

## **ESRI SPECIAL ARTICLE**

***Educational Attainment and Skill Utilisation in the  
Irish Labour Market: An EU Comparison***

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# EDUCATIONAL ATTAINMENT AND SKILL UTILISATION IN THE IRISH LABOUR MARKET: AN EU COMPARISON

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P. Redmond and A. Whelan<sup>1</sup>

## ABSTRACT

In recent years the Irish economy has experienced strong economic growth accompanied by significant improvements in the labour market. The unemployment rate in the second quarter of 2017 stands at 6.2 per cent (CSO, 2017), its lowest rate in nine years. In light of these improvements in the labour market, we examine the nature of current employment in Ireland with respect to the intensity of use of certain skills and the mismatch between the skills possessed by employees and those required to do their jobs. Furthermore, we consider the possible future sources of skilled labour supply by examining the characteristics of those currently unemployed and inactive in the labour market, as well as the ability of Ireland to attract high-skilled migrant workers. Our analysis reveals a high degree of skill underutilisation among Irish employees. The percentage of Irish workers reporting education or skill levels in excess of those required to do their job is the third highest of 28 EU countries. Our findings also indicate that, as was the case in recent decades, immigration may play an important role as a source of skilled labour in a tightening labour market.

## 1. INTRODUCTION

The unemployment rate in Ireland, as of Quarter 2, 2017, was 6.2 per cent (CSO, 2017), its lowest rate in nine years. As the economy improves and the labour market tightens, the issues facing the Irish economy today are likely to be very different from those which arose during the Great Recession, when the unemployment rate peaked at 15 per cent in 2011 and 2012. In this context, we examine the nature of current employment in Ireland with respect to the intensity of use of certain skills, as well as the mismatch between the skills possessed by employees and those required to do their jobs. In doing so, we draw comparisons between Ireland and the other 27 EU Member States by utilising the 2014 European Skills and Jobs Survey (ESJS).<sup>2</sup> We also consider the

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<sup>1</sup> We thank anonymous referees for comments; any remaining errors are the responsibility of the authors.

<sup>2</sup> Cedefop's ESJS is the first survey on skill mismatch carried out across all EU28 Member States (Cedefop, 2014). It examines the drivers of skill development and the evolution of skill mismatch in relation to the changing complexity of the skills and tasks required for individual's jobs. Related documents can be accessed at: [www.cedefop.europa.eu/en/events-and-projects/projects/european-skills-and-jobs-esj-survey](http://www.cedefop.europa.eu/en/events-and-projects/projects/european-skills-and-jobs-esj-survey).

possible future sources of skilled labour supply in a tightening labour market, by examining the characteristics of the unemployed and inactive workers in Ireland as well as the ability of Ireland to attract high-skilled migrant workers.

Skills mismatch is a broad term which incorporates a number of different concepts (McGuinness et al., 2017a). Vertical mismatch refers to a misalignment between the skills or education levels possessed by employees and those required to do their job. A large body of literature examines the consequences of overskilling and overeducation, describing scenarios whereby employees possess skills or education levels which exceed those required to do their job.<sup>3</sup> Therefore, overskilling and overeducation represent an underutilisation of existing skills.

It is important to point out that when discussing high rates of overeducation or overskilling, the policy implications are not about reducing education levels within a country, but rather on how to better utilise the existing skills of the labour force. Indeed, while individuals whose education is not fully utilised suffer a wage penalty relative to individuals with the same level of education in matched employment (see, e.g., McGuinness and Sloane, 2011), they earn a wage premium relative to their lower educated counterparts doing the same type of job (see e.g. Lindley, 2009). As such, there are positive wage returns associated with acquiring additional years of education, even for those individuals whose skills and education are underutilised.

In this paper, we also examine underskilling and undereducation, which refer to scenarios whereby employees possess skills and education levels which fall below those required to do their job. We also discuss the concept of skill shortages, which refers to unfilled or hard-to-fill vacancies due to a lack of suitably qualified or skilled candidates.

While policy recommendations, such as the country specific recommendations from the European Commission, often focus on skill shortages<sup>4</sup> (European Commission, 2017a), our analysis indicates that a relatively large proportion of Irish employees report skill underutilisation in their current jobs. Moreover, the Manpower Talent Shortage Survey 2015 suggests that skill shortages in Ireland are not as prevalent as in other developed economies, with the incidence of hard-to-fill vacancies due to a lack of suitably skilled candidates being the lowest out of

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<sup>3</sup> For a review, see McGuinness et al. (2017a).

<sup>4</sup> The European Commission (2017b) refer specifically to the National Skills Bulletin 2016 (EGSN, 2016) highlighting skill shortages in the areas of ICT, engineering, sales, logistics, health, business and finance.

42 countries. Nonetheless, even if they are not prevalent at an aggregate level, skill shortages may arise in certain specific occupations or sectors, thereby posing challenges for employers trying to fill specific types of jobs.

In terms of potential sources of skilled labour, we show that those currently experiencing unemployment have higher education levels than the inactive. In addition, despite a high number of people classified as 'inactive', only a very small percentage of these are shown to have a strong enough attachment to the labour market to be considered as a potential source of labour supply. Therefore, the scale and composition of those currently experiencing unemployment, when compared to the inactive, show greater potential in this regard. However, the overall numbers of potentially high-skilled employees, when considering both the unemployed and the inactive, are relatively small. Given this, and the potential continued growth in labour demand, immigration may play an important role. The ESJS data reveal that the share of foreign-born workers with tertiary education in Ireland is the third highest in the EU, at 57 per cent. As such, the high education level of immigrant workers in Ireland as well as a relatively highly educated pool of unemployed individuals suggests that Ireland appears well positioned to fill high-skilled jobs as they arise.

## **2. THE CURRENT LABOUR MARKET**

In this section we use recent labour market data from the 2017 Quarterly National Household Survey (QNHS) to give an overview of the current position of the Irish labour market. Table 1 outlines some of the main labour market and employment related statistics for the Irish economy. The unemployment rate has been declining for the last number of years. The current rate of 6.2 per cent represents a dramatic improvement compared to the rate of 15 per cent recorded during the economic crisis in 2011 and 2012. The labour force participation rate in Ireland declined with the onset of the Great Recession in 2008, however it has been stable in recent years and currently stands at 59.8 per cent. The percentage of employees working part-time is 22.2 per cent, down from 23.8 per cent in Quarter 1, 2016, and the percentage of employees on temporary contracts is 7.5 per cent, compared to 7.8 per cent in Quarter 1, 2016. Table 1 also presents descriptive statistics relating to educational attainment. Taking the adult population as a whole, those aged 25-64, Ireland has a highly educated population with 44 per cent educated to tertiary level and 37 per cent educated to upper secondary or post-secondary level. The percentage of

individuals educated to tertiary level in Ireland is above the OECD average of 35 per cent.<sup>5</sup>

**TABLE 1 LABOUR MARKET INDICATORS (QUARTER 2, 2017)**

	%
Unemployment rate (15-74 years)	6.2
Labour force participation rate (15+ years)	59.9
Temporary employees	7.5
Part-time employees	22.2
<b>Highest education level (aged 25-64 years)</b>	
Lower secondary or below	18.9
Upper secondary or post-secondary (non-tertiary)	36.7
Tertiary (short cycle / bachelor / master / doctoral)	44.4

*Source:* Quarterly National Household Survey.

*Notes:* The seasonally-adjusted unemployment rate is reported. Temporary and part-time employees are expressed as a percentage of all employees. The education levels relate to all individuals (unemployed, employed and inactive) aged 25-64 years.

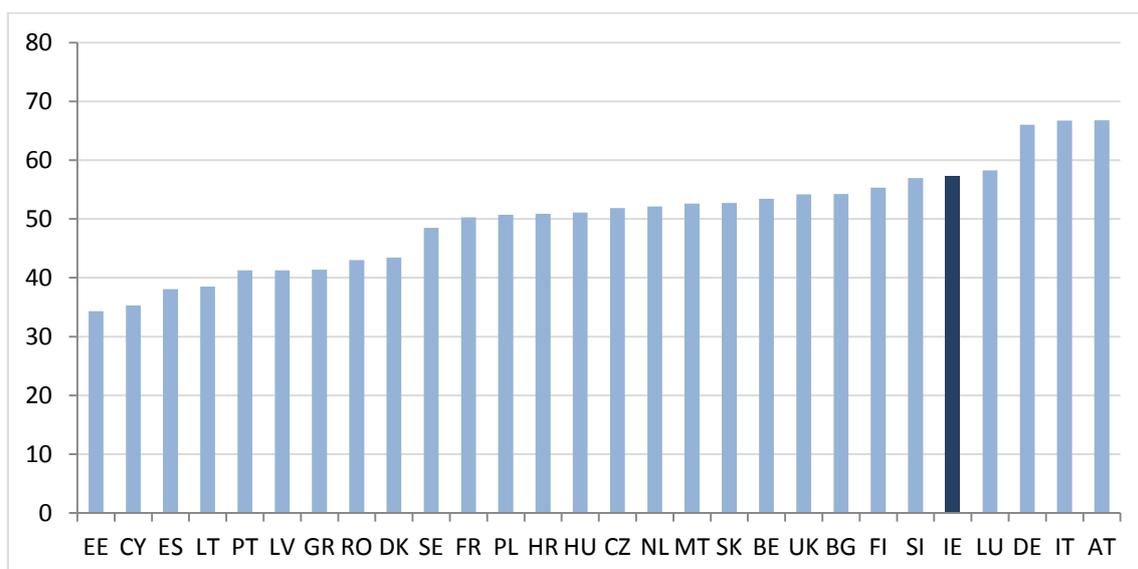
### 3. SKILL INTENSITY AND SKILLS MISMATCH

We examine the skill content of jobs in Ireland using the 2014 Cedefop European Skills and Jobs Survey (ESJS), which captures information on employees' skill levels and skill utilisation for 28 EU Member States. The survey contains the following question, 'Which of the following best describes the highest level of literacy skills required for doing your job?', with four possible responses; 1. Basic, 2. Advanced, 3. Not Applicable / Literacy Skills Not Required and 4. Don't Know. There are similar questions relating to numeracy and ICT skills. Figures 1-3 report the percentage of full-time employees who state that their jobs require advanced skills in the 28 EU Member States.<sup>6</sup> In terms of literacy skills (Figure 1) 57 per cent of Irish full-time employees state that their jobs require advanced literary skills. This is above the EU average of 50 per cent and ranks Ireland fifth highest out of 28 countries, behind Austria, Italy, Germany and Luxembourg. A similar pattern emerges when we look at numeracy skills (Figure 2), with 39 per cent of full-time employees in Ireland stating that their job requires advanced numeracy skills, the fifth highest of 28 countries. However, just 17 per cent of Irish employees report that their job requires advanced ICT skills (Figure 3), putting Ireland below the EU average, ranking 13th highest out of 28 countries. Figure 4 shows the proportion of jobs that are highly skill intensive across all three areas, numeracy, literacy and ICT. Just over 10 per cent of employees in Ireland rate their job as highly skill intensive across all three measures, which is the tenth highest of 28 countries.

<sup>5</sup> See OECD, 2016. Available at: [www.education.ie/en/Publications/Statistics/International-Statistical-Reports/Education-at-a-Glance-OECD-Indicators-2016-Briefing-Note.pdf](http://www.education.ie/en/Publications/Statistics/International-Statistical-Reports/Education-at-a-Glance-OECD-Indicators-2016-Briefing-Note.pdf).

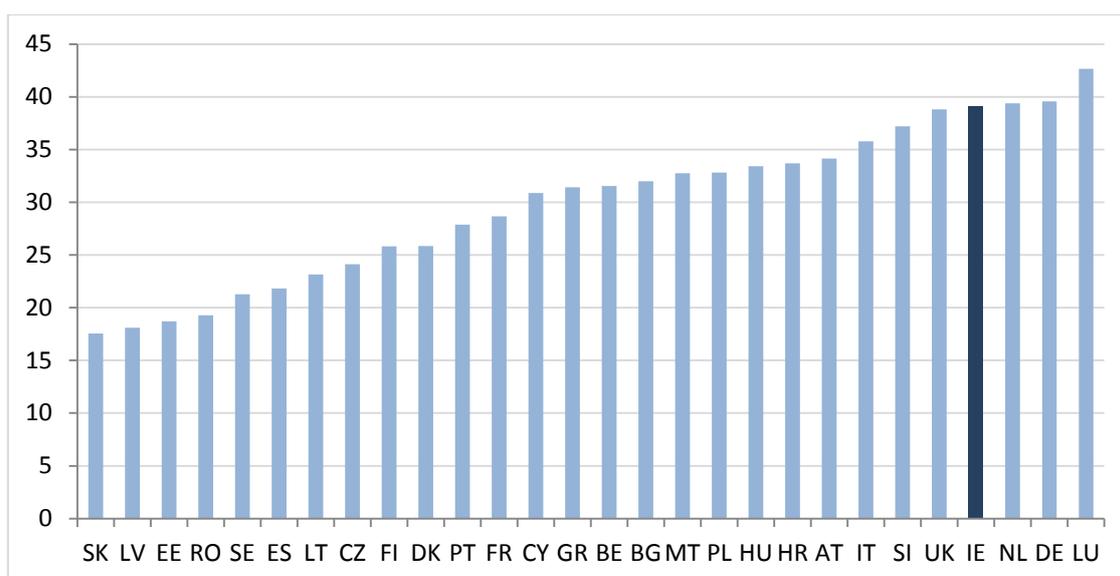
<sup>6</sup> A variable is created which equals one if employees state their job requires advanced skills and zero if employees state that basic skills are required or that the question is not applicable / skills not required.

**FIGURE 1 EMPLOYEES REPORTING THAT THEIR JOB REQUIRES ADVANCED LITERACY SKILLS (%)<sup>7</sup>**



Source: Cedefop European Skills and Jobs Survey, 2014.

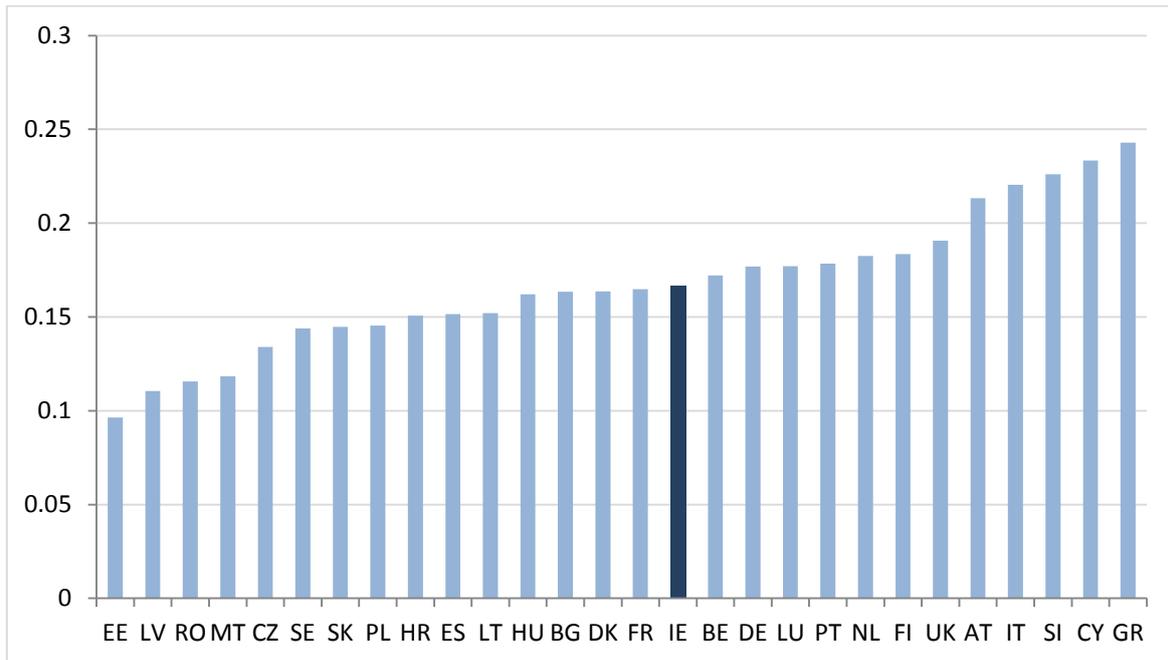
**FIGURE 2 EMPLOYEES REPORTING THAT THEIR JOB REQUIRES ADVANCED NUMERACY SKILLS (%)**



Source: Cedefop European Skills and Jobs Survey, 2014.

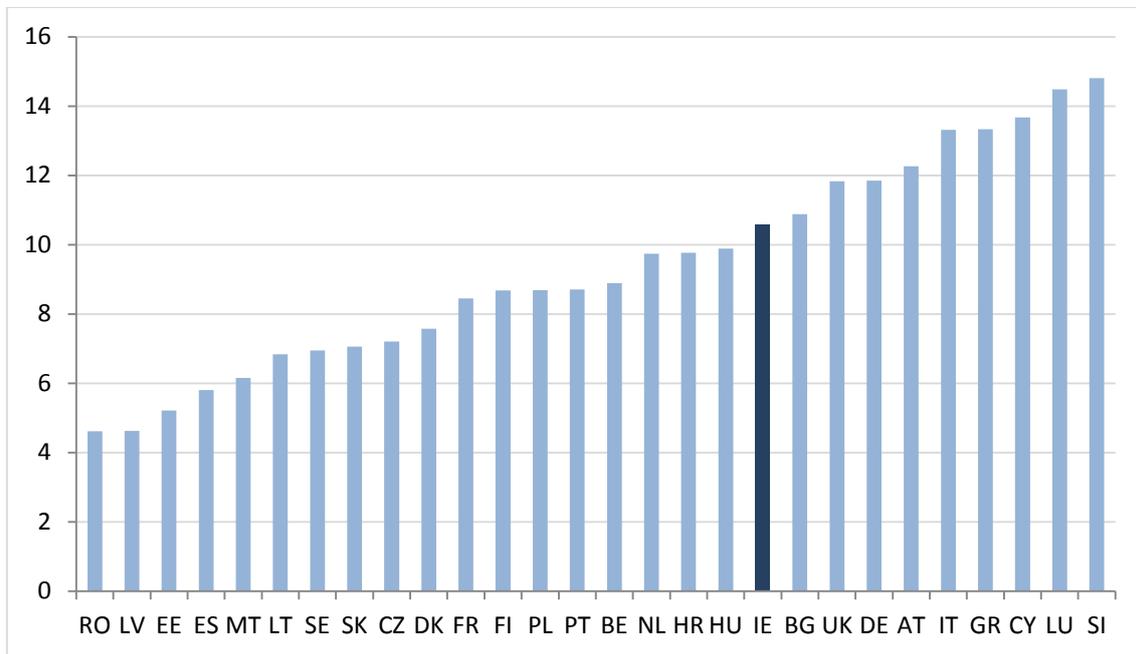
<sup>7</sup> The EU28 refers to the following countries: Belgium [BE], Bulgaria [BG], Czech Republic [CZ], Denmark [DK], Germany [DE], Estonia [EE], Ireland [IE], Greece [GR], Spain [ES], France [FR], Croatia [HR], Italy [IT], Cyprus [CY], Latvia [LV], Lithuania [LT], Luxembourg [LU], Hungary [HU], Malta [MT], Netherlands [NL], Austria [AT], Poland [PL], Portugal [PT], Romania [RO], Slovenia [SI], Slovakia [SK], Finland [FI], Sweden [SE], and United Kingdom [UK].

**FIGURE 3 EMPLOYEES REPORTING THAT THEIR JOB REQUIRES ADVANCED ICT SKILLS (%)**



Source: Cedefop European Skills and Jobs Survey, 2014.

**FIGURE 4 EMPLOYEES REPORTING THAT THEIR JOB REQUIRES ADVANCED NUMERACY, LITERACY AND ICT SKILLS (%)**



Source: Cedefop European Skills and Jobs Survey, 2014.

It is important to note that that the definition of ‘advanced skills’ is subjective and may vary across countries. For example, what employees in one country consider to be advanced skills may be considered basic in another country. Nonetheless, the data are informative as they capture intensity of skill use relative to a country

specific benchmark. For example, it could be the case that what employees in Ireland consider advanced ICT skills are of a higher level than other countries. Therefore, when answering the question, employees in each country are applying their own benchmark as to what they consider to be advanced skills. The fact that just 17 per cent of Irish employees consider their jobs to require advanced ICT skills may point to skills underutilisation, whereby employees find their ICT related work tasks to be relatively easy.

We can further investigate the issue of skill underutilisation using a separate question in the ESJS which asks employees, 'Overall, how would you best describe your skills in relation to what is required to do your job?', with employees responding that their skills are either; 1. Higher, 2. Matched or 3. Lower than what is required to do their job. Figure 5 shows the percentage of employees who report that their skills are underutilised in their job across all 28 countries. A relatively high percentage of Irish employees consider themselves to be overskilled. At 46 per cent, this is the fourth highest rate of skill underutilisation out of 28 EU countries, behind Greece, Austria and the United Kingdom.

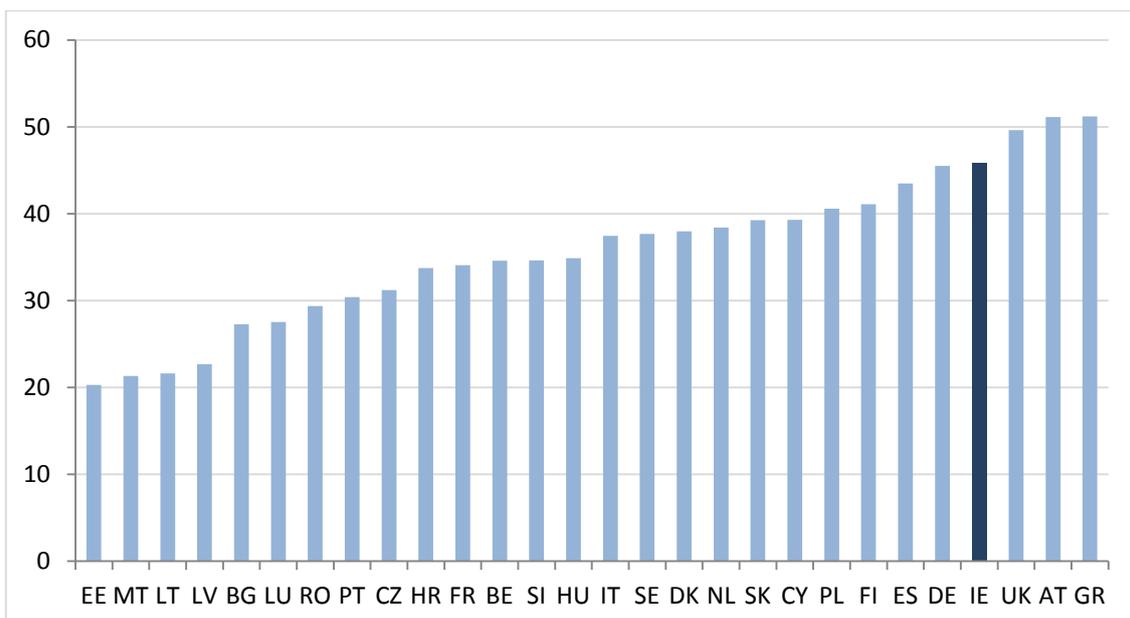
The literature highlights a number of costs to the individual associated with skills underutilisation. These individuals are found to suffer a wage penalty relative to individuals with similar skill levels in matched employment (see, e.g., McGuinness and Sloane, 2011; Sánchez-Sánchez and McGuinness, 2015; Sloane, 2014). Similarly, as discussed in the introduction, individuals whose education is not fully utilised suffer a wage penalty relative to individuals with the same level of education in matched employment, (see, e.g., McGuinness and Sloane, 2011). However, these types of workers earn a wage premium relative to their lower educated counterparts doing the same type of job (see, e.g., Lindley, 2009). Therefore, the wage returns to each additional year of education, while lower than those for matched employees, are still positive for individuals who find themselves in jobs whereby their education and skills are not fully utilised.

There is also evidence that individuals who are mismatched have lower levels of job satisfaction (Mavromaras et al., 2012; Sloane, 2014; Green and Zhu, 2010; Congregado et al., 2016). Higher incidences of skills underutilisation in an organisation is also associated with lower workplace harmony (Belfield, 2010). In addition, mismatched workers are also more likely to want to quit their job (McGuinness and Wooden, 2009) and experience lower skills development (Cedefop, 2015a). Regarding the persistence of mismatch, the evidence is mixed. Verhaest et al. (2015) and Clark et al. (2014) find that overeducation can be quite persistent. Specifically, Clark et al. (2014) show that 66 per cent of overeducated US workers remained overeducated after one year. However, Frei and Sousa-Poza (2012) find that spells of overeducation in Switzerland are typically short.

Overskilled workers with a higher academic degree tend to have the highest persistence of mismatch, while workers with vocational education are found to exit mismatch more quickly (Mavromaras and McGuinness, 2012).

A study by McGuinness et al. (2017b) finds Ireland to have a relatively high level of overeducation compared to the rest of the EU. They use EU-LFS data to compile a panel dataset of overeducation in Europe. Unlike the subjective approach of measuring overeducation or overskilling, whereby employees are asked directly to compare their education or skill level to their job requirements (as in the ESJS data), they use a statistical measure of overeducation. This involves calculating the modal level of education for each two-digit ISCO occupation code and categorising workers as over (under) educated if their level of education is above (below) the modal education level for their occupation. McGuinness et al. (2017b) find that over the period 2001 to 2011, the rate of overeducation in Ireland, at 33 per cent, far exceeded the EU average of 19 per cent.

**FIGURE 5 EMPLOYEES REPORTING THAT THEY ARE OVERSKILLED FOR THEIR JOB (%)**

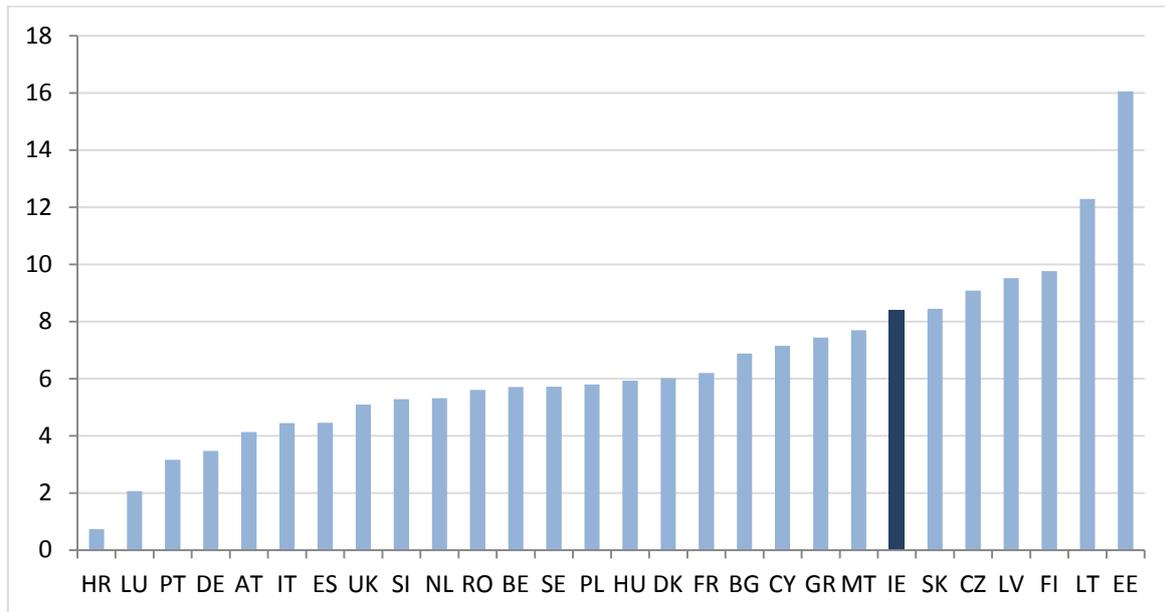


Source: Cedefop European Skills and Jobs Survey, 2014.

The percentage of full-time workers in Ireland who consider themselves to be underskilled, as measured using the ESJS survey, is approximately 8 per cent. While this is considerably lower than the rate of overskilling, it is still relatively high in comparison to other countries, with Ireland having the seventh highest rate of underskilling out of 28 EU Member States (Figure 6). Therefore, given Ireland’s relatively high rates of skills mismatch, in terms of both overskilling and underskilling, it is not surprising that Ireland ranks quite poorly in relation to the

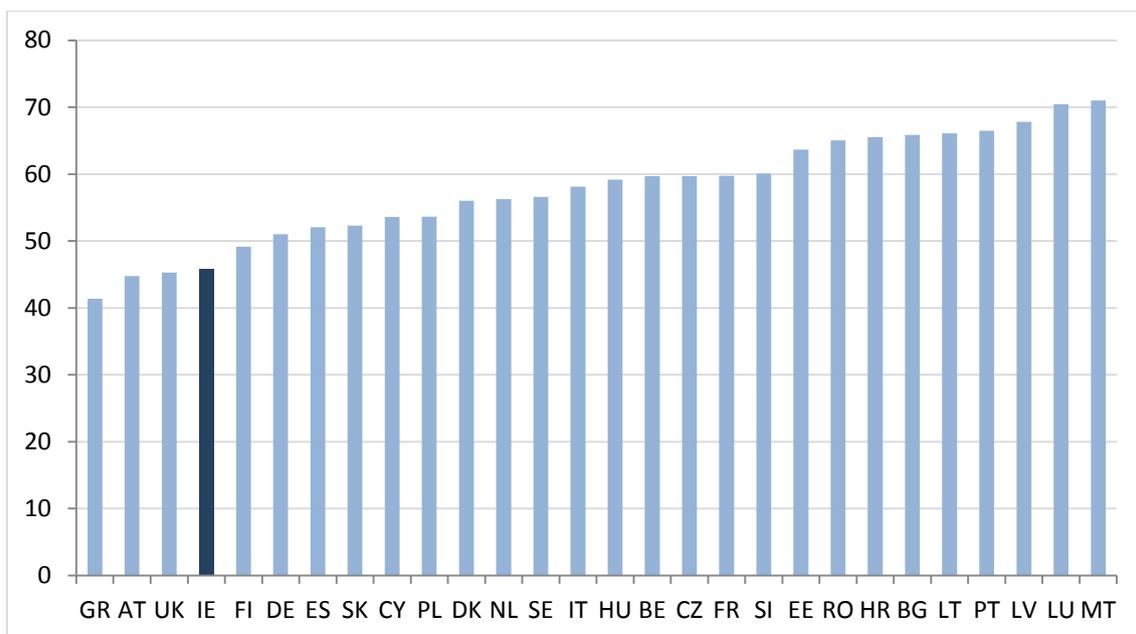
percentage of employees who consider their skills to be matched to their job. The percentage of matched employees in Ireland is 46 per cent, the fourth lowest rate in the EU28, with only Greece, Austria and the UK recording lower rates of matched employment (Figure 7).

**FIGURE 6 EMPLOYEES REPORTING THAT THEY ARE UNDERSKILLED FOR THEIR JOB (%)**



Source: Cedefop European Skills and Jobs Survey, 2014.

**FIGURE 7 EMPLOYEES REPORTING THAT THEY ARE MATCHED FOR THEIR JOB (%)**



Source: Cedefop European Skills and Jobs Survey, 2014.

#### 4. THE POLICY DEBATE ON SKILLS MISMATCH

The area of skills mismatch attracts a great deal of attention among policymakers. However, as noted by McGuinness et al. (2017a), the policy advice surrounding skills mismatch can sometimes be vague. As mentioned, skills mismatch is a very broad concept and can incorporate a number of different types of mismatch, including vertical mismatch (usually measured in terms of overeducation, undereducation, overskilling and underskilling), skill gaps, skill shortages (usually measured in terms of unfilled and hard-to-fill vacancies), field of study (horizontal) mismatch and skill obsolescence. It is important that policymakers are cognisant of this fact and avoid using the term skills mismatch without specifically stating the type of mismatch in question. For example, while the European Commission's 2016 and 2017 country specific recommendations (CSRs) for Ireland raise the issue of skills mismatch as a potential policy concern, a greater discussion of the precise types of mismatch would be informative.<sup>8</sup>

The policy debate on mismatch often addresses areas of mismatch for which there is the least available evidence, namely skill shortages. The term skill shortage describes a situation whereby employers are unable to fill vacant posts due to a lack of qualified candidates. The evidence on skill shortages is usually based on employer surveys such as the European Business Survey (EBS), the Manpower Talent Shortage Survey and the European Company Survey (ECS). As highlighted by McGuinness et al. (2017a), caution is called for when using these types of employer surveys to inform the policy discussion on skill shortages. This is due to difficulties in disentangling genuine skill shortages, which arise when demand for skills by employers cannot be met by supply at market clearing wage rates, from other types of recruitment difficulties relating to issues such as poor wages, working conditions, or inadequate recruitment and human resource functions within the firm. The percentage of employers facing genuine skill shortages may fall well below the percentage of employers reporting recruiting difficulties (Cedefop, 2015b). Nevertheless, we can look to some of these employer surveys as a guide to assessing the degree of skill shortages across countries. In particular, the 2015 Manpower Talent Shortage Survey asks employers how much difficulty they have filling jobs due to a lack of available talent, while also ranking the types of jobs for which skill shortages are most apparent. It is notable that Ireland is singled out as the country with the lowest level of difficulty (out of 42 countries) filling jobs.

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<sup>8</sup> The 2017 CSR documents can be accessed at: [https://ec.europa.eu/info/publications/2017-european-semester-country-specific-recommendations-commission-recommendations\\_en](https://ec.europa.eu/info/publications/2017-european-semester-country-specific-recommendations-commission-recommendations_en).

## 5. POTENTIAL SOURCES OF FUTURE LABOUR SUPPLY

In this section we use data from the Quarterly National Household Survey (QNHS) to examine the potential sources of future labour supply for the growing Irish economy. We focus specifically on the composition of three groups; migrant workers, the inactive, and the unemployed. Furthermore, we utilise the EU Labour Force Survey (EU-LFS) and the Cedefop European Skills and Jobs Survey (ESJS) to compare Ireland's position relative to the other EU Member States.

### 5.1 Migrant workers

After the expansion of the EU in 2004 with the entry of ten new Member States, there was a sharp increase in the flow of migrants to Ireland (Barrett et al., 2011). Ireland was one of only three countries, including Sweden and the UK, that allowed full access to its labour market for the citizens of the new Member States. This, coupled with strong economic growth in Ireland at that time, resulted in large numbers migrating to Ireland. In 2002, immigrants accounted for just 5 per cent of Irish employees. However, by 2007, this had increased to 10 per cent (Barrett et al., 2011). This increased further in subsequent years, with non-Irish nationals currently accounting for 18 per cent of all employees.<sup>9</sup> The ESJS data allow us to compare the percentage of foreign-born employees in Ireland with the EU28.<sup>10</sup> As we can see from Figure 8, Ireland has the third highest percentage of foreign-born employees in the EU.

As noted by González Pandiella (2016), Ireland is very open to international migration flows, with immigration helping to provide the skills required by the Irish economy. The ESJS data reveal that the share of foreign-born workers with tertiary education in Ireland is the third highest in the EU, at 57 per cent (Figure 9). In 2016, a breakdown of immigration by educational attainment for recently arrived immigrants highlighted that more than half (57.1 per cent) of the migrants aged 15 and over had a third-level degree or above (CSO, 2016). These findings highlight the importance of high-skilled migrant workers to the Irish labour force and show that Ireland has a proven capability in attracting highly educated workers. However, the evidence shows that migrants face both a pay gap and an occupational gap, suggesting their skills are not being fully utilised within the Irish labour market (Barrett et al., 2012; Barrett et al., 2016). The ESJS data confirm this by showing that foreign-born workers in Ireland report the second highest level of overskilling in the EU, at approximately 50 per cent.

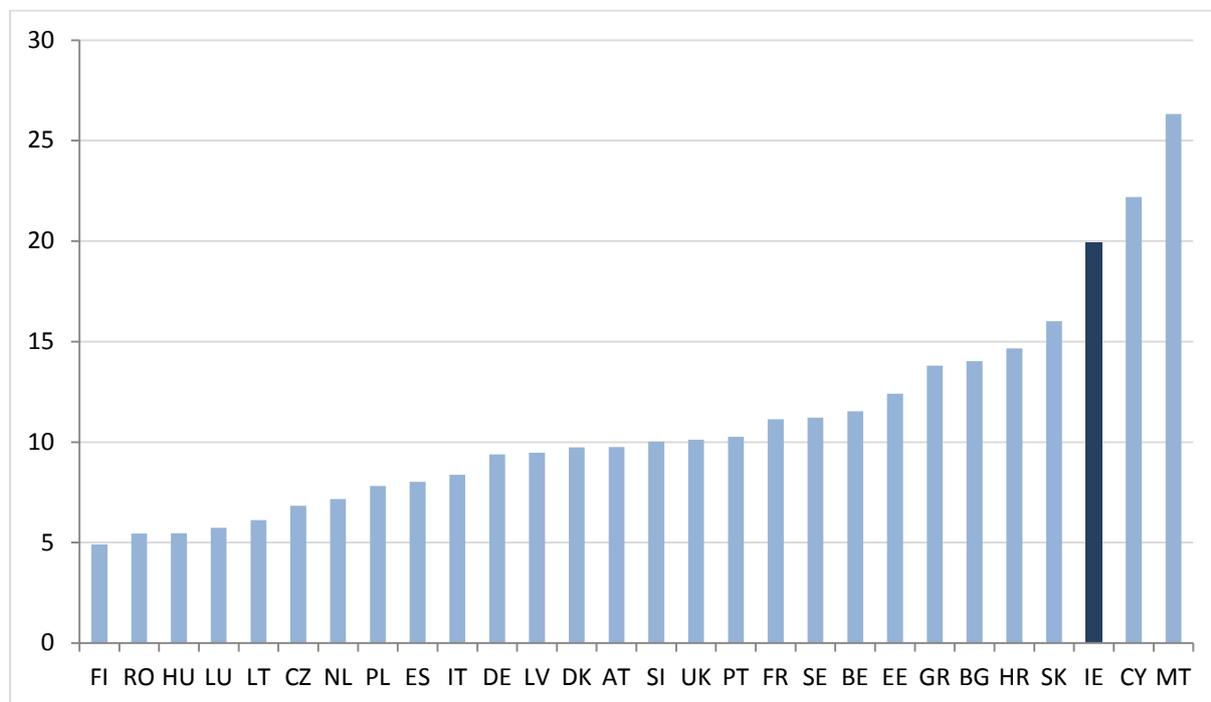
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<sup>9</sup> The European Migration Network, using data from the Quarterly National Household Survey, publish statistics relating to Non-Irish nationals. See <http://emn.ie/index.jsp?p=128&n=138>.

<sup>10</sup> There is a question in the ESJS data which asks the employee whether they were born in the country in which they are currently working.

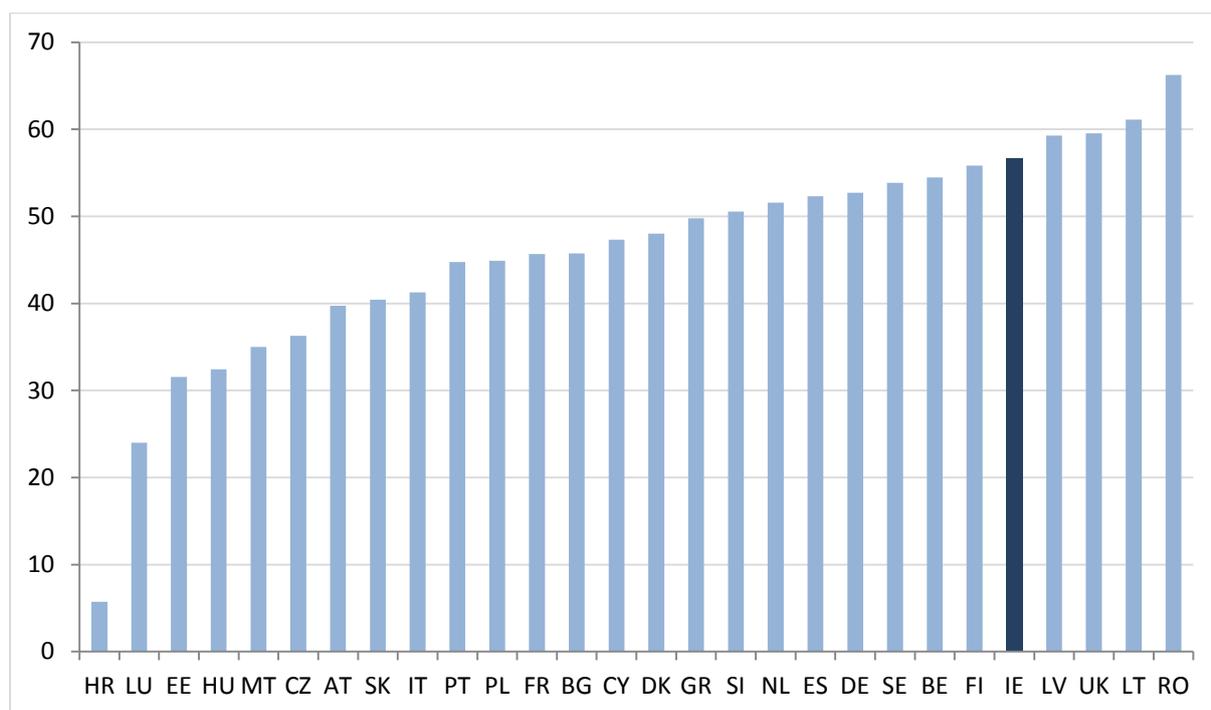
Therefore, while migration represents an important source of skilled labour supply, there is scope for better utilising the skills of migrant workers.

**FIGURE 8** PERCENTAGE OF FOREIGN-BORN EMPLOYEES, 2014 (%)



Source: Cedefop European Skills and Jobs Survey, 2014.

**FIGURE 9** SHARE OF MIGRANTS IN EMPLOYMENT WITH TERTIARY EDUCATION, 2014 (%)

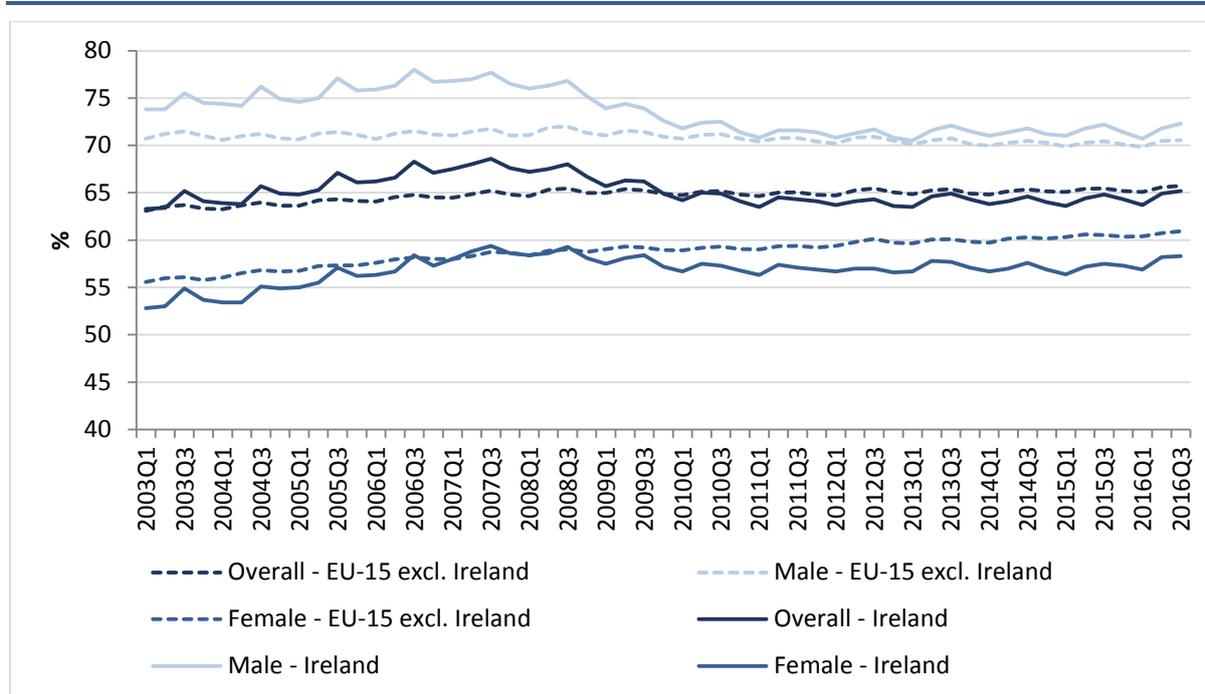


Source: Cedefop European Skills and Jobs Survey, 2014.

## 5.2 Inactive

Next we focus on labour force participation rates and the composition of those currently classified as ‘inactive’ in the labour market as another potential source of labour supply. In terms of participation rates, female participation increased substantially in the decade before the economic crisis and, following a decline at the onset of the crisis in 2008, has since stabilised. This can be seen in Figure 10 which shows participation rates for males and females aged 15-74 years. While the female participation rate in Ireland is below the EU average, the male participation rate is slightly higher and, consequently, the overall participation rate for Ireland is quite similar to the EU average, at approximately 65 per cent. Bercholz and Fitzgerald (2016) find that the economic crisis had a particularly significant impact on women under 30, who remained in education in their 20s for a longer period than before the crisis. Bercholz and Fitzgerald (2016) suggest that the educational attainment among women aged 30 and over will continue to increase in Ireland for at least a decade, with a corresponding increase in female labour force participation among this cohort. They predict that as older women retire and are replaced with younger women with more education, this may have a positive productivity effect on the economy.

**FIGURE 10 PARTICIPATION RATES, 2001 -2016 (%)**



Source: EU Labour Force Survey.

Notes: Expressed as a percentage of the population aged 15-74.

Table 2 shows the composition of the inactive as predominately female (59 per cent), over 45 years of age (56 per cent) with lower secondary or less education (51 per cent). In the second quarter of 2017, those classified as ‘not in the labour

force' totalled 1,477,000 individuals. Some of these individuals have a stronger attachment to the labour force than others and are classified by Eurostat as potential additional labour force (PALF). This group includes 'persons seeking work but not immediately available' and 'persons available for work but not seeking'. Of the 1,477,000 individuals who are 'not in the labour force' in Ireland, 33,900 are classified as potential additional labour force (CSO, 2017). Therefore, despite the large number of individuals currently classified as 'inactive', the potential implications for labour supply appear relatively weak given their composition and the small proportion classified as being in the potential additional labour force. There is also the additional difficulty and complexity associated with attempting to design policies that impact on labour force participation rates and reduce inactivity. Very little is known in this regard, especially when compared to the greater body of research relating to policies aimed at reducing unemployment.

**TABLE 2 COMPOSITION OF THE INACTIVE (QUARTER 2, 2017)**

	%
<b>By Age</b>	
15-19	20.3
20-24	7.3
25-34	7.4
35-44	9.6
45-54	10.5
55-64	16.0
64-74	29.0
<b>By Gender</b>	
Male	41.2
Female	58.8
<b>By Education Level</b>	
Lower Secondary (& below)	50.7
Upper Secondary	24.1
Post Secondary	8.4
Tertiary	16.8

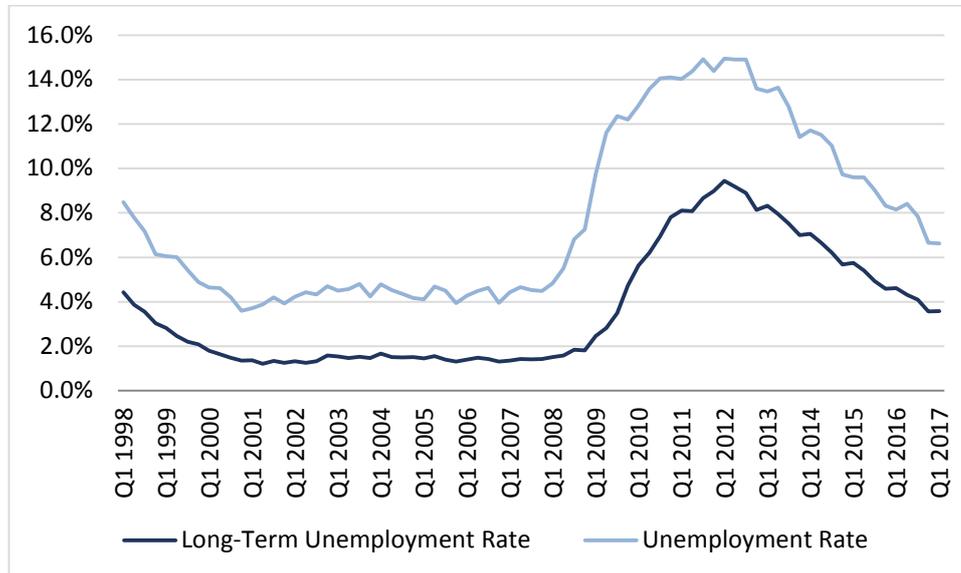
Source: Quarterly National Household Survey, Q2, 2017.

### 5.3 Unemployed

The steady pace of employment creation and the corresponding reduction in unemployment since 2012 can be seen in Figure 11, with the unemployment rate now fast approaching the pre-crisis level. In 2017, most sectors of the economy are experiencing employment growth, with the construction sector and the information and communications sector registering the largest recent increases. We examine the composition of those currently classified as unemployed in the

labour market to further examine their potential as an additional source of future labour supply.

**FIGURE 11 UNEMPLOYMENT RATES, 1998 – 2017 (%)**



Source: Quarterly National Household Survey.  
Notes: Expressed as a percentage of the population aged 15-74.

In the second quarter of 2017, the seasonally-adjusted unemployment rate for Ireland reached 6.2 per cent, compared to the Euro Area seasonally-adjusted unemployment rate of 9.1 per cent.<sup>11</sup> The lowest unemployment rates in August 2017 were in the Czech Republic (2.9 per cent), Germany (3.6 per cent) and Malta (4.2 per cent), with the highest unemployment rates in Greece (21.2 per cent) and Spain (17.1 per cent). From August 2016 to August 2017, the absolute magnitude of the decrease in the unemployment rate in Ireland was among the largest in Europe, declining by 1.6 percentage points (from 7.9 to 6.3 per cent). Other countries which experienced large declines were Spain (2.2 percentage points), Croatia (2.1 percentage points), Cyprus (2.4 percentage points) and Slovakia (2.1 percentage points). The seasonally-adjusted youth unemployment rate for Ireland was 12.7 per cent in August 2017, a significant drop compared to a rate of 17.2 per cent recorded in August 2016. The most recent figures for the EU28 in August 2017 show the seasonally-adjusted youth unemployment rate was 16.7 per cent with the lowest rate observed in Germany (6.4 per cent) and the highest rates in Greece (43.3 per cent), Spain (38.7 per cent) and Italy (35.1 per cent). While the scale of the problems confronting the Greek, Spanish and Italian labour markets and economies is clearly evident, Ireland's

<sup>11</sup> Please see Eurostat, 2017. Available at: [http://ec.europa.eu/eurostat/statistics-explained/index.php/Unemployment\\_statistics](http://ec.europa.eu/eurostat/statistics-explained/index.php/Unemployment_statistics).

performance is improving significantly and is now more closely aligned with the EU average.

The composition of the unemployed is shown in Table 3. The unemployed are found to be predominately male (62 per cent) and, compared to the inactive, unemployed individuals are younger in age (particularly the short-term unemployed) and have relatively high levels of education; 24.9 per cent of unemployed individuals have tertiary education compared to 16.8 per cent of the inactive. In the second quarter of 2017, the seasonally-adjusted number of persons unemployed was 141,500 and this was the first quarter since Q3 2010 that long-term unemployment (one year or more) accounted for less than 50 per cent of total unemployment. In terms of the ability of activation programmes to reintegrate the unemployed into the labour market, recommendations have been made for strengthening policy in this area (McGuinness et al., 2014; Martin, 2014; Kelly et al., 2015).

**TABLE 3 COMPOSITION OF THE UNEMPLOYED (QUARTER 2, 2017)**

	All (%)	Short-Term Unemployed (%)	Long-Term Unemployed(%)
<b>By Age</b>			
15-19	9.3	14.1	
20-24	16.2	20.1	14.9 <sup>12</sup>
25-34	23.5	24.2	23.0
35-44	20.2	19.6	21.8
45-54	17.7	12.0	23.3
55-74	13.2	10.1	17.0
<b>By Gender</b>			
Male	62.4	54.5	69.3
Female	37.6	45.5	30.7
<b>By Education Level</b>			
Lower Secondary (& below)	28.2	21.8	33.4
Upper Secondary	32.7	34.5	30.1
Post Secondary	14.2	12.0	17.2
Tertiary	24.9	31.8	19.3

Source: Quarterly National Household Survey, Q2, 2017.

Note: The 65-74 age category is omitted because of the small sample size

<sup>12</sup> The figure of 14.9 per cent refers to ages 15-24. Two age categories, 15-19 and 20-24, are combined due to small sample sizes.

## 6. CONCLUSION

The self-reported skill intensity of jobs among Irish employees is relatively high in terms of literacy and numeracy, but lower in terms of ICT skills. Just over 10 per cent of employees in Ireland rate their job as highly skill intensive across all three measures. Ireland is also shown to have a relatively high degree of skill underutilisation, as measured by the rates of both overeducation and overskilling, with Ireland recording some of the highest rates of skill underutilisation in Europe.

Despite the high rates of skill underutilisation and a vast body of literature documenting the negative consequences associated with this type of skills mismatch, the policy debate in Ireland and across Europe typically focuses on the area of skill shortages. There is a concern, especially in a tightening labour market, that skill shortages may pose significant problems. However, as reported by the 2015 Manpower Talent Shortage Survey, the incidence of hard-to-fill vacancies due to a lack of suitably skilled candidates reported by Irish employers is the lowest out of 42 countries. Therefore, while skill shortages may be problematic in certain specific sectors, it appears that a more prevalent issue relates to the fact a large number of Irish employees are not fully utilising their skills and education in their current employment. While over 45 per cent of full-time employees in Ireland say that their skills are in excess of what is required to do their job, just 8 per cent say their skills are inadequate for their job.

While there appears to be scope to better harness the skills of existing employees as the economy continues to improve and the labour market tightens, another consideration relates to the additional sources of labour supply in the future. Our findings suggest the level and composition of those currently experiencing unemployment, when compared to the inactive, show greater potential for providing future sources of labour supply for Ireland's growing economy. However, it is unlikely that this group alone can fully meet the increased labour demands. As such, a key source of future labour supply for Ireland may be immigration. This has been an important source of labour supply in Ireland in recent decades. In 2002, immigrants accounted for just 5 per cent of employees in Ireland. However, by 2016 this figure had increased to 18 per cent. Moreover, a large proportion of immigrants are highly skilled. The ESJS data show that the share of foreign-born workers with tertiary education in Ireland is the third highest in the EU, at 57 per cent.

Finally, while not the focus of this study, it is important to highlight the uncertainties surrounding Brexit and its potential impact on the Irish labour market. Garcia Rodriguez (2017), building on previous work by Bergin et al. (2017), estimates that a 'hard Brexit' will lead to higher unemployment in Ireland.

Furthermore, while strong migration links exist between Ireland and the UK (Barrett et al., 2015), the implications of Brexit on migration flows to Ireland have yet to be established.

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