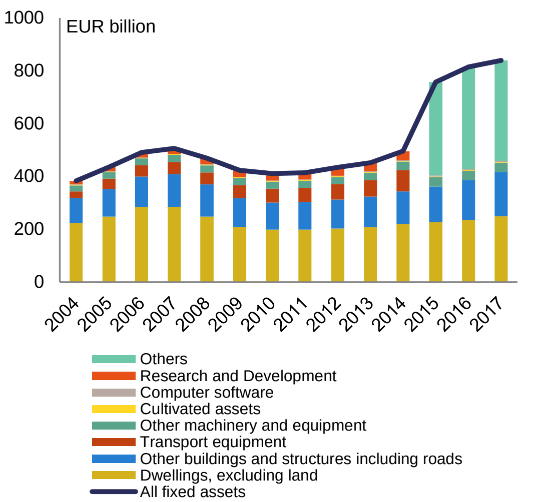
Over the years, the share of 'mobile' assets in the Irish capital stock has increased. Headline investment figures remain heavily volatile (see Section 1). The large imports by some multinationals of R&D assets, including intellectual property, had a significant impact on the capital stock, increasing the share of mobile stock (Graph 4.4.6). Corporate restructuring decisions by some of the multinationals holding these mobile assets could have implications for the relocation of these mobile assets, reversing the positive impact of the inflows reported since 2015 (McCarthy, 2018).

Despite the booming economy, investment growth by domestic firms and small and

[43] ttp://www.eib.org/en/infocentre/press/releases/all/2018/2018-178-digitalisation-of-irish-smes-and-national-research-investment-to-benefit-from-european-best-practice.htmc

medium-sized enterprises in particular is relatively lukewarm. The Credit Demand survey showed that only one in two SMEs invested in machinery and equipment and less than one in ten in intangible capital in 2016 (Cargan et al., 2018). Data suggest that the significant drop in investment by SMEs has not recovered yet. In a recent Eurobarometer, 52 % of Irish firms indicated that they had no need for further investments. The reasons behind underinvestment by small and medium-sized enterprises are not well known. This low investment rate will not help to cut down the productivity gap with multinationals (Central Statistics Office, 2018c). Debt overhang and risk aversion in times of uncertainty have been proposed as plausible explanations. Uncertainties stemming from various sources have been identified as the main factor holding back investment in Ireland according to the European Investment Bank Survey on investment (European Investment Bank, 2018).

Graph 4.4.6: **Net Capital Stock held at the end of the year by asset type**



(1) For confidentiality reasons, from 2015 onwards figures for the stock of Transport equipment – which includes the aircraft – and Research and Development assets are suppressed. Starting with 2015, these two components are captured therefore by the Others category, which is computed as the difference between Total fixed assets and the remaining categories for which data is published.
Source: CSO

Investment needs

Investment challenges relate primarily to infrastructure, decarbonisation, housing supply, skills and innovation. Infrastructure deficits such as in transport, energy, water, digitalisation and housing supply, as well as skills shortages, are considered by business to be a major obstacle to investment (Box 4.4.1). Skills shortages, in particular digital and managerial skills (Section 4.3.1 and 4.4.1), and a low level of investment in R&D by domestic firms (see above) may hinder the overall productivity of the economy, in particular for the domestic sector, and further widen the productivity gap between multinationals and domestic companies. Prioritising investments and policies to meet decarbonisation needs in sectors accounting for a high share of emissions would also contribute to environmentally sustainable development and reduce the cost of future action.

Targeted and timely capital infrastructure investment may enhance productivity and competitiveness (National Competitiveness Council, 2018a)**.** After years of low public and private capital investment following the crisis, infrastructure is inadequately maintained and unable to meet peak demand (Engineers Ireland, 2018) reducing the competitiveness of Irish firms (World Economic Forum, 2018). The National Development Plan (Department of Public Expenditure and Reform, 2018) addresses some of the infrastructure gaps by increasing the capital investment efforts to EUR 116 million over 2018-2027. ([44]) Although public expenditure is being front-loaded and planned to increase strongly, time is required for the investments to have sizeable effects. Additional policy measures may be required to incentivise private investments in areas such as clean energy and transport, housing and skills.

([44]) Investments are expected to be aligned with the national strategic outcomes identified in the National Planning Framework (DPER, 2018a) as well as with the regional priorities specified in the Regional Spatial and Economic Strategies to be approved in early 2019.

Box 4.4.1: **Investment challenges and reforms in Ireland**

Macroeconomic perspective

Investment continues to recover after falling significantly during the economic downturn. Headline figures are volatile and inflated by the activities of multinationals, but domestic investment is increasing strongly driven largely by construction activity (Section 1). Public capital investment is on an upward path and according to the National Development Plan is expected to reach 4 % of modified gross national income (GNI*) by 2024 (from 2.7 % in 2017) and to remain around this level until 2027 (Section 1 and Section 4.4.1).

Assessment of barriers to investment and ongoing reforms

Public administration/ Business environment	Regulatory/ administrative burden	
	Public administration	
	Public procurement /PPPs	
	Judicial system	
	Insolvency framework	
	Competition and regulatory framework	
Labour market/ Education	EPL & framework for labour contracts	
	Wages & wage setting	
	Education, skills, lifelong learning	CSR
Financial Sector / Taxation	Taxation	
	Access to finance	
R&D&I	Cooperation btw academia, research and business	CSR
	Financing of R&D&I	CSR
Sector specific regulation	Business services / Regulated professions	
	Retail	
	Construction	
	Digital Economy / Telecom	
	Energy	
	Transport	

Legend:

	No barrier to investment identified
CSR	Investment barriers that are also subject to a CSR
	No progress
	Limited progress
	Some progress
	Substantial progress
	Fully addressed

Infrastructure bottlenecks and the lack of skilled labour remain the main barriers holding back investment in Ireland. Around 76 % of firms surveyed by the European Investment Bank encountered difficulties in investing due to the unavailability of skilled labour. However, the most significant barrier to investment last year was the relatively high level of uncertainty (78 % of firms). A number of factors seem to have increased uncertainty, worsening the investment outlook to the point that a significant share of firms is delaying investment decisions. These survey results are consistent with the relatively high rate of firms that do not wish to invest at present in Ireland despite the good performance of the economy. Business regulations and energy costs also score relatively high as factors hindering investments in Ireland (63 % and 68 % of firms respectively). Financial conditions have improved but they are still mentioned by two thirds of firms as a relevant barrier to investment.

Main barriers to investment and priority actions underway:

1. The availability of housing and infrastructure remains the major barrier to investment. Although the adoption and launching of the National Development Plan have improved the outlook for the provision of some basic infrastructure, it will take time to reduce the current infrastructure deficits, in transport (including clean transport solutions) and other public infrastructure. The same applies to the availability of housing despite the increase in the annual rate of supply of new housing units. Delays in the delivery of digital infrastructure add to these deficits hampering plans to reduce congestion in the Dublin region and to spread economic activities across regions. Infrastructure investment is also encountering difficulties in areas such as energy, digitisation, environmental infrastructure and the fight against climate change. Infrastructure deficits hinder investment in other sectors in turn.

2. Current policies and incentive mechanisms seem to have been insufficient to cope with the pressing needs for skilled labour and firms claim that this is a major obstacle to investment. There seems to be a general shortage of skilled labour that the local supply cannot meet. The level of labour market mismatches is not sufficient to the shortage of skills across sectors. Some stakeholders emphasise the strong competition in the market for skilled labour between foreign and local firms, it being difficult for the latter to match the wages paid by multinationals. The shortage is particularly important for digital skills. However, other sectors such as construction and infrastructure also mention the availability of staff at all levels, from managers to intermediate skills, as an important long-term barrier to investment and growth.

3. Uncertainty is holding back private sector investments. Despite strong economic growth in recent years, many firms are reluctant to investment. They remain reluctant to borrow, trying to avoid the potential hardship familiar from the recession. Uncertainty prevails in all sectors but it seems to be particularly important in construction (European Investment Bank, 2018, Cargan et al., 2018). This negatively affects negatively the rate of the supply-side response to the demand for housing and infrastructure. In the case of manufacturing and services, this uncertainty may delay the diffusion of innovation. Uncertainty seems to affect both small and micro firms as well as medium and large firms, although the two groups of firms may be concerned by different underlying reasons.

The Strategic Banking Corporation of Ireland, established by the Ministry of Finance, ensures access to flexible and lower cost borrowing for Irish small and medium-sized enterprises and supports market access for small and medium-sized enterprises entering the lending market. Enterprise Ireland is a government organisation responsible for the development of Irish enterprises in world markets (for recent measures initiated by Enterprise Ireland, see the 2018 Small Business Act Fact Sheet (European Commission (2018i). The Ireland Strategic Investment Fund is a sovereign development fund of EUR 8.9 billion managed and controlled by the National Treasury Management Agency, which invests on a commercial basis to support economic activity and employment in Ireland, with a long investment time horizon. Microfinance Ireland is a not-for-profit lender, established to deliver the Government's Microenterprise Loan Fund, and provides loans of EUR 2 000 to EUR 25 000 to start-ups, newly established and growing micro-enterprises.

The weak capacity of the construction sector may become an obstacle to deliver the infrastructure and housing required. The crisis has had a devastating impact on the construction sector. Many firms left the market and the workforce occupied in the sector during the boom years was dispersed. Since then, the entry of new firms has been sluggish. In 2016, the number of firms was just 6.7 % higher than in 2010. In the third quarter of 2018, employment in the sector was just 39 % below the level reached in the heydays of 2007. Labour productivity in construction has recovered but remains low in comparison to other sectors and countries (European Commission, 2018). The productivity of the sector can be increased by a more intensive use of information and communications technology and pre-fabricated solutions, the reskilling of the workforce and the entry of larger foreign producers (McKinsey Global Institute, 2017). The latter should be possible unless barriers hamper entry.

Infrastructure links with continental Europe

Direct shipping routes to continental Europe may be reinforced. More than 80 % of Irish road freight to mainland Europe currently transits the United Kingdom using the so-called 'land-bridge route'. Increasing the physical and logistical capacity at Irish ports as well as their hinterland connectivity may help to create alternative routes to handle increasing volumes of traffic after Brexit.

Diversification of energy interconnections is key to reducing Ireland's energy import dependency and supporting the integration of renewable power. Two projects have been identified as EU Projects of Common Interest. The 700 MW Celtic interconnector is an EUR 930 million investment to be funded in part by a Connecting Europe Facility (CEF) grant and in part by electricity consumers in Ireland and France. It has a strategic importance to ensure diversification of foreign supply as it will be the first direct connection between Ireland and the continent. The Greenlink interconnector to UK is proposed as a EUR 400 million private investment with regulatory guarantees. Gas dependency on the UK decreased from 90 to 33% in 2017 as a result of the exploitation of the Corrib field. Predicted throughput for the Winter Period 2018/19 is that gas supplies from Great Britain via the Moffat entry point are expected to account for approximately 57% system demand. Corrib gas field is expected to meet approximately 40% of Gas Networks Ireland system demand with the balance of 3% met from Inch (Kinsale) production. However, long-term strategies for replacement with non-fossil resources should not be neglected, as 50 % of electricity in Ireland comes from gas.

Housing supply * ([45])

Residential construction is booming but housing completions still fall short of demand. Annual housing completions amounted to 17 161 in the third quarter of 2018, i.e. 33% more than on the same period last year. Despite this steep increase, housing supply is still short of the required level, estimated to increase from 23 000 in 2018 to 32 000 by 2024 (DAFT, 2018)

A significant increase of investments in deep renovation of buildings is required to achieve decarbonisation objectives. The Sustainable Energy Agency of Ireland estimates that investment of circa EUR 35 billion would be required to upgrade Ireland's housing stock to a minimum building energy rating of B3. Most of this investment would have to be made by home-owners themselves, though there is also room for limited government assistance.

The low level of residential development on sites sold by the National Asset Management Agency (NAMA) is a concern. In March 2018, only 11% of the 55 000 units sold by NAMA (National Asset Management Agency, 2017) in the last 7 years had been built up. The development of some of these sites may be inhibited by constraints related to commercial viability, infrastructure or suitable planning permission. In addition, land hoarding was also identified by NAMA as one potential cause meriting further analysis.

The Serviced Site Fund and the Regeneration Development Fund will support the delivery of infrastructure to unlock land development. Around 3.3 billion are planned over 2018-2027 to inter alia service land sites with the necessary infrastructures. By 2021, the Serviced Site Fund

([45]) An asterisk indicates that the analysis in the section contributes to the in-depth review under the MIP (see Section 3 for an overall summary of main findings) expects to have serviced sites with capacity for delivering 6 200 housing units for those with the greatest affordability challenges. The Regeneration Development Fund will have a broader focus and fund infrastructure to facilitate housing development as well as urban and rural regeneration interventions.

More construction on publicly-owned land could increase housing affordability. Publicly-owned land has capacity for the development of over 50 000 housing units. This land could be used to provide social and affordable housing in areas where demand for housing is strong. The sale or leasing of land to private promoters may be conditioned to its immediate development to avoid land hoarding.

The newly-created Land Development Agency may help accelerate the construction in publicly owned land and reduce the volatility of prices in the housing market. The Agency, launched in September 2018, is expected to facilitate the construction of 150 000 new homes over the next 20 years in a mix of private and public land, including by supporting urban regeneration initiatives. It will assemble strategic land banks making these available for housing in a controlled manner so as to counter the boom-bust cycle in land and house prices. The agency has been provided with compulsory purchase powers that may discourage land hoarding.

Property taxes based on below-market valuations result in an implicit subsidy on home ownership and create incentives for under-occupation. House price valuations serving as a base for property taxes have not been revised since 2013 when prices were around 42 % below the current level. Regular updates combined with the introduction of special arrangements for low-income groups would optimise resource allocation ([46]) and reduce housing purchase demand as well as increase the progressivity of the tax system (see Section 4.1.3). In addition, it would provide the government with additional resources to address housing and infrastructure challenges.

([46]) In Ireland, 70.6% of people live in under-occupied dwellings, the highest share in Europe.

Investments for sustainable development

Ireland is falling further behind in decarbonising its economy and engaging on a path of sustainable development. Greenhouse gas emissions are steadily rising, with particularly severe challenges in transport, agriculture, energy and the built environment ([47]). The lack of progress will make the challenge of meeting Ireland's EU obligations that more difficult, while also increasing the cost of future action ([48]) and raising concerns for some key multinational companies. ([49]) In addition, delayed action increases the risk of Ireland having to cover the cost of stranded assets. ([50])

There are no signs yet that a reversal in trend is to be expected. On the basis of existing measures, Ireland is projected to keep emissions stable in sectors outside of the EU emissions trading system (non-ETS sectors) by 2020 (compared to 2005 levels), while its target is -20%. By 2030, Ireland is still not projected to reduce emissions in non-ETS sectors, compared with the target of-30%.

Compliance with EU commitments will become increasingly challenging and could become costly. The lack of early action means that Ireland will need to use all the flexibilities under the Effort Sharing Decision and Effort Sharing Regulation to comply with its EU obligations. Even so, Ireland will need to purchase allocations from other Member States for the 2013-2020 compliance period. In spite of allocations under the Effort Sharing Regulation being significantly higher during 2021-2025 than the 2020 target, Ireland is also expected — under current projections — to have to buy allocations from other Member States on a large scale during 2021-2030 (Graph 4.4.9).

([47]) In 2016 GHG emissions increased by 2.7% in agriculture, 4.1% in transport and 6% in the energy sector – mostly due to an increase of gas use in electricity generation

([48]) In-depth analysis in support of the Commission Communication COM(2018) 773 or IPCC Special Report on global warming of 1.5°C, summary for policymakers:

([49]) Amazon, Apple, Facebook and Google are for example all committed to source 100% of their energy from renewable sources. Access to cost-effective renewable energy is one of the primary factors used by Facebook in selecting their data center locations (https://sustainability.fb.com/clean-and-renewable-energy/) .

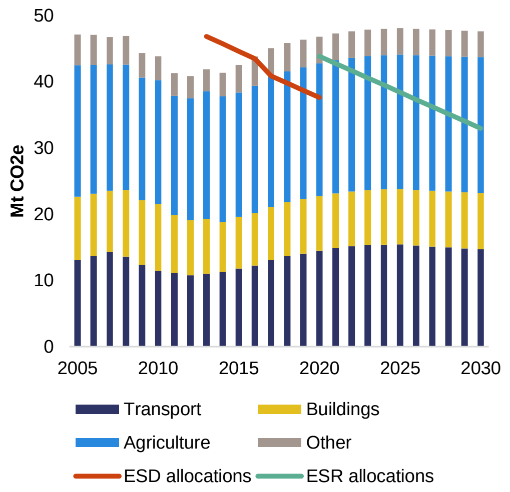
([50]) In-depth analysis in support of the Commission Communication COM(2018) 773 or IPCC Special Report on global warming of 1.5°C, summary for policymakers:

This would likely entail a large budgetary cost. ([51])

Ireland is yet to spell out a pathway towards a decarbonised and sustainable future. The National Mitigation Plan, National Planning Framework and National Development Plan (NDP) have contributed to defining Ireland's vision of a sustainable and low-carbon economy. The NDP identifies investment needs of EUR 21.8 billion for climate action for 2018-2027 of which EUR 7.6 billion would come from the public budget, as well as EUR 8.6 billion funding for sustainable public transport. However, the concrete actions programmed or budgeted for fall far short of putting Ireland on a path to achieving the 2030 climate targets and the government acknowledges that the National Mitigation Plan needs to be revisited. The government is currently working on a "whole-of-government" plan to identify new measures to address the issue, with the aim to finalise it by year-end. Such an effort should be underpinned by a detailed vision of the technological pathways and investment requirements (public and private) that would enable Ireland to reach its 2030 and 2050 objectives in key sectors such as renewables, the phasing out of coal and peat, transport, buildings, agriculture and the circular economy.

([51]) A report from the Department of Public Expenditure and Reforms of 2014 indicated that the cost could be around EUR 90 million for 2013-2020 and "in the billions" for 2021-2030. A note from the Institute of International and European Affairs estimates that the lack of domestic action could generate compliance costs for the climate and renewable energy targets of EUR 3-6 billion for both compliance periods.

Graph 4.4.7: **non-ETS emissions and estimated annual allocations under the ESD and ESR.**



(1) Annual allocations under the ESR estimated based on preliminary or projected emissions for 2016-2018.
Source: Environmental Protection Agency and European Commission.

The draft National Energy and Climate Plan builds on the National Development Plan objectives but does not clarify investment needs until 2030. In its final National Energy and Climate Plan (NECP) to be adopted by 31 December 2019 in line with the Regulation on the Governance of the Energy Union and Climate Action ([52]), Ireland will provide an overview of its investment needs until 2030 for the different dimensions of the Energy Union, including renewable energy, energy efficiency, security of supply, and climate mitigation and adaptation. The information provided, including in the draft plan submitted in December 2018, will further contribute to the identification and assessment of energy and climate-related investment needs for Ireland. The final NECP, to be finalised by the end of 2019, should include new national objectives for 2030 as well as concrete policies and measures across the energy and climate areas. The definition of the NECP should also improve policy coordination of national administrations and enable synergies between different sectors.

Ireland is likely to miss its renewable energy target by 2020. The Sustainable Energy Authority of Ireland, 2017 expects a gap of 1.7 to 3.7

([52]) Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action percentage points from its 16 % target. Despite considerable potential, especially in wind energy, investment in renewable electricity has been hindered, inter alia, by uncertainty concerning the future of support schemes and lengthy and complex consenting, planning and grid access procedures. These issues will be partly tackled through a new renewable electricity support scheme to start in 2019. Investment in heat networks and clean transport infrastructure would also be necessary to promote the use of renewable energy in these sectors. The introduction of a renewable heat incentive in 2018 with an allocation of EUR 300 million for the period 2018 to 2027 is an important step for stimulating investment in renewable heating and cooling.

Ireland has intensified its efforts on energy efficiency but its primary energy consumption increased in 2016. ([53]) Ireland has room to decouple energy use from growth and exploit the potential for energy efficiency, in particular in buildings and transport sectors. Ireland's proposed indicative energy efficiency target for 2030 would equate to an approximate quadrupling of the scale of effort on home retrofits. ([54]) Attracting investment and unlocking private financing into energy efficiency on the necessary scale is crucial. Market uptake of available energy efficiency solutions, technological innovation, digitalisation and up-skilling of the workforce in the energy renovation sector and promoting the multiple benefits of energy efficiency to further drive demand have the potential to drive the energy efficiency market further.

Investing in public and clean transport is important in order to reduce congestion and carbon emissions. The return to economic growth and still-high dependence on car usage continues to put pressure on transport infrastructure, which results in higher commuting times and increased CO2 emissions.(National Competitiveness Council, 2018) In addition, public transport in Ireland is mainly diesel-powered, with only 2.7 % of the railway network being electrified in 2015 (the lowest level in the EU) and the main public bus operators (Dublin Bus and Bus Éireann) relying on diesel-engine fleets.

Although Ireland is not a material- and waste-intensive economy, it would benefit from a national strategy for the transition to a more circular economy. Progress towards the mandatory recycling EU targets has slowed in the recent years. However, the projections indicate that Ireland should be close to meeting the 2020 recycling target for municipal waste (Eunomia, 2018). While the recycling rate slightly increased from 37 % in 2013 to 41 % in 2016 (Eurostat, 2017), it is noteworthy that in the same period Ireland substantially reduced the landfill rate from 38 % to 26 % and increased waste incineration from 16 % to 29 %. Behind this successful reduction of landfilling are measures such as the increasing landfill levy. Caution is required regarding the increase in incineration capacity. Investments should rather focus on projects higher up in the waste hierarchy to shift reusable and recyclable waste away from incineration and landfilling and thus ensure that the achievement of the post-2020 municipal waste recycling targets is not compromised. Ireland's relatively low toxic waste rate suggests good potential for recycling with all the economic and environmental benefits, including carbon emission reduction.

Ireland still has significant investment needs in the water and waste water sectors. Over 83 % of the population is connected to the drinking water network. A further 7% of the population are supplied by State supported community group water schemes, and 10% from private water sources and supplies which is reflective of the geographically dispersed settlement patterns in Ireland. Moreover, Ireland has a very high leakage rate in its water supply systems (44 % leakage) (European Commission, 2017). Ireland has also been encountering issues with the implementation of the Urban Waste Water Treatment Directive (Environmental Protection Agency, 2018). This is partly due to ageing or outdated infrastructure that has not been renewed because of limited investments in the water sector. Water and waste water infrastructure deficiencies can have a major impact not only on health and wellbeing but also on enterprise, particularly in the food and biopharma sectors (National Competitiveness Council, 2017) and on housing construction (see above). Further infrastructure investment is needed

([53]) According to the SEAI, just under 12ppts of the national target of 20% was achieved by the end of 2016. Source: NEEAP 2017 https://ec.europa.eu/energy/sites/ener/files/documents/ie_neeap_2017.pdf

([54]) Draft NECP, 2018

to treat waste water, reduce leaks in the networks and improve water supply and quality. The National Development Plan estimates investment needs of EUR 8.8 billion over 2018-2027 to support the continued operation, repair and upgrading of Ireland's water and wastewater infrastructure.

Investments for Regional Cohesion

Regional differences in competitiveness remain in Ireland. While the Southern and Eastern (S&E) region scored 8 points above the EU Regional Competitiveness Index ([55]) average (set at 55 out of 100 in 2016), the Border, Midland and Western region scored 8 points below. The indicators driving the regional competitiveness gaps are business sophistication and innovation, market size and labour market efficiency.

Upgrading the innovation capacity and skills of domestic firms may help narrow the regional competitiveness and productivity gap across the regions. Differences in productivity levels across regions in Ireland are high. In 2016, the productivity index (OECD Economic Survey Ireland, March 2018) of the South-East region (226.2) was 124% higher than in the Border, Midland and Western region (102.4). The regional productivity gap is largely explained by the concentration of multinationals in the South-East region, which have higher productivity than the domestic firms and account for 64% of the total innovation expenditure (OECD, 2018a). The low research and innovation capacity of domestic firms is partly due to their weak managerial skills. The innovation capacities and skills of the Irish-owned small and medium-sized enterprises could be increased by reinforcing their cooperation with research centres and multinationals and by providing them with targeted public R&D support, in particular in the lagging regions (the Northern & Western; and Midland regions)(see section 4.4.1).

Ireland is implementing an ambitious National Broadband Plan to deliver high-speed broadband services to all premises in Ireland. The Plan envisages a combination of private and public investments. The latter will support the roll out of broadband infrastructure in mostly rural areas, where it is not commercially viable. The Government publicly announced that the infrastructure would be future-proof, capable of delivering download speeds of over 100 Mbps to residential customers and 1 gigabit and beyond to any businesses, in line with the EU 2025 broadband targets proposed by the Commission in 2017 (Gigabit Society Communication, 2017).

The National Broadband Plan is expected to resolve the significant digital divide between urban and rural areas in ultrafast broadband. In 2017 82 % of rural homes had access to fast internet, which is well above the EU average of 47 %. However, less than 5 % of rural premises were covered by *future-proof* very high-capacity networks able to deliver ultrafast broadband. This is one of the lowest coverages in the EU (22 % on average) and far below the overall coverage (53 %) for Ireland (which includes urban areas) (European Commission, 2019b). With many Irish-owned small and medium-sized enterprises located in rural areas, addressing the rural divide in ultrafast connectivity will help boost their competitiveness and productivity. Pending rollout of the National Broadband Plan State Intervention, the Mobile Phone and Broadband Taskforce has, since 2016, delivered a series of targeted measures designed to eliminate deployment barriers and hence to facilitate mobile and broadband network rollout

4.4.3. SINGLE MARKET INTEGRATION AND SERVICES SECTOR

Ireland is an open and competitive economy but some specific goods and services markets require attention. The prices for households of goods and services were among the highest in the EU at the end of 2017 and producer services prices were equally high. Legal services and insurance are particularly costly. Other services markets also warrant attention. The World Economic Forum ranks Ireland the 84th country out of 140 for Competition in Services. The persistence of market rigidities and barriers to entry in some of these sectors can hamper market adjustments to external shocks.

Barriers in the market for legal services remain unaddressed. Competition in legal services

([55]) The RCI measures the ability of regions to offer an attractive and sustainable environment for firms and residents in which to live and work. (https://ec.europa.eu/regional_policy/en/information/maps/regional_competitiveness/#3).

remains hampered by restrictions, —introduced before the Legal Services Regulation Act of 2015 but still in force— that increase litigation costs to the detriment of small businesses in particular (see section 4.4.4). The Legal Services Regulatory Authority, established in October 2016, has been conducting preparatory work as well as some public consultations. Regulatory work, according to the Strategic Plan 2018-2020*, has only recently commenced, and prioritises some of the key issues, including regulation of both legal and limited liability partnerships. However, the degree of ambition in relation to open-ended provisions of the Act regarding competition and the reduction of the costs of legal services remains to be seen. Those provisions could allow for legal persons engaged in legal practice both in Ireland and throughout the EU, to become partners. The introduction of multidisciplinary practices, direct professional access to barristers as well as the much-needed easing of advertising restrictions are also important steps of the planned reform but they have no firm schedule for commencement and are likely to face significant delays.

Barriers to entry into retail markets represent a challenge. Ireland scores among the top five countries with the greatest number of procedural requirements as regards the establishment of retail outlets (European Commission, 2018f). ([56]) Retailers face procedural obstacles which delay and increase the costs of opening new shops. In particular, for large-scale retail outlets, the regulatory framework forces operators intending to build establishments above a certain size to consider a city centre location first. Only if this is not possible can they consider a location further from the city centre. Furthermore, regulatory requirements for information, such as requests for evidence of the need for additional retail floor space and specific retail impact assessments, are barriers adding to the general length of the procedure and the cost before a shop can open. While understanding their rational, these requirement restrictions may have a negative impact on market structure and dynamics.

Many retail chains operate in both the Irish and UK markets with integrated supply chains. A recent study for the Department of Business, Enterprise and Innovation (Thelle et al., 2018) indicates that changes to that supply chain could raise logistics, import and transaction costs and retail prices. In addition, in the field of free movement of goods, Irish legislation contains some technical barriers related to fire safety standards which restrict trade flows in the non-harmonised sector ([57]) of upholstered furniture, leading to higher production costs for manufacturers aiming to sell their products in Ireland. The low number of independent test laboratories can also make the assessment of conformity for all type of products difficult and costly.

The Integrated Single Electricity Market between Ireland and Northern Ireland ([58]) went live in October 2018. The Integrated Single Electricity Market is key to a real all-island market in line with EU market rules. By ensuring efficient energy flows, it should lead to greater security of supply and affordable electricity. So far, it is functioning well, with high volumes traded in the day-ahead market. The balancing market ([59]) is being monitored closely as it has witnessed high price volatility.

For the first time since electricity and gas market price deregulation, the market share of incumbent suppliers is below 50 %. Yet electricity and gas prices remain high and above EU average, putting strain on consumers. The electricity smart metering roll-out, scheduled to begin in 2019, will enable consumers to adapt their electricity use to price signals and benefit from energy efficiency schemes. New services will require a regulatory framework for new market actors and the management of energy data.

([56]) However, conditions for retail operations in Ireland are relatively liberal and do not go beyond limiting distribution channels for certain products

([57]) Non-harmonised products are products which are not subject to EU harmonised rules that protect consumers, public health and the environment. They may come under the national rules. Non-harmonised products represent approximately 20% of the products sold in the EU.

([58]) See the UK country report.

([59]) The balancing market is the institutional arrangement that deals with the real-time balancing of electricity demand and supply.

4.4.4. INSTITUTIONAL QUALITY AND GOVERNANCE

The National Development Plan could usefully be underpinned by a robust monitoring system, adequately resourced departments and a sound system of project selection. Translating the national strategic outcomes into specific and measurable targets (result indicators) and defining the necessary interventions to be annually delivered for their attainment (output indicators) will help monitor the progress of the plan towards its intended outcomes. It will also enable easy assessment of the capacity that the national, regional and local departments require for their implementation. The implementation of the plan may also benefit from a project selection system which assesses their value for money and contribution to the national strategic outcomes and regional and project specific objectives.

Although Ireland has fallen six notches to 23rd place in the World Bank's classification of Doing Business (World Bank, 2018), its regulatory environment remains business-friendly. The relative improvement of other upcoming countries and the 2018 increase in the stamp duty on the purchase of non-residential property explain this lower ranking. In comparison to other Member States, planning charges and property registration costs as well as 'commercial rates' levied by local authorities on commercial property are relatively high in Ireland (OECD, 2018d). Although it has been falling in recent years, obtaining a planning permit from local authorities costs 2.8 times more than the OECD average (World Bank, 2018) and registering a property costs 1.5 times the OECD average (on an upward trend, back to the levels of 2010-2012).

The cost of enforcing contracts remains the weakest point for doing business in Ireland (Doing Business rank 102nd). High attorney fees are a major factor explaining these high costs in 2017 after higher than average rises in previous years. The high price of legal services shows the importance of removing the barriers to entry and competition in the market for legal services (see Section 4.4.3). It is particularly harmful for SMEs which, unlike larger firms, cannot internalise these services. Therefore, the high cost of enforcing contracts impairs their ability to use the judiciary system for dispute resolution. The high cost of legal services also impinges on insolvency procedures. The Irish insolvency framework is very efficient with a high recovery rate, short proceedings and facilities for restructuring. However, the cost of legal services is relatively high and the number of cases is relatively low as indicated above (see Section 3.2).This may lead to inefficiencies resulting from the choice of the liquidation mechanism in case of insolvency.

The quality of regulatory policy and governance, stakeholder engagement in developing regulation and ex-post evaluation of legislation has slightly improved since 2015. (OECD, 2018e) Despite the positive developments more work remains to be done, especially in view of the rolling out of the National Development Plan. The impact assessment of regulations on small and medium-sized enterprises is still in a pilot phase.

The envisaged composition of a new body for proposing judicial appointments raises concerns regarding the level of participation of the judiciary. The proposed composition of the Judicial Appointments Commission, which — according to the amended proposal — would comprise only five judges out of 17 (including a lay chairperson 'accountable to the *Oireachtas*') would not be in line with European standards (Council of Europe, 2010) and with the recommendation of the Council of Europe's Group of States against Corruption (Group of States against Corruption, 2018) which require that an independent and competent authority drawn in substantial part from the judiciary be authorised to make recommendations or express opinions which the relevant appointing authority follows in practice. As to efficiency, the Court of Appeal, set up in 2014, has a considerable backlog and appears to be under-resourced as regards the number of judges. A draft Bill providing for an increase in their number has been approved by the government. In follow-up to the judgment of the European Court of Human Rights in *McFarlane v. Ireland*, a compensation scheme aimed at awarding damages in the event of protracted court proceedings, and to be based on statute, is under preparation.

Ireland ranks high for the provision of digital public services, **especially for Open Data and services for businesses.** Despite commencing its

Open Data Initiative as recently as 2014, Ireland is now best in class in Europe (Digital Economy and Society Index, 2018a). In addition, it has an almost perfect score for the evaluation of services for businesses (99 out of 100 vs 83 EU average) (Digital Economy and Society Index, 2018). When it comes to digital services aimed at and used by citizens, the indicators are somewhat less impressive. The eGovernment Strategy 2017-2020 outlines concrete actions to make services more user-friendly, in particular a one-stop shop login for all services. It also aims at high levels of interoperability, cybersecurity and data protection.

The success of the eGovernment strategy depends on Ireland`s ability to address connectivity and digital skills challenges. Whilst embracing the *'digital by default'* principle, the Strategy includes the need to make services available in other ways for users who cannot access such services online. Although some assistance is included in these cases, it is beyond such specific assistance to address the wider reasons why people would not be able to make use of public services, notably the lack of at least basic digital skills and/or lack of adequate and affordable internet access. These two major challenges need to be addressed comprehensively (see Section 4.4.1).

ANNEX A: OVERVIEW TABLE

Commitments	**Summary assessment (1)**
2018 country-specific recommendations (CSRs)	
CSR 1: Achieve the medium-term budgetary objective in 2019. Use windfall gains to accelerate the reduction of the general government debt ratio. Limit the scope and the number of tax expenditures, and broaden the tax base. Address the expected increase in age-related expenditure by increasing the cost-effectiveness of the healthcare system and by pursuing the envisaged pension reforms.	Ireland has made **Limited Progress** in addressing CSR 1 (The overall assessment does not include an assessment of compliance with the Stability and Growth Pact).
Achieve the medium-term budgetary objective in 2019. Use windfall gains to accelerate the reduction of the general government debt ratio.	**Limited Progress** (The assessment does not include an assessment of compliance with the Stability and Growth Pact). Budget 2019 estimates some receipts from the return of funds set aside for the resolution of the financial crisis, including the winding down of the National Asset Management Agency. However, no measures have been adopted so far to use these to reduce the debt.
Limit the scope and the number of tax expenditures, and broaden the tax base.	**Some Progress** The measure with the biggest positive impact is an increase in the lower value-added-tax rate on hospitality, from 9 % to 13.5 %. Furthermore, the vehicle registration tax relief granted for certain leased vehicles will be suppressed and the scope of the sugar sweetened drinks tax will be moderately widened. At the same time, some Budget 2019 measures actually increase tax expenditures and narrow the tax base, e.g. personal income tax is cut by changing bands and increasing certain tax credits, as is the universal social charge through band and rate changes. Diesel is still taxed at a lower rate both in terms of carbon and energy content, even though it emits more air pollutants.
Address the expected increase in age-related expenditure by increasing the cost-effectiveness of the healthcare system and by pursuing the envisaged pension reforms.	**Limited Progress** Despite some measures to increase the cost-effectiveness of healthcare, expenditure has continued to increase at a fast rate. The ambitious Sláintecare reform represents a credible vision for making the health system universally accessible and sustainable. However, its implementation is endangered by the health system's difficulties in addressing the duplicate health insurance market and effectively managing its own budget, performance and workforce in the short term. The Roadmap for Pension Reform, published in 2018, aims to address the long term sustainability of the state pension system. However, the envisaged reforms have not yet been finalised.

CSR 2: Ensure the timely and effective implementation of the National Development Plan, including in terms of clean energy, transport, housing, water services and affordable quality childcare. Prioritise the upskilling of the adult working-age population, with a focus on digital skills.	Ireland has made **Some Progress** in addressing CSR 2
Ensure the timely and effective implementation of the National Development Plan, including in terms of clean energy, transport, housing, water services and affordable quality childcare.	**Some Progress** Some of the governance structures, funds and tools to deliver the National Development Plan have already been set up and implementation has started. However, the government has not put in place a performance framework which translates the plan objectives into specific and measurable targets (result indicators) and defines the necessary interventions to be annually delivered for their attainment (output indicators). The absence of this framework will make it difficult to ensure the timely and effective implementation of the plan and to assess the capacity that the national, regional and local departments require for their implementation. The implementation of the plan may also benefit from a robust project selection system which assesses their value for money and alignment with the output and result indicators of the plan.
Prioritise the upskilling of the adult working-age population, with a focus on digital skills.	**Some Progress** A new policy framework for further education and training and skills development of people in employment was launched in September 2018.Employees, particularly those in vulnerable jobs, will be able to access upskilling and reskilling opportunities directly at work, through engagement with companies, mainly SMEs, and as part of regional economic development strategies. The Agency for upskilling those in employment (SkillsNet) will also be reinforced. The new pilot programme EXPLORE aimed at increasing lifelong learning participation rates and offering upskilling opportunities for adults concerning also digital skills, was also launched in 2018
CSR 3: Foster the productivity growth of Irish firms, and of small and medium enterprises in particular, by stimulating research and innovation with targeted policies, more direct forms of funding and more strategic cooperation with foreign multinationals, public research centres and universities. Promote faster and durable reductions in long-term arrears by the use of secondary markets, building on initiatives for vulnerable households and, where necessary, using write-offs of non-recoverable exposures.	Ireland has made **Some Progress** in addressing CSR 3

Foster the productivity growth of Irish firms, and of small and medium enterprises in particular, by stimulating research and innovation with targeted policies, more direct forms of funding and more strategic cooperation with foreign multinationals, public research centres and universities.	**Limited Progress** Some measures have been introduced. A key step is the announcement of the EUR 3.16 billion capital funding under the 'Business, Enterprise and Innovation Priority Investments' to projects highlighted in Project Ireland 2040 over the five years until 2022. The third Innovation 2020 Progress Report outlines advances made in delivering the 140 actions. A Disruptive Technologies Innovation Fund has been endowed with EUR 500 million and the first call for proposals launched. Yet the R&D efforts of most domestic firms continue to be moderate, tax credits remain the main instrument of public R&D support (accounting for 80 % of total public R&D spending) and science-business linkages continue to be weak.Public expenditure in R&D has decreased from EUR 951 m in 2016 to EUR 907 million in 2017. Measures have been announced to produce a new 'Future Jobs' programme that would enact measures specifically targeted to increase productivity growth of Irish firms and diversify exports.
Promote faster and durable reductions in long-term arrears by the use of secondary markets, building on initiatives for vulnerable households and, where necessary, using write-offs of non-recoverable exposures.	**Substantial Progress** The pace of NPL reduction is picking up pace as the banks have sold, or agreed to sell, a significant portion of their NPL stocks. With these, the headline NPL ratio (ECB data) should decline to around 7% by mid-2019. However, risks remain. Although some of the disposed assets include long-term mortgage arrears, the size of the latter remains high, both in percentage and absolute terms. Also, a potential worsening in economic conditions, especially given the uncertainty over the UK's departure from the EU in 2019,, could result in an above-average worsening of credit quality for restructured loans, even those that have transitioned into performing status. Several recent policy initiatives, mostly launched by opposition parties, may hamper the recent positive developments. Meanwhile, the take up of the Enhanced Mortgage-to-Rent scheme, which was introduced in 2017 to support vulnerable debtors that are in deep distress, is improving, although it is too early to tell if the measure will have a meaningful impact. In turn, the take up insolvency procedures continues to be relatively dismal.

Europe 2020 (national targets and progress)	
Employment rate target set in the NRP: 69-71 %.	The employment rate for women and men aged 20-64 was 73 % in 2017. This therefore exceeded the rate set for the 2020 target range of employment rates of 69-71 %.
R&D target set in the NRP: 2.5 % of GNP	It will be difficult for Ireland to achieve its 2020 R&D target of 2.5 % GNP. In 2017, IE had an overall public and private R&D intensity of 1.05 % of GDP (1.7 of GNI*). Public expenditure in R&D grew from EUR 836 million in 2010 to EUR 907 million in 2017. However, there has been a decline in 2017 in relation to public expenditure in 2016 (EUR 951 m). Public R&D intensity stood at 0.3 % of GDP in 2017. Business R&D expenditure increased from EUR 1.8 billion in 2010 to EUR 2.2 billion in 2017. Business R&D intensity stood at 0.7 of GDP in 2017.
National greenhouse gas (GHG) emissions target: - 20 % in 2020 compared with 2005 (in sectors not included in the EU emissions trading scheme)	National projections indicate that cumulated emissions (on the basis of existing measures) over the 2013-2020 compliance period will exceed allocations by 16 million tons of CO2 equivalent and that emissions in 2020 will be around their 2005 level, i.e. 20 pps short of the reduction target. This means that Ireland will need to buy allocations from other Member States in surplus in order to comply with the Effort Sharing Decision and it will put Ireland in a difficult starting position for the 2021-2030 compliance period under the Effort Sharing Regulation.
2020 renewable energy target: 16 %	The draft National Energy and Climate Plan (NECP) suggests that Ireland will miss its 16% target and reach a minimum of 12.3% and maximum of 14.3% by 2020 (which is 1 pp below previous estimates by the Sustainable Energy Agency of Ireland). The launch of a new Renewable Electricity Support Scheme and Support Scheme for Renewable Heat in 2018 have the potential to accelerate progress and address some of the regulatory and investment barriers. However the Irish Government anticipates a shortfall and the need to buy renewable shares from Member States exceeding their targets to ensure compliance.

Energy efficiency, 2020 energy consumption targets: - Ireland's 2020 energy efficiency target is 31 925 GWh of savings expressed in primary energy consumption	By end-2016, Ireland had achieved 12 % energy savings. According to its draft NECP Ireland will only achieve savings of up to 16.2 % by 2020 (i.e. 3.8 pps below the 20 % target) based on the policy measures in place by end-2016. While the 4th National Energy Efficiency Action Plan for Ireland (2017) includes additional measures, their concrete scope, budget and pace of implementation, in particular in the built environment, do not appear sufficient to bridge the expected target gap
Early school/training leaving target: to 8 %	Ireland's current share of early school leavers (i.e. 18-24 year olds with at most lower secondary education and not in further education and training) fell to 5.1 % in 2017, which is substantially below the 8 % target. However, Ireland has higher than average early school leaving rates for people with disabilities (27.8 % vs the EU average of 23.6 %). Ireland has one of the widest early school leaving gaps between people with and without disabilities in the EU (22.5pps vs the EU average of 12.6pps).
Tertiary education target: 60 %. of population aged 30-34.	Tertiary education attainment in Ireland is reported to be at 53.5 % for 30-34 year olds, this exceeds the EU average of 39.9 %. There is a significant tertiary education attainment gap between people with and without disabilities (24.6pps. vs the EU average of 13.2pps) which aggravates inequalities in terms of access to employment and participation in society by this group.
Target for reducing the number of people at risk of poverty or social exclusion, expressed as an absolute number of people: The Irish contribution to the Europe 2020 poverty target is **to reduce by a minimum of 200 000 the population in 'combined poverty**' (i.e. at-risk-of-poverty or basic deprivation)	The 'combined poverty' was 29.2 %, equal to 1.39 million people in 2016. Approximately 180 000 people will need to be lifted out of combined poverty to meet the Europe 2020 target

([1]) The following categories are used to assess progress in implementing the country-specific recommendations (CSRs):
No progress: The Member State has not credibly announced nor adopted any measures to address the CSR. This category covers a number typical situations to be interpreted on a case by case basis taking into account country-specific conditions. They include the following:

- no legal, administrative, or budgetary measures have been announced
  - in the national reform programme,
  - in any other official communication to the national Parliament/relevant parliamentary committees or the European Commission,
  - publicly (e.g. in a press statement or on the government's website);
- no non-legislative acts have been presented by the governing or legislative body;
- the Member State has taken initial steps in addressing the CSR, such as commissioning a study or setting up a study group to analy possible measures to be taken (unless the CSR explicitly asks for orientations or exploratory actions). However, it has not proposed any clearly-specified measure(s) to address the CSR.

Limited progress: The Member State has:

- announced certain measures but these address the CSR only to a limited extent; and/or
- presented legislative acts in the governing or legislative body but these have not been adopted yet and substantial further, non-legislative work is needed before the CSR is implemented;
- presented non-legislative acts, but has not followed these up with the implementation needed to address the CSR.

Some progress: The Member State has adopted measures

- that partly address the CSR; and/or
- that address the CSR, but a fair amount of work is still needed to fully address the CSR fully as only a few of the measures have be implemented. For instance, a measure or measures have been adopted by the national Parliament or by ministerial decision but no implementing decisions are in place.

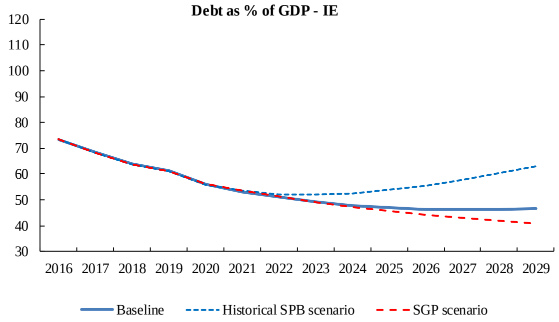
Substantial progress: The Member State has adopted measures that go a long way towards addressing the CSR and most of them have bee implemented.

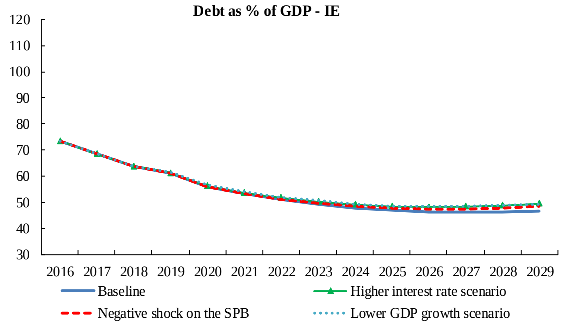
Full implementation: The Member State has implemented all measures needed to address the CSR appropriately.

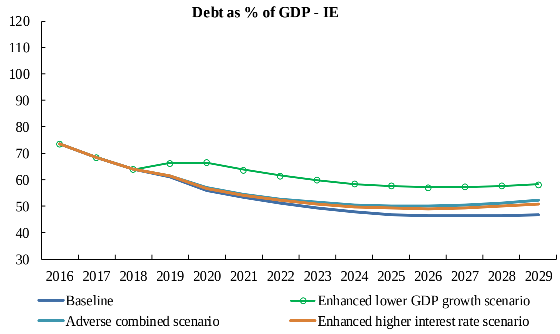
ANNEX B: COMMISSION DEBT SUSTAINABILITY ANALYSIS AND FISCAL RISKS

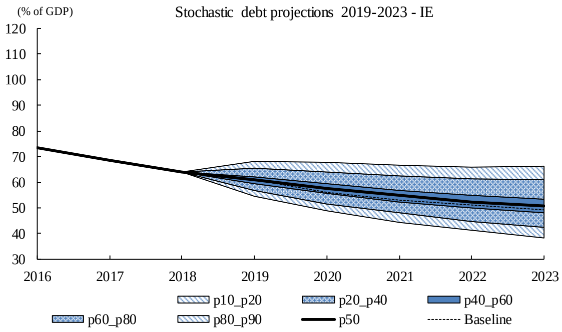
General Government debt projections under baseline, alternative scenarios and sensitivity tests

IE - Debt projections baseline scenario	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Gross debt ratio	**68.4**	**63.9**	**61.1**	**56.0**	**53.2**	**51.0**	**49.3**	**47.9**	**46.9**	**46.4**	**46.3**	**46.4**	**46.7**
Changes in the ratio (-1+2+3)	*-5.0*	*-4.6*	*-2.7*	*-5.1*	*-2.8*	*-2.2*	*-1.7*	*-1.4*	*-0.9*	*-0.5*	*-0.1*	*0.1*	*0.3*
of which													
(1) Primary balance (1.1+1.2+1.3)	**1.7**	**1.5**	**1.3**	**1.6**	**1.3**	**0.9**	**0.5**	**0.3**	**0.0**	**-0.2**	**-0.3**	**-0.3**	**-0.4**
(1.1) Structural primary balance *(1.1.1-1.1.2+1.1.3)*	***1.7***	***1.4***	***0.9***	***1.0***	***0.9***	***0.7***	***0.5***	***0.3***	***0.0***	***-0.2***	***-0.3***	***-0.3***	***-0.4***
(1.1.1) Structural primary balance (bef. CoA)	*1.7*	*1.4*	*0.9*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
(1.1.2) Cost of ageing					*0.1*	*0.3*	*0.5*	*0.7*	*1.0*	*1.2*	*1.3*	*1.3*	*1.4*
(1.1.3) Others (taxes and property incomes)					*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
(1.2) Cyclical component	***0.0***	***0.1***	***0.4***	***0.6***	***0.4***	***0.2***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***
(1.3) One-off and other temporary measures	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***
(2) Snowball effect (2.1+2.2+2.3)	**-3.2**	**-4.4**	**-2.5**	**-2.1**	**-1.5**	**-1.3**	**-1.2**	**-1.2**	**-0.9**	**-0.7**	**-0.4**	**-0.2**	**-0.1**
(2.1) Interest expenditure	*2.0*	*1.6*	*1.4*	*1.3*	*1.2*	*1.2*	*1.2*	*1.2*	*1.3*	*1.3*	*1.4*	*1.5*	*1.6*
(2.2) Growth effect	*-4.9*	*-4.9*	*-2.7*	*-2.2*	*-1.6*	*-1.5*	*-1.4*	*-1.4*	*-1.3*	*-1.1*	*-0.9*	*-0.8*	*-0.8*
(2.3) Inflation effect	*-0.3*	*-1.1*	*-1.2*	*-1.2*	*-1.1*	*-1.1*	*-1.0*	*-1.0*	*-0.9*	*-0.9*	*-0.9*	*-0.9*	*-0.9*
(3) Stock-flow adjustments	**0.0**	**1.3**	**1.1**	**-1.5**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**









Short term	Medium term	S1	Debt sustainability analysis (detail)	Baseline	Historical SPB	Lower GDP growth	Higher interest rate	Negative shock on SPB	Stochastic projections	DSA	S2	Long term
LOW (S0 = 0.2)	LOW	LOW (S1 = -0.9)	Risk category	LOW	MEDIUM	LOW	LOW	LOW	LOW	LOW	MEDIUM (S2 = 3.3)	MEDIUM
			Debt level (2029)	46.7	62.9	49.3	49.6	48.4				
			Debt peak year	2018	2018	2018	2018	2018				
			Percentile rank	39.0%	69.0%							
			Probability debt higher						14.6%			
			Dif. between percentiles						27.9			

Note: For further information, see the European Commission Fiscal Sustainability Report (FSR) 2018.

[1] The first table presents the baseline no-fiscal policy change scenario projections. It shows the projected government debt dynamics and its decomposition between the primary balance, snowball effects and stock-flow adjustments. Snowball effects measure the net impact of the counteracting effects of interest rates, inflation, real GDP growth (and exchange rates in some countries). Stock-flow adjustments include differences in cash and accrual accounting, net accumulation of assets, as well as valuation and other residual effects.

[2] The charts present a series of sensitivity tests around the baseline scenario, as well as alternative policy scenarios, in particular: the historical structural primary balance (SPB) scenario (where the SPB is set at its historical average), the Stability and Growth Pact (SGP) scenario (where fiscal policy is assumed to evolve in line with the main provisions of the SGP), a higher interest rate scenario (+1 pp. compared to the baseline), a lower GDP growth scenario (-0.5 pp. compared to the baseline) and a negative shock on the SPB (calibrated on the basis of the forecasted change). An adverse combined scenario and enhanced sensitivity tests (on the interest rate and growth) are also included, as well as stochastic projections. Detailed information on the design of these projections can be found in the FSR 2018.

[3] The second table presents the overall fiscal risk classification over the short, medium and long-term.

a. For the short-term, the risk category (low/high) is based on the S0 indicator. S0 is an early-detection indicator of fiscal stress in the upcoming year, based on 25 fiscal and financial-competitiveness variables that have proven in the past to be leading indicators of fiscal stress. The critical threshold beyond which fiscal distress is signalled is 0.46.

b. For the medium-term, the risk category (low/medium/high) is based on the joint use of the S1 indicator and of the DSA results. The S1 indicator measures the fiscal adjustment required (cumulated over the 5 years following the forecast horizon and sustained thereafter) to bring the debt-to-GDP ratio to 60 % by 2033. The critical values used are 0 and 2.5 pps. of GDP. The DSA classification is based on the results of 5 deterministic scenarios (baseline, historical SPB, higher interest rate, lower GDP growth and negative shock on the SPB scenarios) and the stochastic projections. Different criteria are used such as the projected debt level, the debt path, the realism of fiscal assumptions, the probability of debt stabilisation, and the size of uncertainties.

c. For the long-term, the risk category (low/medium/high) is based on the joint use of the S2 indicator and the DSA results. The S2 indicator measures the upfront and permanent fiscal adjustment required to stabilise the debt-to-GDP ratio over the infinite horizon, including the costs of ageing. The critical values used are 2 and 6 pps. of GDP. The DSA results are used to further qualify the long-term risk classification, in particular in cases when debt vulnerabilities are identified (a medium / high DSA risk category).

ANNEX C: STANDARD TABLES

Table C.1: **Financial market indicators**

	2013	2014	2015	2016	2017	2018
Total assets of the banking sector (% of GDP)[1)]	565.2	552.8	414.1	393.6	357.9	324.4
Share of assets of the five largest banks (% of total assets)	47.8	47.6	45.9	44.3	45.5	-
Foreign ownership of banking system (% of total assets)[2)]	65.1	48.3	48.4	48.3	48.8	46.0
Financial soundness indicators:[2)]						
- non-performing loans (% of total loans)	-	21.6	14.9	13.1	9.9	8.5
- capital adequacy ratio (%)	20.5	22.6	25.3	25.0	25.2	25.2
- return on equity (%)[3)]	-13.2	8.5	6.8	6.3	5.0	6.9
Bank loans to the private sector (year-on-year % change)[1)]	-6.8	-10.0	-6.4	-3.5	2.1	-0.4
Lending for house purchase (year-on-year % change)[1)]	-1.7	-3.9	-1.1	-4.2	2.7	0.1
Loan to deposit ratio[2)]	-	98.8	98.7	93.2	95.3	88.5
Central Bank liquidity as % of liabilities[1)]	-	4.1	2.4	1.7	1.8	0.8
Private debt (% of GDP)	267.7	278.3	306.0	283.3	243.6	-
Gross external debt (% of GDP) - public	70.0	73.2	54.4	49.1	45.3	-
- private	584.2	696.0	702.4	641.5	569.5	-
Long-term interest rate spread versus Bund (basis points)*	222.0	120.4	68.7	64.6	48.4	53.9
Credit default swap spreads for sovereign securities (5-year)*	120.4	53.5	37.0	45.7	27.9	17.5

1) Latest data Q3 2018. Includes not only banks but all monetary financial institutions excluding central banks.
2) Latest data Q2 2018.
3) Quarterly values are annualised.
* Measured in basis points.
Source: European Commission (long-term interest rates); World Bank (gross external debt); Eurostat (private debt); ECB (all other indicators).

Table C.2: **Headline Social Scoreboard indicators**

	2013	2014	2015	2016	2017	2018 [6]
Equal opportunities and access to the labour market						
Early leavers from education and training (% of population aged 18-24)	8.7	6.7	6.8	6.0	5.0	:
Gender employment gap (pps)	10.5	11.8	12.3	12.1	12.1	12.2
Income inequality, measured as quintile share ratio (S80/S20)	4.7	4.9	4.5	4.4	4.6	:
At-risk-of-poverty or social exclusion rate[1] (AROPE)	29.9	27.7	26.0	24.2	22.7	:
Young people neither in employment nor in education and training (% of population aged 15-24)	16.4	15.3	14.3	12.6	10.9	:
Dynamic labour markets and fair working conditions†						
Employment rate (20-64 years)	66.5	68.1	69.9	71.4	73.0	74.0
Unemployment rate[2] (15-74 years)	13.8	11.9	10.0	8.4	6.7	5.7
Long-term unemployment rate[3] (as % of active population)	8.0	6.6	5.3	4.2	3.0	2.1
Gross disposable income of households in real terms per capita[4] (Index 2008=100)	90.1	89.8	92.9	95.8	98.9	:
Annual net earnings of a full-time single worker without children earning an average wage (levels in PPS, three-year average)	24560	24726	24994	25510	:	:
Annual net earnings of a full-time single worker without children earning an average wage (percentage change, real terms, three-year average)	-0.5	0.1	0.4	2.0	:	:
Public support / Social protection and inclusion						
Impact of social transfers (excluding pensions) on poverty reduction[5]	59.0	55.8	55.0	52.2	52.6	:
Children aged less than 3 years in formal childcare	28.0	27.4	30.6	28.6	34.4	:
Self-reported unmet need for medical care	3.3	3.7	2.8	2.6	2.8	:
Individuals who have basic or above basic overall digital skills (% of population aged 16-74)	:	:	44.0	44.0	48.0	:

(1) 1 People at risk of poverty or social exclusion (AROPE): individuals who are at risk of poverty (AROP) and/or suffering from severe material deprivation (SMD) and/or living in households with zero or very low work intensity (LWI).
(2) Unemployed persons are all those who were not employed but had actively sought work and were ready to begin working immediately or within two weeks.
(3) Long-term unemployed are people who have been unemployed for at least 12 months.
(4) Gross disposable household income is defined in unadjusted terms, according to the draft Joint Employment Report 2019.
(5) Reduction in percentage of the risk of poverty rate, due to social transfers (calculated comparing at-risk-of poverty rates before social transfers with those after transfers; pensions are not considered as social transfers in the calculation).
(6) Average of first three quarters of 2018 for the employment rate, long-term unemployment rate and gender employment gap. Data for unemployment rate is seasonally adjusted (annual series, for EE, EL, HU, IT and UK data based on first three quarters of 2018).
Source: Eurostat

Table C.3: **Labour market and education indicators**

Labour market indicators	**2013**	**2014**	**2015**	**2016**	**2017**	**2018 [4]**
Activity rate (15-64)	71.8	71.8	72.1	72.7	72.7	:
Employment in current job by duration						
From 0 to 11 months	13.1	14.1	14.6	15.2	14.8	:
From 12 to 23 months	8.0	8.5	8.6	9.9	10.1	:
From 24 to 59 months	14.9	14.7	14.5	15.6	17.0	:
60 months or over	61.9	60.2	59.4	55.6	53.0	:
Employment growth* (% change from previous year)	3.0	2.7	3.5	3.8	2.9	3.4
Employment rate of women (% of female population aged 20-64)	61.3	62.3	63.8	65.4	67.0	68.0
Employment rate of men (% of male population aged 20-64)	71.8	74.1	76.1	77.5	79.1	80.1
Employment rate of older workers* (% of population aged 55-64)	51.2	52.6	55.4	56.8	58.4	60.1
Part-time employment* (% of total employment, aged 15-64)	23.7	23.0	22.2	21.9	20.1	19.5
Fixed-term employment* (% of employees with a fixed term contract, aged 15-64)	10.8	10.3	9.6	9.0	9.1	10.1
Participation in activation labour market policies (per 100 persons wanting to work)	21.6	24.5	28.2	27.3	:	:
Transition rate from temporary to permanent employment (3-year average)	39.5	38.8	39.4	:	:	:
Youth unemployment rate (% active population aged 15-24)	26.7	23.4	20.2	16.8	14.4	13.5
Gender gap in part-time employment	20.9	20.0	20.2	19.5	19.7	19.2
Gender pay gap[1] (in undadjusted form)	12.9	13.9	:	:	:	:
Education and training indicators	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Adult participation in learning (% of people aged 25-64 participating in education and training)	7.6	7.0	6.5	6.5	9.0	:
Underachievement in education[2]	:	:	15.0	:	:	:
Tertiary educational attainment (% of population aged 30-34 having successfully completed tertiary education)	53.6	54.6	53.8	54.6	54.5	:
Variation in performance explained by students' socio-economic status[3]	:	:	12.7	:	:	:

* Non-scoreboard indicator
(1) Difference between the average gross hourly earnings of male paid employees and of female paid employees as a percentage of average gross hourly earnings of male paid employees. It is defined as "unadjusted", as it does not correct for the distribution of individual characteristics (and thus gives an overall picture of gender inequalities in terms of pay). All employees working in firms with ten or more employees, without restrictions for age and hours worked, are included.
(2) PISA (OECD) results for low achievement in mathematics for 15 year-olds.
(3) Impact of socio-economic and cultural status on PISA (OECD) scores. Values for 2012 and 2015 refer respectively to mathematics and science.
(4) Average of first three quarters of 2018. Data for youth unemployment rate is seasonally adjusted (annual series, for EE, EL, HU, IT and UK data based on first three quarters of 2018).
Source: Eurostat, OECD

Table C.4: **Social inclusion and health indicators**

	2012	2013	2014	2015	2016	2017
Expenditure on social protection benefits* (% of GDP)						
Sickness/healthcare	8.4	7.9	7.4	5.7	5.8	:
Disability	1.1	1.1	1.1	0.8	0.8	:
Old age and survivors	6.9	6.8	6.3	4.9	5.1	:
Family/children	2.2	2.1	1.8	1.4	1.3	:
Unemployment	3.2	2.9	2.5	1.8	1.5	:
Housing	0.7	0.7	0.6	0.5	0.5	:
Social exclusion n.e.c.	0.3	0.2	0.2	0.1	0.1	:
Total	22.8	21.7	19.8	15.1	15.2	:
of which: means-tested benefits	7.1	6.9	6.2	4.5	4.3	:
General government expenditure by function (% of GDP, COFOG)						
Social protection	15.9	15.1	13.8	10.4	9.9	:
Health	7.5	7.2	6.8	5.3	5.2	:
Education	4.9	4.7	4.3	3.3	3.3	:
Out-of-pocket expenditure on healthcare (% of total health expenditure)	13.6	14.1	14.2	13.6	13.0	:
Children at risk of poverty or social exclusion (% of people aged 0-17)*	33.5	34.4	30.4	28.8	27.3	25.2
At-risk-of-poverty rate[1] (% of total population)	16.6	15.7	16.4	16.3	16.6	15.6
In-work at-risk-of-poverty rate (% of persons employed)	5.6	5.0	5.4	4.8	4.8	5.1
Severe material deprivation rate[2] (% of total population)	9.8	9.9	8.4	7.5	6.5	5.2
Severe housing deprivation rate[3], by tenure status						
Owner, with mortgage or loan	0.0	0.4	0.0	0.8	0.0	0.2
Tenant, rent at market price	1.2	2.3	1.6	0.6	3.1	1.3
Proportion of people living in low work intensity households[4] (% of people aged 0-59)	23.4	23.9	21.0	19.2	18.2	16.2
Poverty thresholds, expressed in national currency at constant prices*	11399	11253	11373	12193	12597	12888
Healthy life years (at the age of 65)						
Females	12.2	12.1	12.3	12.0	13.2	:
Males	10.9	10.9	11.4	11.4	12.0	:
Aggregate replacement ratio for pensions[5] (at the age of 65)	0.4	0.4	0.4	0.4	0.4	0.3
Connectivity dimension of the Digital Economy and Society Index (DESI)[6]	:	:	46.2	55.5	60.7	64.7
GINI coefficient before taxes and transfers*	57.0	58.2	57.5	55.1	54.6	:
GINI coefficient after taxes and transfers*	29.9	30.0	30.8	29.8	29.5	:

* Non-scoreboard indicator
(1) At-risk-of-poverty rate (AROP): proportion of people with an equivalised disposable income below 60 % of the national equivalised median income.
(2) Proportion of people who experience at least four of the following forms of deprivation: not being able to afford to i) pay their rent or utility bills, ii) keep their home adequately warm, iii) face unexpected expenses, iv) eat meat, fish or a protein equivalent every second day, v) enjoy a week of holiday away from home once a year, vi) have a car, vii) have a washing machine, viii) have a colour TV, or ix) have a telephone.
(3) Percentage of total population living in overcrowded dwellings and exhibiting housing deprivation.
(4) People living in households with very low work intensity: proportion of people aged 0-59 living in households where the adults (excluding dependent children) worked less than 20 % of their total work-time potential in the previous 12 months.
(5) Ratio of the median individual gross pensions of people aged 65-74 relative to the median individual gross earnings of people aged 50-59.
(6) Fixed broadband take up (33%), mobile broadband take up (22%), speed (33%) and affordability (11%), from the Digital Scoreboard.
Source: Eurostat, OECD

Table C.5: **Product market performance and policy indicators**

Performance indicators	2012	2013	2014	2015	2016	2017
Labour productivity per person[1] growth (t/t-1) in %						
Labour productivity growth in industry	0.42	-7.96	9.60	72.22	0.24	5.03
Labour productivity growth in construction	3.83	6.23	-2.31	-8.17	5.54	6.51
Labour productivity growth in market services	-1.82	-0.24	5.54	10.32	2.54	3.80
Unit Labour Cost (ULC) index[2] growth (t/t-1) in %						
ULC growth in industry	0.88	7.43	-3.79	-40.81	-1.68	-3.07
ULC growth in construction	-7.32	-5.63	8.12	9.43	1.74	-3.73
ULC growth in market services	5.14	-0.78	-2.79	-4.14	0.82	-1.23
Business environment	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Time needed to enforce contracts[3] (days)	650	650	650	650	650	650
Time needed to start a business[3] (days)	10.0	10.0	6.0	6.0	5.0	5.0
Outcome of applications by SMEs for bank loans[4]	1.24	0.79	1.23	0.73	0.26	0.73
Research and innovation	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
R&D intensity	1.56	1.57	1.55	1.19	1.19	1.05
General government expenditure on education as % of GDP	4.90	4.70	4.30	3.30	3.30	:
Employed people with tertiary education and/or people employed in science and technology as % of total employment	54	55	55	55	55	56
Population having completed tertiary education[5]	35	37	36	38	38	40
Young people with upper secondary education[6]	88	90	93	93	94	94
Trade balance of high technology products as % of GDP	2.23	1.98	0.57	2.34	2.80	4.40
Product and service markets and competition				**2003**	**2008**	**2013**
OECD product market regulation (PMR)[7], overall				1.58	1.35	1.45
OECD PMR[7], retail				0.87	1.53	1.53
OECD PMR[7], professional services				1.60	1.25	1.25
OECD PMR[7], network industries[8]				3.32	2.49	2.21

(1) Value added in constant prices divided by the number of persons employed.
(2) Compensation of employees in current prices divided by value added in constant prices.
(3) The methodologies, including the assumptions, for this indicator are shown in detail here: http://www.doingbusiness.org/methodology.
(4) Average of the answer to question Q7B_a. "[Bank loan]: If you applied and tried to negotiate for this type of financing over the past six months, what was the outcome?". Answers were codified as follows: zero if received everything, one if received 75% and above, two if received below 75%, three if refused or rejected and treated as missing values if the application is still pending or don't know.
(5) Percentage population aged 15-64 having completed tertiary education.
(6) Percentage population aged 20-24 having attained at least upper secondary education.
(7) Index: 0 = not regulated; 6 = most regulated. The methodologies of the OECD product market regulation indicators are shown in detail here: http://www.oecd.org/competition/reform/indicatorsofproductmarketregulationhomepage.htm
(8) Aggregate OECD indicators of regulation in energy, transport and communications (ETCR).
Source: European Commission; World Bank — Doing Business (for enforcing contracts and time to start a business); OECD (for the product market regulation indicators); SAFE (for outcome of SMEs' applications for bank loans).

Table C.6: **Green growth**

Green growth performance		2012	2013	2014	2015	2016	2017
Macroeconomic							
Energy intensity	kgoe / €	0.08	0.08	0.07	0.06	0.06	0.05
Carbon intensity	kg / €	0.33	0.33	0.30	0.25	0.24	-
Resource intensity (reciprocal of resource productivity)	kg / €	0.52	0.57	0.50	0.41	0.42	0.43
Waste intensity	kg / €	0.07	-	0.08	-	-	-
Energy balance of trade	% GDP	-3.0	-3.2	-2.7	-1.5	-1.1	-1.2
Weighting of energy in HICP	%	12.70	11.67	11.15	10.62	8.84	8.50
Difference between energy price change and inflation	%	7.9	3.0	1.0	-4.9	-4.9	0.8
Real unit of energy cost	% of value added	4.4	4.6	4.4	4.8	5.5	-
Ratio of environmental taxes to labour taxes	ratio	0.18	0.19	0.19	0.19	0.19	-
Environmental taxes	% GDP	2.4	2.5	2.4	1.9	1.9	1.8
Sectoral							
Industry energy intensity	kgoe / €	0.06	0.06	0.05	0.03	0.03	0.03
Real unit energy cost for manufacturing industry excl. refining	% of value added	5.9	6.7	6.4	6.7	7.0	-
Share of energy-intensive industries in the economy	% GDP	3.1	3.1	3.1	2.5	2.4	2.3
Electricity prices for medium-sized industrial users	€ / kWh	0.14	0.14	0.14	0.14	0.13	0.12
Gas prices for medium-sized industrial users	€ / kWh	0.04	0.04	0.04	0.04	0.03	0.03
Public R&D for energy	% GDP	0.00	0.00	0.00	0.00	0.00	0.00
Public R&D for environmental protection	% GDP	0.01	0.00	0.00	0.00	0.01	0.00
Municipal waste recycling rate	%	36.6	36.6	39.8	-	40.7	-
Share of GHG emissions covered by ETS*	%	29.4	26.8	27.4	27.9	28.8	-
Transport energy intensity	kgoe / €	0.74	0.76	0.77	0.74	0.76	0.73
Transport carbon intensity	kg / €	1.92	1.96	1.93	1.90	1.88	-
Security of energy supply							
Energy import dependency	%	83.8	91.7	86.2	88.9	69.1	67.1
Aggregated supplier concentration index	HHI	19.9	15.3	13.9	13.4	6.5	-
Diversification of energy mix	HHI	0.32	0.35	0.33	0.33	0.34	0.34

All macro intensity indicators are expressed as a ratio of a physical quantity to GDP (in 2010 prices)
Energy intensity: gross inland energy consumption (in kgoe) divided by GDP (in EUR)
Carbon intensity: greenhouse gas emissions (in kg CO2 equivalents) divided by GDP (in EUR)
Resource intensity: domestic material consumption (in kg) divided by GDP (in EUR)
Waste intensity: waste (in kg) divided by GDP (in EUR)
Energy balance of trade: the balance of energy exports and imports, expressed as % of GDP
Weighting of energy in HICP: the proportion of 'energy' items in the consumption basket used for the construction of the HICP
Difference between energy price change and inflation: energy component of HICP, and total HICP inflation (annual % change)
Real unit energy cost: real energy costs as % of total value added for the economy
Industry energy intensity: final energy consumption of industry (in kgoe) divided by gross value added of industry (in 2010 EUR)
Real unit energy costs for manufacturing industry excluding refining : real costs as % of value added for manufacturing sectors
Share of energy-intensive industries in the economy: share of gross value added of the energy-intensive industries in GDP
Electricity and gas prices for medium-sized industrial users: consumption band 500–20 00MWh and 10 000–100 000 GJ; figures excl. VAT.
Recycling rate of municipal waste: ratio of recycled and composted municipal waste to total municipal waste
Public R&D for energy or for the environment: government spending on R&D for these categories as % of GDP
Proportion of GHG emissions covered by EU emissions trading system (ETS) (excluding aviation): based on GHG emissions (excl land use, land use change and forestry) as reported by Member States to the European Environment Agency.
Transport energy intensity: final energy consumption of transport activity (kgoe) divided by transport industry gross value added (in 2010 EUR)
Transport carbon intensity: GHG emissions in transport activity divided by gross value added of the transport industry
Energy import dependency: net energy imports divided by gross inland energy consumption incl. consumption of international bunker fuels
Aggregated supplier concentration index: covers oil, gas and coal. Smaller values indicate larger diversification and hence lower risk.
Diversification of the energy mix: Herfindahl index covering natural gas, total petrol products, nuclear heat, renewable energies and solid fuels
* European Commission and European Environment Agency
Source: European Commission and European Environment Agency (Share of GHG emissions covered by ETS); European Commission (Environmental taxes over labour taxes and GDP); Eurostat (all other indicators)

ANNEX D: INVESTMENT GUIDANCE ON COHESION POLICY FUNDING 2021-2027 FOR IRELAND

Building on the Commission proposal for the next Multi-Annual Financial Framework for the period 2021-2027 of 2 May 2018 (COM (2018) 321), this Annex D ([60]) presents the preliminary Commission services views on priority investment areas and framework conditions for effective delivery for the 2021-2027 Cohesion Policy. These priority investment areas are derived from the broader context of investment bottlenecks, investment needs and regional disparities assessed in the report. This Annex provides the basis for a dialogue between Ireland and the Commission services in view of the programming of the cohesion policy funds (European Regional Development Fund, European Social Fund Plus).

Policy Objective 1: A Smarter Europe - Innovative and smart industrial transformation
Ireland is considered a strong innovator while none of its three regions are innovation leaders. The country continues to lag behind in the level of investment in research and innovation that affects leveraging business investments in research and innovation, the linkages between research and enterprises and the creation of patented intellectual assets and innovation outcomes. Business research and innovation investment is concentrated on a small number of foreign multinationals operating in a few sectors only in Ireland. Innovation capacity, capability, and the ability of Irish-owned firms to fully utilise new technologies is weakened in particular by low research and innovation levels. To help create a balance in research and innovation between the foreign multinationals and domestic companies, high priority investment needs ([61]) have therefore been identified to provide adequate public funding by new targeted forms of measures that address Irish small and medium-sized enterprises specific needs in research and innovation, **create a stronger, targeted innovation capacity and capability in and for Irish domestic small and medium-sized enterprises based on a reinforced link with cooperation with research centres and large businesses, and also based on a reinforced link with evolving Smart Specialisation areas and a more effective and faster innovation diffusion**, and in particular to: • enhance Research and Innovation capacities and the uptake of advanced technologies; • enhance Competitiveness and growth of Irish-owned small and medium-sized enterprises; • strengthen innovation performance in all regions and foster productivity growth by prioritising smart specialisation areas on the basis of national and regional needs and potential, including green innovation; • encourage cooperation activities on corresponding Smart Specialisation priorities and exchange of experience (inter-regional among the Irish regions and including with neighbouring countries, clusters and in the context of the EU Atlantic Strategy). This would also help to address persisting regional differences in the research and development intensity. Stimulate interregional cooperation in new value chains, also with other countries; • strengthen eco-innovation and research, development and innovation focusing on green and blue innovation, including in the area of water, innovation on clean energies, climate change mitigation and low-carbon technologies and on making Ireland a more circular economy. This means in practice, in particular, to • create stronger linkages between multinationals and domestic firms to improve innovation diffusion (technological spill-overs); stronger cooperation between firms and public research centres to strengthen the innovation capacities of domestic small and medium-sized enterprises (improving the relatively weak science-business linkages and capitalise on Ireland's scientific

([60]) This Annex is to be considered in conjunction with the EC Proposal for a Regulation of the European Parliament and of the Council on the European Regional Development Fund and on the Cohesion Fund COM(2018) 372 and the EC Proposal for a Regulation of the European Parliament and of the Council on the European Social Fund Plus COM(2018) 382, in particular as regards the requirements for thematic concentration and urban earmarking outlined in these proposals.

([61]) The intensity of needs is classified in three categories in a descending order - high priority needs, priority needs, needs.

excellence); reinforce Irish small and medium-sized enterprises absorption capacities to successfully apply new technologies, in particular in low-carbon and clean energy technologies; incentivise domestic small and medium-sized enterprises to engage in knowledge investments (i.e. in research and innovation) and in human capital investments (i.e. lifelong learning to improve managerial and digital skills);

- invest in Irish firms' capacity to internalise external knowledge, spill-overs in innovation and new technologies in order to participate at a higher level in global value chains; foster public and business investment in research and innovation; overcome barriers to research and innovation activity; increase the number of innovative indigenous firms; enhance cooperation and exchange of experience (inter-regional, including with neighbouring countries, clusters, in the EU Atlantic Strategy context); link regional research and innovation actors to industrial stakeholders from different Member States;
- Use innovation as a way to reduce energy consumption and greenhouse gas emissions. This could be through promotion of innovative energy efficiency solutions in businesses, including in their premises, installations and processes. In addition, the use of innovative renewable energy technologies could also contribute to this goal;
- create policies and schemes to overcome barriers to innovation take-up; further develop industrial clusters that include small and medium-sized enterprises, within and outside national borders.

The improvement in economic conditions over the last two years has translated itself into close to full employment. This has led to shortages of high-skilled labour and a mismatch between skills available and the needs of Irish firms to upgrade their own skills levels and competitiveness. Irish firms continue to face challenges/lose workforce to established foreign multinational companies, in particular regarding more highly skilled employees. Ireland should look to improve the match between the supply of and demand for SME-relevant skills, in particular managerial and digital skills. High priority, targeted investment needs have therefore been identified for the **development of skills for Smart Specialisation, industrial transition and entrepreneurship**, in synergy with small and medium-sized enterprises-relevant lifelong learning actions and upskilling under Policy Objective 4, and in particular to:

- develop and upgrade skills for smart specialisation, industrial transition and entrepreneurship;
- reap the benefits of digitalisation for companies and citizens via the 2025 EU Gigabit Society compatible broadband speeds being delivered from the ERDF 2014-2020 period.

This means in practice, in particular, to:

- foster innovation management in Irish SMEs, in particular with regard to upgrading managerial skills and the need to address the issue of smart industrial transition; integrate high education and vocational excellence with national, regional and transnational innovation, its diffusion and skills development systems;
- create new business models and forms of employment arising from the digital transformation, whilst ensuring fair working conditions and social protection; help the small and medium-sized enterprises across the country to use superfast and ultrafast broadband being delivered to allow such enterprises to increase their competitiveness, to innovate, increase productivity, and to reach new markets and customers, and grow rapidly; foster the adoption of digital technologies in Irish small and medium-sized enterprises; enable Business-to-business, Business-to-customer and Customer-to-customer new business opportunities.

Policy Objective 4: A more social Europe – Implementing the European Pillar of Social Rights
The female inactivity rate is high due to caring responsibilities. Investment needs have therefore been identified to **promote women's labour market participation and a better work-life balance**, and in particular to: • strengthen work-life balance policies and support labour market reintegration; • enhance access to affordable, sustainable and high-quality childcare and long-term care services.
Ireland has the highest share of people living in households with very low work intensity and the lowest employment rate of people with disabilities. High priority investment needs have therefore been identified to **improve access to employment for all jobseekers including the inactive and under-represented groups**, and in particular to: • support active labour market policies with more targeted and tailored skills specific training, well-designed wage and recruitment subsidies, as well as basic skills development and lifelong learning policies, including digital skills; • support and develop services to improve the employment situation of persons with disabilities; • improve activation and integrated policy solutions for those furthest away from the labour market.
Severe social housing shortages remain and homelessness is rising. Although the poverty rate has slightly decreased in recent years, there is still a need for food aid to the most deprived. Investment needs have therefore been identified to **promote the social integration of people at risk of poverty or social exclusion and to address material deprivation**, and in particular to: • prevent and reduce homelessness and housing exclusion, including through the provision of social housing, and improved accessibility of products and social services to vulnerable groups; • promote the social integration of children at risk of poverty and social exclusion; • ensure that housing actions are part of an integrated policy response; • provide food and basic material assistance to the most deprived.
Factors for effective delivery of Cohesion policy
• ensuring a partnership based delivery model by strengthening the capacity of beneficiaries, stakeholders, social partners, civil society organisations and other bodies; • ensure that Managing Authorities have sufficient resources to manage the Operational Programme(s); • improved public procurement procedures and performance; • key elements to ensure an effective delivery of the policy objectives are innovative actions, including social innovation; • broader use of financial instruments and/or contributions to an Irish compartment under InvestEU for revenue-generating and cost-saving activities.

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