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# Why has Labour Market Participation not fully recovered in Ireland since the Recession?

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#### **European Commission**

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# Why has Labour Market Participation not fully recovered in Ireland since the Recession?

By Violaine Faubert

#### **Abstract**

In recent years, the Irish economy has experienced a sustained expansion phase and the unemployment rate is approaching pre-crisis levels. However, ten years after the crisis, the labour market participation rate, a crucial determinant of labour supply, has not recovered as strongly as expected. Ireland stands out from the EU average, where the activity rate has increased continuously.

The pre-crisis peak in the Irish activity rate mainly reflected increased female participation from a low base and the expansion of the labour force through immigrants, in particular EU citizens, who displayed a higher activity rate than Irish nationals.

Two structural factors account for the sharp decline in activity observed since 2007. The activity rate of young people (15-24), which used to be extremely high, has converged towards the EU average, as young people have been staying longer in education and training. In addition, the age distribution of the working age population is less supportive. The share of those aged 25 34, whose activity rate is typically highest, has shrunk, while that of individuals over 55, whose activity rate is typically lower, is increasing.

Various policy levers could bolster the activity rate. Active labour market policies could improve access to employment for inactive people. As female labour market participation remains far below that of men, bringing more women into the workforce could partly offset the sluggishness of the activity rate. The further increase in the state pension age planned over the next decade could also encourage longer careers. As the impact of these policies would likely materialise only slowly, any further increase in the activity rate is most likely to be driven by net inward migration in the short run.

**Keywords:** employment, migration, Ireland, labour market participation rate, labour supply.

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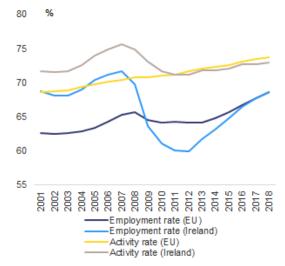
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#### Introduction

Ten years after the start of the crisis, the Irish labour market participation rate, a crucial determinant of labour supply, has not fully recovered. The Irish economy has experienced a sustained expansion phase and unemployment rate (5.8% in 2018) approaching pre-crisis levels. Yet the activity rate —the fraction of the working-age population either working or looking for a job—remained in 2018 slightly below the levels observed in the early 2000s, before the construction boom, and 4.5pps below its 2007 peak for individuals aged 15 to 74 years.

Given the role of labour supply in determining actual and potential economic growth, it is crucial to understand why the activity rate has not bounced back as the Irish economy recovered. Fostering employment is one of the priorities of the Europe 2020 Strategy for sustainable and inclusive growth, which aims at ensuring the sustainability of Europe's social model through competitiveness and job creation. Increasing activity would also benefit public finances. One of the headline targets of the Europe 2020 strategy aims at raising the employment rate of those aged 20 to 64 years the fraction of the working age population in employment. Although Ireland has already achieved its 2020 national target for the employment rate, its employment rate remains below its pre-crisis level, contrary to the EU average (Graph 1). The average activity rate in the EU, which was lower than that of Ireland before the crisis, has persistently increased over the last decade, whereas it remains below its precrisis level in Ireland. Against this background, this note analyses the structural and cyclical drivers of the Irish activity rate. It describes the difference in participation between Irish nationals and foreign nationals, explains the medium term outlook for the activity rate and highlights policy options.

Graph 1: Activity and employment rates (% of working age population, 15-64)



Source: Eurostat

# Cyclical and structural determinants of labour market participation

Labour market activity is largely determined by the age distribution of the population. Participation usually follows an inverted U shape over the life cycle: it rises in youth, flattens through the working years, and falls with retirement. Prime-age workers (25 to 54) thus play a crucial role in shaping the aggregate activity rate. By contrast, as younger people engage in education and older people move into retirement, their respective activity rates are reduced. Alongside the age composition. participation depends on cohort effects: the attachment of a given cohort to the labour force depends on institutions. This effect is particularly relevant for women in Ireland (Byrne and O'Brien, 2016).

The design of the taxation system also plays a role. An unbalanced sharing of family caring responsibilities can dampen the labour supply of women, while the tax and welfare benefits systems influence labour supply decisions. Financial incentives embedded in pension systems influence retirement decisions, while an increase in the relative marginal effective tax rate for households' second earners impacts

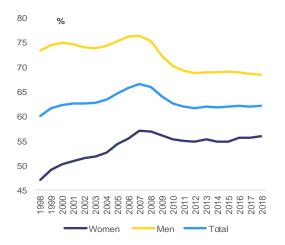
negatively female labour market participation (Christiansen et al., 2016).

Participation fluctuates over the business cycle. It increases in periods of expansion, as labour demand is high, and tends to decrease in recessions, as discouraged workers quit the labour force. Diminished job prospects during recessions also induce students to stay longer in education. Cyclical fluctuations may have opposite impacts on men and women. The "added workers effect" suggests that more women are likely to enter the labour force during a recession to compensate for income lost as the crisis hits their male partners.

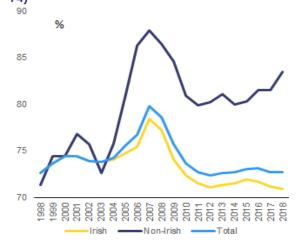
## Recent trends in labour market participation in Ireland

In Ireland, the activity rate sharply increased in the decade to the financial crisis. The rise in activity of individuals aged 15-74, from 60.0% in 1998 to 66.6% in 2007, reflected a gradual increase in female labour market participation from a low base and a surge in male activity during the construction boom. Between 1998 and 2007, female activity rate increased by 10pps, to 57.0% (Graph 2). It was sustained by birth-year cohort effects (Byrne and O'Brien, 2016) reflecting changes in social norms and institutions. Rising educational levels, which translated into higher expected earnings, equal pay legislations, which contributed to the decrease in the gender wage gap (McGuinness et al., 2009), and favourable economic conditions were also supportive (Russell et al., 2009).

Graph 2: Activity rates by gender (% of working age population, 15-74)



Graph 3: Activity rates of Irish and non-Irish males (% of working age male population, 15-74)



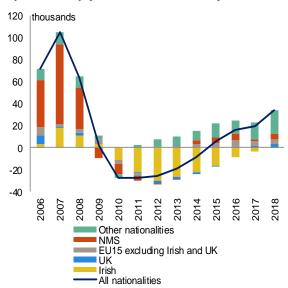
Source: Eurostat. Missing observation for 2005 filled by interpolation

The pre-crisis peak in male activity mainly reflected the enlargement of the labour force through immigration. Male activity rate rose more modestly than that of women (+3pps between 1998 and 2007, to 76.4%), though from a higher base. Most of the increase occurred between 2004 and 2007, during the construction boom. The peak in male activity mostly reflected that of non-Irish nationals (Graph 3)(i). As the activity rate of the Irish males was already high, net migration met the increased labour demand during the boom. Net inward migration surged after the 2004 EU enlargement (Graph 4), as Ireland was among only three countries that granted citizens of the new Member States full access to its labour market from 2004 (Barrett et al., 2014). It represented up to 4% of the labour force in 2007 (Graph 5).

The pre-crisis upward trend in the female activity rate resumed after the cyclical downturn, though at a slower pace, whereas male activity has not recovered. Aggregate activity fell sharply during the recession (-5pps) and has hovered around 62% since 2011 (Graph 2). However, female activity rate declined only marginally (-2pps) from peak to trough. Higher educational attainment and sectoral specialisation (many women work in the public sector) explain why women were less exposed to the crisis (Bercholz and Fitzgerald, 2016). The pre-crisis upward trend in female activity rate resumed after the downturn (Graph 2), although it remains far below that of men. However, recent increases in female labour market participation are much more moderate than in the early 2000s.

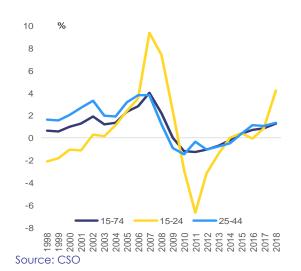
Male activity shrank during the crisis (-8pps) when jobs in construction and manufacturing were badly hit. The drag from prime age males (Graph 6) mainly reflected a cyclical effect. Their contribution turned positive with the recovery, as the number of underemployed part-time workers and discouraged workers receded. By contrast, the participation of younger men, the group that contributed most to the decline in the activity rate, did not bounce back as the economy recovered.

Graph 4: Contribution to net inward migration by nationality (thousands individuals)

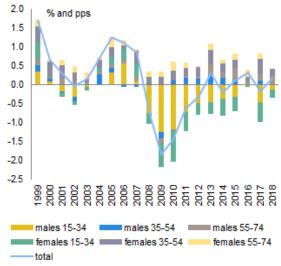


Source: CSO Note: (1) EU15 excluding Ireland and UK: countries before the 2004 enlargement. (2) NMS: 10 countries that joined the EU in 2004, along with Bulgaria and Romania, who joined in 2007, and Croatia, who joined in 2013.

Graph 5: Net migration as percentage of the labour force (15-74) by age

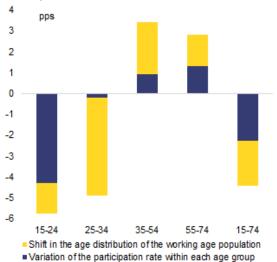


Graph 6: Contribution to the annual change in the activity rate (15-74)



Source: CSO

Graph 7: Shift-share analysis of changes in activity between 2007 and 2018



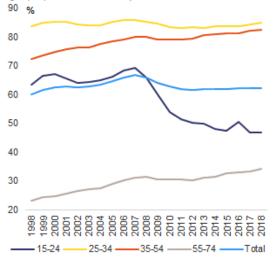
Source: CSO

Note: Changes in the activity rate are broken down into changes in participation rates within each age group (while holding the shares of each age group in the working age population fixed) and changes in the relative weights between the different age groups (while holding the participation rates of different age groups fixed).

The decrease in activity since 2007 reflects structural changes. A shift-share analysis shows that the lower activity of the 15-24 explains half of the 4.5pp fall in activity observed between 2007 and 2018 (Graph 7). The activity rate of young people, which was about 20pps above the EU average in the early 2000s, has now converged towards the EU average. The share of students in the working age population surged during the recession, especially for males, as the

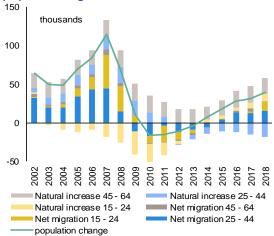
opportunity cost of continuing in education decreased at a time when unemployment was high (Bercholz and Fitzgerald, 2016). Hence, the majority of the young people who had exited the labour force but remained in Ireland returned to education (Conefrey, 2011). As the Irish growth model shifted away from construction towards internationally traded information technology and financial services, education and Irish nationality have become increasingly important to youth employment after 2006 (Kelly et al., 2014). This trend has not reversed as the economy recovered. In 2017, 89.6% of the inactive 15-24 population reported education or training as the main reason for inactivity. The increased engagement in education could bolster future activity and potential output as better educated cohorts would replace lower-educated earlier cohorts. However, the declining share of the 15-24 in the working age population (-3pps over the past decade, to 15 %) could limit this positive impact. Had the activity rates of the different age groups remained unchanged, the aggregate activity rate would have been 2.3pps higher in 2018 (Graph 7).

Graph 8: Activity rates by age (% of the working age population, 15-74)



Source: CSO

Graph 9: Contribution to annual increase in population aged 15-64



Source: CSO

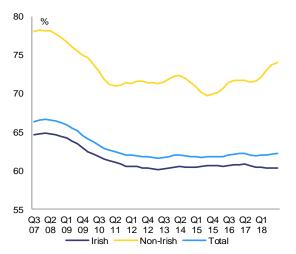
Lower participation also reflects adverse changes in the age distribution of the population. The relative weight of the age group (25-34) whose activity rate is highest (Graph 8) receded over the past decade by 5pps, owing to the fall in the birth rate that occurred in the mid-1980s (Byrne and O'Brien, 2016). By contrast, both the relative weight and the activity rate of those over 55 picked up, on the back of the increase in the age of eligibility for the state pension announced in 2010 and implemented in 2014. The positive contribution of older workers did not offset the drag from younger workers (Graph 7). Had the age distribution remained unchanged, the activity rate would have been 2.2pp higher in 2018.

Net inward migration has provided an important source of labour since it turned positive in 2015. In recent years (Graph 9), inward migration has offset the natural decrease of the age group most likely to participate in the labour force (25-44).

Non-Irish nationals are filling labour and skill shortages in a tight labour market. Non-Irish nationals(ii) accounted for 37% of the cumulated growth in employment between 2015 and 2018<sup>(iii)</sup>. The activity rate of non-Irish nationals was 14pps higher than that of the Irish in 2018, which partly reflects the younger age of immigrants, and has been rising since 2015 (+3pps), whereas that of Irish nationals remains stable (Graph 10). In recent years, non-Irish nationals significantly contributed employment of the fastest-growing sectors, such as ICT, accommodation and food services and administrative and support services. In 2018, non-Irish nationals also contributed significantly to employment in construction, where skills and

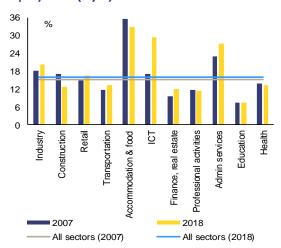
labour shortages are reported (Conefrey and McIndoe-Calder, 2018; Mc Quinn, 2018).

Graph 10: Activity rates by nationality (% of working age population, 15-74)



Source: CSO

Graph 11: Share of non-Irish nationals in employment (%) by economic sector



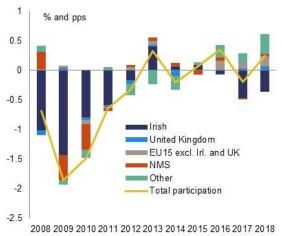
Source: CSO

Non-Irish nationals are overrepresented at the two ends of the skills' distribution, reflecting the duality of the Irish economy. They accounted for 16% of total employment in 2018 (Graph 11), but represent up to one-third of employment both in low-skilled (accommodation and food services) and high-skilled activities (information and communication technology, ICT). Contrary to the 2000s, EU15<sup>(iv)</sup> and extra EU nationals made the bulk of the increase in activity in recent years (Graph 12).

The increased qualification level of immigrants reflects the growth in labour demand for high-skilled activities. In 2018, 49% of immigrants had tertiary education, compared to less than 40% before the crisis.

While nationals from new Member States remain overrepresented in industry, construction, and accommodation and food activities, EU 15 nationals are overrepresented in ICT. This polarisation reflects the duality of the economy, with high-skilled migrants working for the sector by multinationals dominated (ICT) migrants lower-skilled employed predominantly domestic part of the economy. In particular, non-Irish nationals represent an increasing share of employment in ICT (30% in 2018, vs 17% in 2007) and are filling the shortage of ICT skills that Ireland suffers (European Commission, 2019).

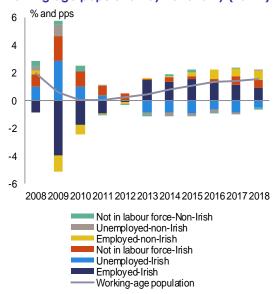
Graph 12: Contribution to annual change in activity by nationality (15-74)



Source: CSO

Note: (1) EU15 excluding Ireland and UK: countries before the 2004 enlargement. (2) NMS: 10 countries that joined the EU after 2004.

Graph 13: Contribution to annual changes in the working age population by nationality (15-74)



Source: CSO

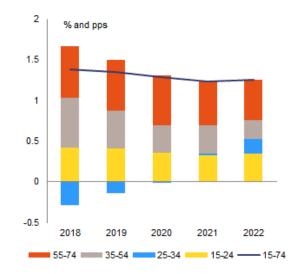
## Options to increase labour market participation

The rise in inactivity since 2007 has been driven primarily by Irish nationals. Outward migration from both Irish and non-Irish (Graph 4) limited the rise in unemployment during the economic downturn. Many of the immigrants from Central and Eastern European Member States worked in lower earning and less-skilled jobs, where job losses were particularly acute. While non-Irish nationals accounted for 25% of all job destruction in 2009 and 2010, their contribution to the rise in unemployment and inactivity was far more limited (Graph 13) due to massive emigration. The rise in inactivity during the downturn has thus been driven by Irish nationals, as discouraged Irish workers left the labour force, but did not all emigrate.

distribution The age and educational characteristics of inactive individuals pose challenges for activation policies. In 2017, 50% of inactive individuals were over 50 (below the EU average of 59%) and 46% had lower secondary or less education (against 43% in the EU). Inactive individuals are also weakly attached to the labour market, with only a small proportion (8.5% in 2018) classified as being in the potential additional labour force. Against this background, the government's Action Plan for Jobless Households aims at improving employment rates of inactive households, with a focus on jobless parents and people with disabilities.

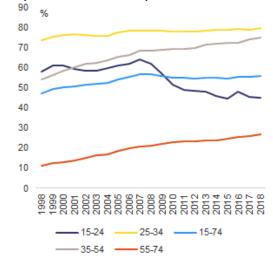
Demographic prospects suggest limited scope for increasing the activity rate of Irish nationals. According to the CSO's demographic projections(v), the prime age Irish national population will not contribute much to the labour supply in the medium term. In the next couple of years, the young and those over 55 are expected to represent two-thirds of the increase in the working age population (Graph 14). The contribution of the group whose activity rate is highest (25-34) is not expected to turn positive before 2021, on the back of the CSO's assumption of increased net inward migration. For illustrative purposes, we project a hypothetical activity rate by fixing the activity rates of the different age groups to their 2018 levels, while using the CSO's projections for the future age distribution. Under these assumptions, the activity rate would decrease by about 0.5pp by 2022. Against this background, in the short term, a further increase in activity is most likely to be driven by a further rise in inward migration.

Graph 14: Contribution to the projected annual increase in population aged 15-74



Source: CSO

Graph 15: Female activity rates



Source: CSO

A moderate increase in the activity of workers over 55 could offset the drag from the shrinking share of younger cohorts in the working age population. We simulate the hypothetical impact of increased activity from workers over 55, using the CSO's demographic projections for the next four years. The simulation suggests that aggregate activity could stabilise at its 2018 level provided that the activity rate of those aged 55 to 74 years increased by about 0.5pp each year. This moderate increase corresponds to the average annual rise in the activity rate of those aged 55 to 74 years observed since the 2014 pension reform.

The further increases in the pension age planned over the next decade could sustain **activity.** The age of eligibility for the Irish state pension is set to increase by one year by 2021, and by a further year by 2028, to 68. Lacking pension income is associated with a significantly higher probability of working among older workers in Ireland, especially for men (Nolan Barrett, 2018). Older women are significantly less likely to work than men, and this effect is stronger among the married: women without immediate access to family-provided financial support need to work to support themselves, while married women prioritise caring responsibilities that reduce their labour force participation. Hence, the projected increase in the state pension age could support the activity rate of older men in particular(vi). The rise in participation observed since the 2014 pension reform has been higher for men, resulting in a higher participation gender gap for those over 65, suggesting that policies regarding the provision of care services could play a role in ensuring higher employment for older women.

The activity rate of women has scope for improvement. Ireland still suffers from a large gender gap in activity (12pps in 2017 against 10pps for the EU average). Female activity rate typically falls in late twenties and early-thirties (Graph 15) for family reasons. The activity rate of women over 45 remains low too, reflecting caring responsibilities for relatives. In 2018, 33.3% of inactive Irish females reported caring responsibilities as the main reason for inactivity, well above the EU average of 18.1%. The gender gap is particularly large for low educational levels(vii), reflecting the low opportunity cost of inactivity, whereas the returns to working for qualified women are sufficient to offset the costs of childcare (Bercholz and Fitzgerald, 2016). The labour supply of women has also scope for improvement through an increase in the number of hours worked. A higher proportion of women in employment work part-time (31% in 2018, against 12% for men). Women also work fewer hours: while part-time workers work a similar number of hours regardless of gender, women working full-time work fewer hours than men (12% less in 2018).

The educational level of inactive women is relatively high in Ireland. In 2018, 21% of inactive women had tertiary education in Ireland, against 14% in the EU average. Focusing on the younger cohorts, 10% of inactive women had tertiary education and were below 50 in Ireland in 2018. These figures suggest some scope for

increasing the supply of qualified labour by promoting female labour market participation. For illustrative purposes, we simulate the hypothetical impact of an increase in the participation rate of prime-age women, using the CSO's demographic projections for the next four years. A moderate increase of 0.5pps per year of their activity rate would stabilise the aggregate activity rate, all other things equal.

#### **Conclusions**

The decrease in activity since 2007 reflects two structural factors. First, the activity rate of young people, which stay longer in education, has decreased. The increased engagement in education of the young could bolster future activity and potential output as better educated cohorts would replace lower-educated earlier cohorts. Second, the decrease in activity over the past decade reflects the lower relative weight of the age group (25-34) whose activity rate is highest in the active population. This latter factor reflects adverse demographic changes that could hamper future participation.

Policies aimed at increasing female labour market participation could limit the adverse impact demographics. Promoting accessibility and affordability of care services for children and people with disabilities could participation improve female (European Commission, 2019). As a significant part of the gender wage gap in Ireland is due to differences in years of work experience and years out of the labour market for family reasons (Russel and Gannon, 2003), policies aimed at increasing continuity in women's employment are also likely to reduce the gender wage gap (McGuinness et al., 2009). The design of the tax and benefit system can also influence activity. The system of joint income taxation of households may reduce incentives for female labour market participation (European Commission, 2017), even though the marginal effective tax rate for second earners is relatively low in Ireland (OECD, 2016). Economic research suggests a relatively high responsiveness of female labour supply to financial incentives in Ireland (Bargain et al., 2014). The shift to a partial individualisation(viii) of the Irish income tax system between 2000 and 2002, which improved incentives for secondary earners to work, increased the activity rate of married women by about 5 pps (Doorley, 2018). Hence,

removing fiscal disincentives for secondary earners could improve activity.

A number of policy levers could tackle the challenges of low participation in the Irish labour market. Bringing more women into the workforce and encouraging longer careers could sustain participation. Upskilling the working age population could also address the shortage of specific skills (European Commission, 2019), most apparent in high-skilled activities which heavily rely on non-Irish nationals. Ensuring

affordable quality childcare, providing active integration support for inactive people and upskilling the adult working-age population are among the Country Specific Recommendations issued to Ireland by the Council of the European Union as part of the European Semester. As the impact of these policy interventions will likely materialise only slowly, the role of labour-market specific immigration is expected to remain important in the short term.

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- (\*) Demographic projections are based on CSO's scenario M1F1 (high net inward migration of 30 000 per annum by 2021 and fertility rate to remain at its 2016 level of 1.8). The most recent CSO's net migration figures for 2018 (34 000) are already above the range of the CSO's most optimistic scenario (30 000 individuals by 2021).
- (vi) The main motivation for a pension reform is to improve the sustainability of public finances rather than to offset trends in participation rates, and as such, there is no available assessment of the impact of the Irish pension reform on the activity rate. The +2pps increase in the participation rate of those over 65 observed since the increase in the state pension age to 66 in 2014 could have been influenced by other determinants unrelated to the policy change.

(vii) The participation gender gap amounts to 23pps for education levels below upper secondary education, against 9pps in the EU. Although the gap is lower for tertiary-educated individuals (8pps in 2017), it remains well above the EU average of 2pps.

(viii) Before the income tax reform in 2000, there were two tax bands in Ireland. Up to EUR 17 800 (the standard rate cut-off point), taxation was applied at 24%. Any additional income was taxed at 46%. Between 1999 and 2001, the standard rate tax bands for a single person and a two-earner couple were increased with no corresponding increase in the standard rate band for one-earner couples. The opportunity cost of remaining a one-earner couple rather than a two-earner couple therefore increased (Doorley, 2018). The individualisation of the income taxation system remains partial: Ireland went from a system of 100% transferability (i.e., married couples living together could be jointly assessed with double the entitlements of a single person of the standard rate tax band) in 1999 to 32% transferability in 2002. In 2019, the standard rate tax band for one-earner couples remains 25% above that of singles or two-earner couples.

<sup>&</sup>lt;sup>(i)</sup> The CSO's quarterly Labour Force Survey provides a break down between Irish nationals and people without Irish nationality from 2006 onwards. We thus rely on Eurostat annual data for the period before 2006. Observations are missing for 2005 in the Eurostat database, and the levels do not coincide between the two sources.

<sup>(</sup>ii) Two database are used to document the contribution of non-Irish nationals to the labour market. The CSO estimates migration flows by age and sex, while the Labour Force Survey (LFS) provides information on the stock of non-Irish nationals, which might have migrated long ago. The LFS provides information on the working age population and the labour force by nationality and economic sector since 2006.

<sup>(</sup>iii) While assessing the cyclical position in real-time is difficult for any economy, the high mobility of the labour supply can make it even harder in a small open economy like Ireland, where migration flows make up a relatively large share of the labour force. In the production function approach, net inward migration in periods of expansion sustains the labour input. Similarly, net outward migration during a recession dampens the labour force. Migration flows can lead to sharp revisions in the level of the trend labour force, and hence, in the level of the potential output, despite the absence of structural labour market reforms (Casey, 2018).

<sup>(</sup>iv) EU15 countries (excluding Ireland and UK) correspond to member countries before the 2004 enlargement.

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