CEDEFOP

European Centre for the Development
of Vocational Training

2023 skills forecast
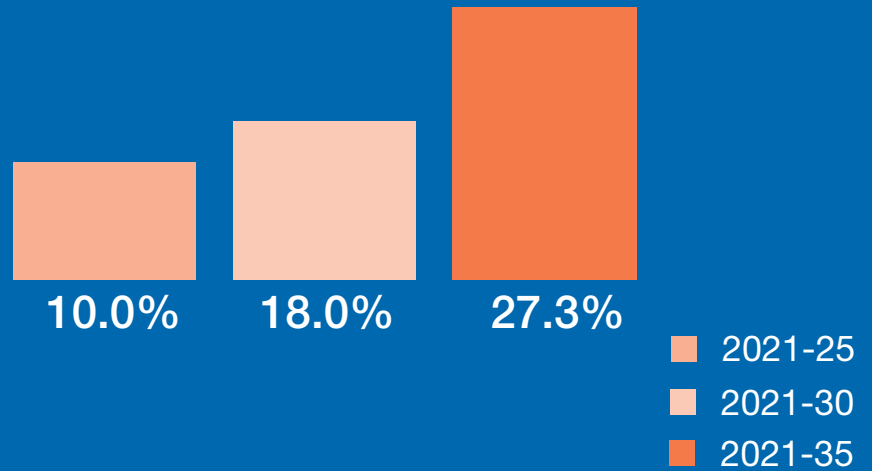## Ireland

Employment in 2035

3 021 000

27.35%

increase 2021-35

% Employment growth 2021-35

10.0% 18.0% 27.3%

- 2021-25
- 2021-30
- 2021-35

Fastest-growing sectors
2021-35% growth

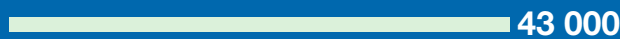**70%**
Accommodation & food service activities

61%
Real estate, professional, scientific & technical activities

Highest-demand occupations
Largest creation of new jobs, 2021-35

53 000
Business & administration professionals

43 000
Personal care workers

42 000
Building & related trades workers, excluding electricians

increase in high-skilled labour demand 2021-35

45%

Total job openings, 2021-35

2 127 000

- Replacement needs (70%)
- New job openings (30%)

Total job openings by skill level 2021-35

- High-skilled non-manual occupations (49%)
- Skilled non-manual occupations (24%)
- Skilled manual occupations (21%)
- Elementary occupations (6%)

EU overview 2035

3.4% employment increase in 2021-35

Fastest growing occupation
Legal, social and cultural professionals

Fastest growing sector
Information and communication

Cedefop skills forecast: Ireland

1. Employment outlook

Employment in Ireland is forecast to grow much faster than the EU-27 average, albeit at slightly slower rates than seen over 2015-19. Figure **1** shows that employment in Ireland grew much faster than the EU-27 average over 2015-19, and, although it fell slightly faster than the EU-27 in 2020 as the Covid-19 pandemic hit, it is estimated to have bounced back strongly over 2020-22. Across the forecast period, employment in Ireland is forecast to grow by around 1.5% pa compared with growth of around 0.2-0.3% pa for the EU-27 as a whole.

Figure 1**. Annual percentage employment growth in Ireland and the EU-27, 2015-35**
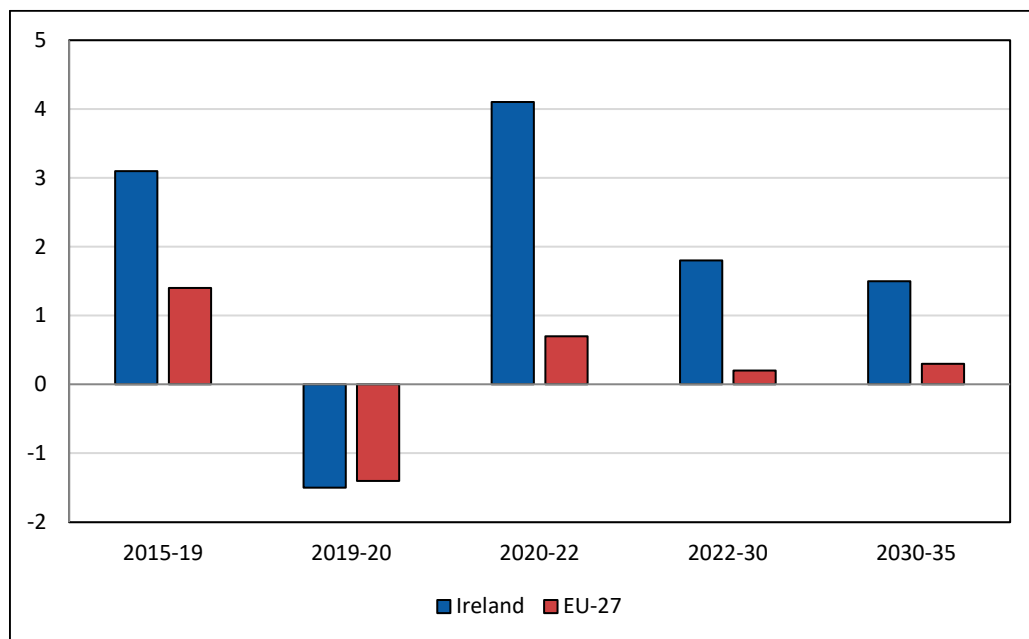
Source: Cedefop (2022 Skills Forecast).
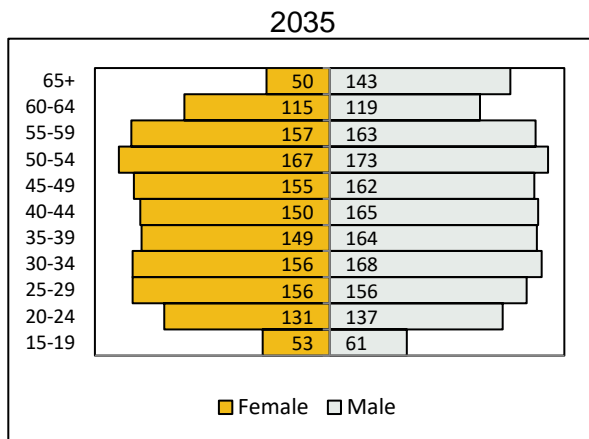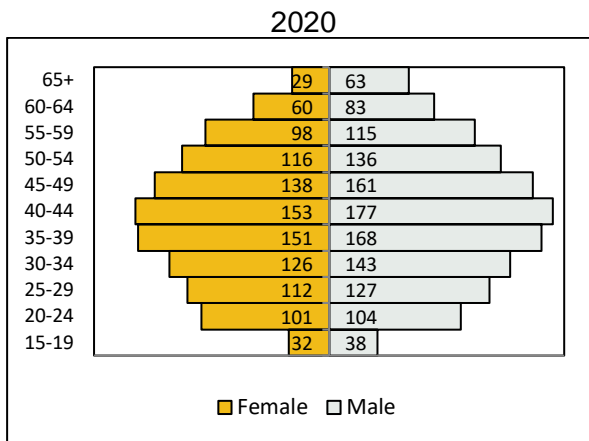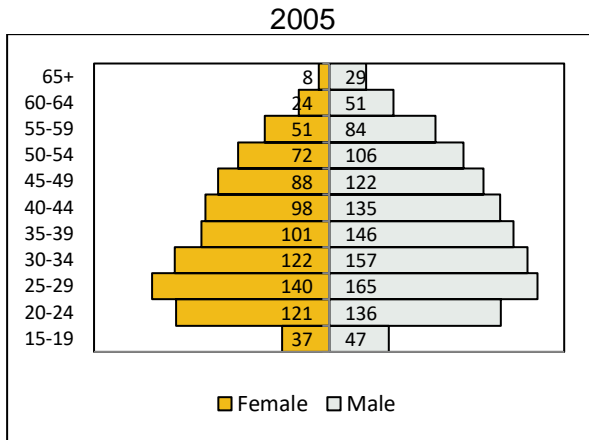
2. Labour force overview

Figure **2** shows Ireland's labour force by age group in 2005, 2020 and 2035. Changes in the labour force in Ireland over the forecast period will continue to be driven by the ageing population and increasing participation rates in all age groups. The total labour force in Ireland is projected to increase by around 26% over 2020-35, which is faster than the growth of around 19% seen over the previous 15 years, and much faster than the expected increase of just under 3% over 2020-35 for the EU-27 as a whole. The total participation rate in Ireland is forecast to increase by 3 pp over 2020-35, compared with an increase of 1 pp in the total rate for the EU-27. Total population in Ireland is forecast to grow by 19% over 2020-35, compared with 21% over 2005-20, which, again, is much higher than for the EU-27 as a whole.

Only the population aged 35-44 in Ireland is forecast to decline during 2020-35, with the remaining age groups over 20 expected to see very rapid growth, reflecting trends in the relevant younger cohorts in preceding periods.

The participation rates of all age groups in Ireland are forecast to grow quite strongly over 2020-35, with the strongest increases for those aged over 20 expected to be for the 20-24, 30-34, 55-59 and 60-64 age groups (7-11 pp).

As elsewhere, female participation rates in Ireland are generally expected to increase more than male participation rates, particularly for 55-64 year olds and 25-34 year olds. Overall, the total participation rate over 2020-35 for females is forecast to increase by 4 pp, and for males by 2 pp, which compares with an increase of only 1 pp for females and no change for males in the EU-27 as a whole.

Figure 2. **Distribution of the labour force (thousands), 2005-35**

2005

Age	Female	Male
65+	8	29
60-64	24	51
55-59	51	84
50-54	72	106
45-49	88	122
40-44	98	135
35-39	101	146
30-34	122	157
25-29	140	165
20-24	121	136
15-19	37	47

■ Female □ Male

2020

Age	Female	Male
65+	29	63
60-64	60	83
55-59	98	115
50-54	116	136
45-49	138	161
40-44	153	177
35-39	151	168
30-34	126	143
25-29	112	127
20-24	101	104
15-19	32	38

■ Female □ Male

2035

Age	Female	Male
65+	50	143
60-64	115	119
55-59	157	163
50-54	167	173
45-49	155	162
40-44	150	165
35-39	149	164
30-34	156	168
25-29	156	156
20-24	131	137
15-19	53	61

■ Female □ Male

Source: Cedefop (2022 Skills Forecast).

3. Sectoral employment trends

Figure **3** shows the annual average employment growth by broad sector in Ireland between 2015 and 2035. All broad sectors are expected to see relatively strong growth over the forecast period, but growth is expected to be led by *Distribution & transport*, *Business & other services* and *Construction*. *Non-marketed services* and *Primary sector & utilities* are expected to see the weakest employment growth over 2022-30.

Figure 3. **Employment growth by broad sector of economic activity, 2015-35**
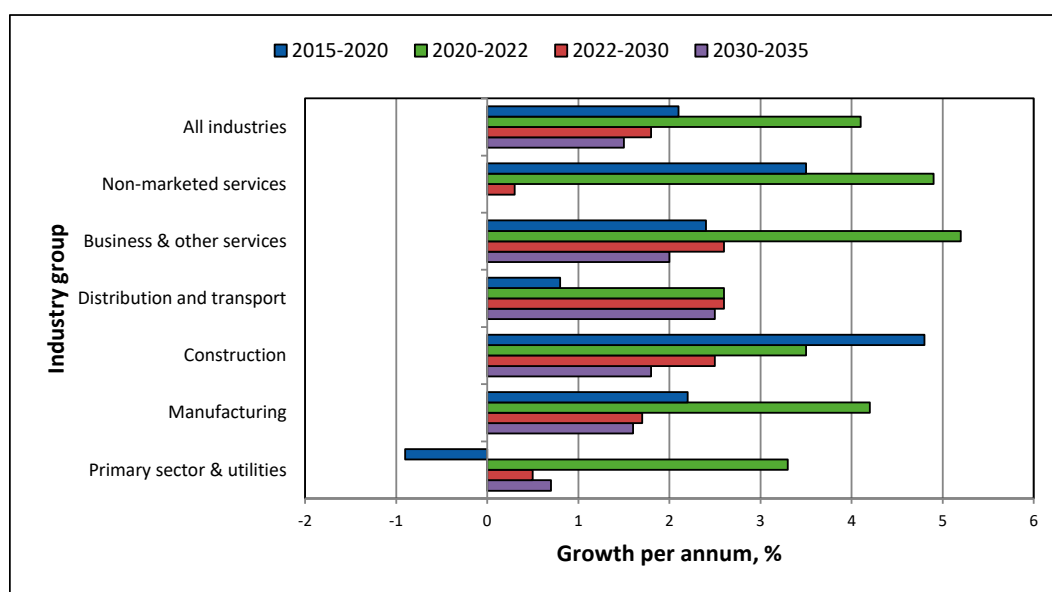
Source: Cedefop (2022 Skills Forecast).

In terms of sub-sectors (i.e. below the level of the six broad sectors discussed above), very few are forecast to see a decline in employment in Ireland over this period. *Health*, within the broad sector of *Non-marketed services*, is the largest (accounting for around 12% of employment in Ireland in 2020) sub-sector forecast to see a decline in employment over 2022-35. In *Business & other services*, growth is expected to be supported by *real estate activities*, *legal, accounting & consulting activities*, *architectural & engineering services*, *market research & other professional services* and *financial & insurance activities*. Other sub-sectors in Ireland that are forecast to see strong employment growth (around 2% pa or above) over 2022-30 and account for more than 1% of total employment are: *accommodation & catering services, warehousing & postal services, land transport* and *wholesale & retail trade* (all within the broad sector of *Distribution & transport*). The accommodation and food sector has been slow to return to pre-COVID

employment levels. Along with high inflation, it is likely to impact on employment growth in at least the short term in these sectors.

4. Job openings by occupational group

Cedefop skills forecasts estimate the total job openings by occupational group as the sum of net employment change and replacement needs. Net employment change refers to new jobs created or jobs lost due to the expansion or contraction of employment in that sector or occupation. Replacement needs arise as the workforce leaves the occupation due to retirement or career changes. Replacement needs, generally, provide more job opportunities than new jobs, meaning that significant job opportunities arise even in occupations declining in size (i.e. agricultural workers are a typical example, as ageing workers employed in the sector will need to be replaced).

Figure **4** shows the total job openings by broad occupational group over 2020-35. The number of job openings indicates the number of jobs that are required to be filled due to lost/newly created jobs and those that are in need of replacement workers. All broad occupations are forecast to experience an increase in jobs. On top of this, all are projected to see a strong replacement demand requirement. *Professionals* is expected to see the greatest number of new jobs as well as the strongest replacement demand. In the economy overall, there are forecast to be 2.3 million job openings over this period, made up of 780,000 new jobs and 1.6 million replacement demand.

Figure 4**. Job openings by broad occupational group, 2020-35**
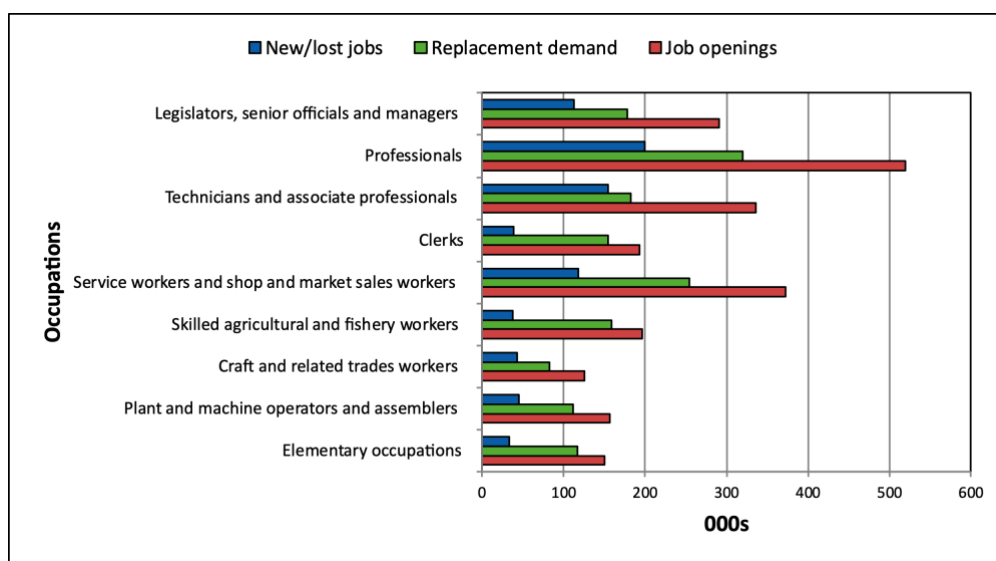
Source: Cedefop (2022 Skills Forecast).

At a more detailed level, most job openings (taking both new/lost jobs and replacement needs together) are generally expected to be in high skilled non-manual occupations, such as *business & administration professionals*, *business & administration associate professionals*, *teaching professionals*, *production & specialised services managers* and *hospitality, retail & other services managers*, each of which are expected to account for 4% or more of all job openings. Having said that, the occupation with the greatest overall number of job openings is expected to be the skilled non-manual occupation of *personal care workers*, reflecting the ageing of the population through an increasing number of jobs for these workers, as well as a strong demand from the need to replace retiring workers from this occupation. Among skilled manual occupations, there are expected to be many job openings for *building & related trades workers* and *drivers & mobile plant operators*, with the former driven by both expansion demand and replacement demand, and the latter driven mainly by replacement demand. Among the, lower skilled, *Elementary* occupations, the number of job openings is generally expected to be lower, with a contraction in total jobs for some occupations, such as labourers, combined with lower replacement demand.

5. Drivers of occupational change

Within the Cedefop skills forecast, future employment growth (or decline) of occupations is further broken down by separating national economic components from regional industrial and economic effects, helping to interpret what is driving the change. From this perspective, employment growth can be explained by three possible drivers: (a) overall trends of the economy (i.e. growth or decline), (b) shifts of employment between sectors and (c) changes in the occupational structure within sectors (i.e. factors making some occupations more important than others).

The occupational composition of employment in Ireland is mainly characterised by changes in the level of specialisation within occupations and, in fewer cases, by changes in industry size. Stronger occupation-specific and industry effects will lead to increases in the share of *professionals* and *managers, technicians and other associate professionals.* Despite the negative impact of industry size effect in some occupations, such as *health associate professionals, chief executives, senior officials and legislators,* the occupation-specific effect is positive and strong enough to compensate for the decrease. The occupations mentioned above, together with *legal, social, cultural & related associate professionals,* benefit the most from these trends.

Therefore, the overall effect of occupational change depends on several factors that must be considered together. Increasing automation and digitisation, moving toward a service-oriented economy, including within manufacturing, will lead to greater use of higher-level occupations at the expense of other occupations. Lower-level occupations are expected to decrease, except for *cleaners, refuse, street & related service occupations*. Intermediate occupations will experience an overall increase. The strongest occupations among the medium-qualified occupations are expected to be *stationary plant & machine operators,* and *building & related trades workers.*

6. Demand for and supply of skills

Within the Cedefop skills forecast, skills are proxied by the highest level of qualification held by individuals in the labour force and in employment. Three levels are distinguished, high, medium, and low, which correspond to the official ISCED classification. The occupational group also offers an indication of the skill level required, as some occupations (e.g. professionals) typically require high-level skills, while some others (e.g. elementary) typically require only basic ones. Therefore, occupational groups are also linked to a skill level.

Figure 5 shows the shares of total job openings by qualification level for Ireland and the EU-27 over 2022-35. The forecast suggest a large share of job openings among the high qualified. The extent to which this is supply driven rather than demand-driven is unclear; there is evidence to suggest that many workers in Ireland are over-qualified for their roles. Therefore, the relatively large share of persons in the workforce with high qualifications could be the result of a large supply of workers holding higher qualifications rather than being a requirement for workers to have those qualifications in their jobs. Nevertheless, the forecast suggests that most (61%) job openings in Ireland are expected to be filled by highly qualified workers. This is due to a high qualification mix in many occupations reflecting their high share in the workforce. Compared to the EU-27, a higher share of job openings is expected to involve high qualifications. The remaining job openings in Ireland require medium qualifications. The high share of high-level graduates in Ireland means that some graduates are employed in jobs below their skill levels, which is projected to continue into the next decade.

Figure 5**. Shares of total job openings by level of qualification, 2022-35**
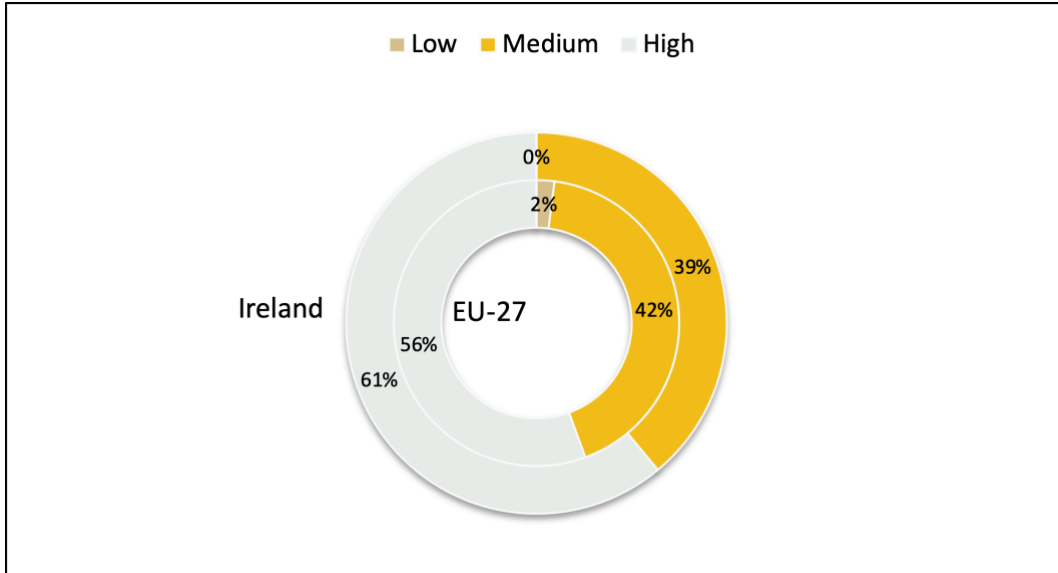
Source: Cedefop (2022 Skills Forecast).

> Future labour supply trends depend on the size of the working age population (defined as aged 15 or older), the labour market participation rates, and the extent to which people acquire formal qualifications.

Figure **6** depicts the development of the qualification share of the labour force in Ireland and the EU-27 over time. Ireland is expected to see a continued increase in the share of the higher qualified in the labour market. While the share was 52% in 2022, it is expected to increase to 59% by 2035, well above the EU-27 average.

Figure 6. **Labour force share by level of qualification, 2015-35**
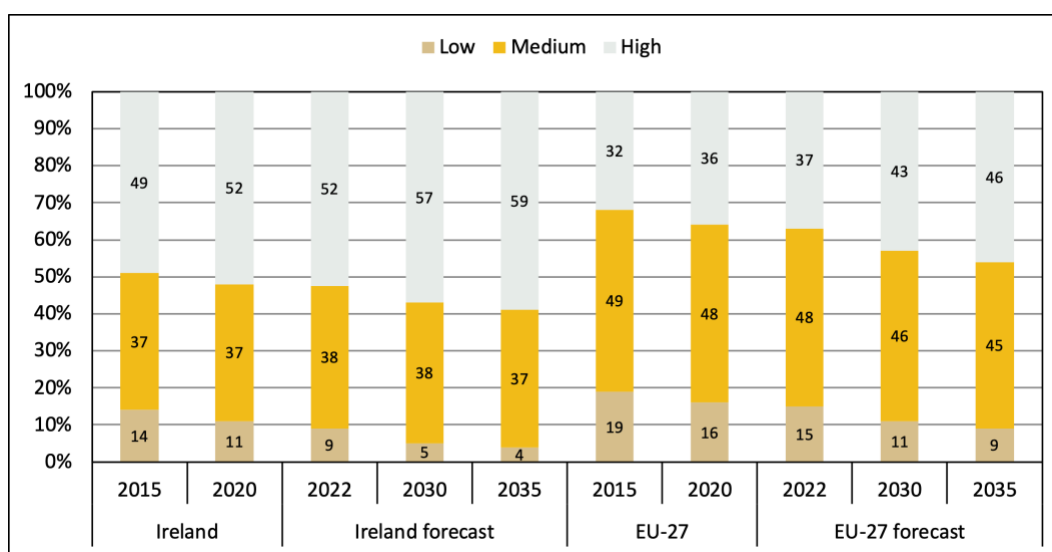
Source: Cedefop (2022 Skills Forecast).

The share of people in employment with low qualifications is expected to continue declining as many are older workers retiring and being replaced by those with higher qualifications. The share of medium qualified workers is expected to be stable (at 37%) until 2035, while the share of low qualified workers is expected to fall to 4% by 2035. The trend is similar to that of the EU-27, albeit Ireland has had a more stable share of the medium qualified but at a lower level than the EU-27. Relative to the EU-27 averages, Ireland is expected to have a higher share of high qualified workers and a lower share of low qualified workers.

Overall, the forecast implies an increasing shortage, especially among the lower qualified. While the supply of higher educated is forecast to fill the demand within higher level occupations sufficiently.

The changes in of job-requirements within occupations might change some of these projections. For example, evolving task requirements even within lower skilled occupations (e.g., digital skills) may increase the required education level. This is particularly the case for operative roles. In addition, the presence of persons overqualified for lower skilled roles in the workforce seems to indicate that such shortages of lower qualified already exist and are filled by persons with somewhat higher qualifications.

Figure **7** shows an indicator, *difficulty of hiring*, whose aim is to approximate shortages of supply by qualifications and its impact on occupations. This measure, shown along the vertical axis, indicates increasing difficulties to fulfil demand given the available

supply of qualifications used in the occupation. Along the horizontal axis, the *degree of hiring required* in the occupation is depicted. Higher values indicate that to reach the forecast result that occupation will need to adjust more (in terms of workers with particular qualifications) relative to the base year (2022) levels. These changes (degree of hiring required) can be due to a change in the qualifications required or increases in the number employed. The size of the bubble indicates the *overall employment level*, bigger bubbles indicate more employment while smaller bubbles less employment.

Occupations with both a high *degree of hiring required* and a high *difficulty of hiring* (i.e. towards the top right of the figure) are likely to have the most difficulties in achieving a suitable workforce.

Figure 7. **Indicators of future hiring difficulties, 2022-35**
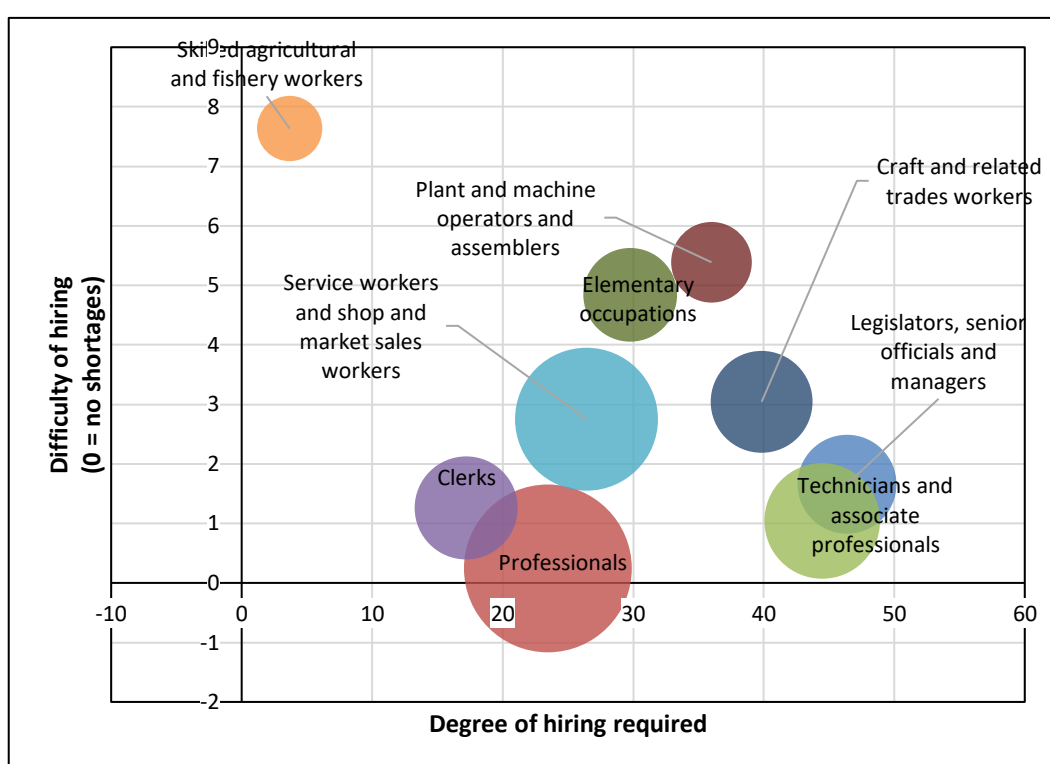
Source: Cedefop (2022 Skills Forecast).
Note: Indicators were calculated at the level of the underlying 2-digit occupation groups. Aggregation was based on the employment weights within each 1-digit occupation group.

The increasing supply of higher educated workers suggests that there may be shortages among the medium, and particularly among the lower qualified or to a mismatch between the level of qualifications obtained to the job requirements. These shortages thus imply that the higher educated may have to be employed within occupations at a lower level than they qualify for, or it will result in hiring difficulties. In general, while high degrees of change can be observed, the hiring

difficulties seem limited and concentrated among occupations with a low qualified employment mix.

Thus, it is no surprise that occupations of *Skilled agricultural & fishery workers*, as well as *Plant & machine operators & assemblers*, *Elementary occupations* and *Craft & related trades workers* show higher hiring difficulties in the forecast (Figure **7**). These go along, respectively, with low and medium levels of change within these occupations, thus low and medium levels of hiring required. While *Professionals, Legislators, senior officials & managers* and *Technicians & associate professionals* are implied to have fewer hiring difficulties, as they usually hire from the supply of higher qualified, the latter two in particular also show a high degree of hiring required in the forecast period. Hiring difficulties among *Professionals* are projected to be very low across the underlying occupations. This result of the forecast is driven by the large supply of higher educated who fill these positions. However, according to expert opinion, professional occupations are both likely to have the largest demand and are likely to have hiring difficulties in the coming years. Among the high-qualified, specific shortages can be expected among specific skills – which could not be included in the forecast. An example would be a likely difficulty in hiring IT-professionals despite a high-share of a highly educated workforce, not all of which are specialised in the necessary fields.

The analysis concerning qualifications should be interpreted with caution. For Ireland, the occupation proxy for skills is a good representation of the required skills in the economy. The labour market in Ireland allows for greater latitude in many jobs, and people can move into areas for which they may not necessarily hold academic or formal qualifications. At the same time, a high supply of higher educated graduates is available in the labour market.

Cedefop methodology

The Cedefop Skills Forecast offers quantitative projections of future trends in employment, by sector of economic activity and occupational group. Future trends in the level of education of the population and the labour force are also estimated. Cedefop's forecast uses harmonised international data and a common methodological approach allowing cross-country comparisons between employment trends in sectors, occupations and qualifications. The forecast and methodology is validated by a group of national experts. The forecast does not substitute national forecasts, which often use more detailed methodologies and data, while they also incorporate in-depth knowledge of a country's labour market.

The latest round of the forecast covers the period up to 2035. The forecast takes account of global economic developments up to May 2022. The European Economy experienced a sharp downturn in 2020 due to the global pandemic, and partially bounced back in 2021. However, the strength of the recovery in the short term is threatened by global factors such as supply chain disruptions, the consequences of the war in Ukraine and high inflation.

The key assumptions of the baseline scenario incorporate the Eurostat population forecast available in May 2022 (Europop 2019) [1], and the short-term macroeconomic forecast produced by DG ECFIN in May 2022 [2]. Several revisions to the data affect the Cedefop Skills forecast 2022, when compared to the 2019 update. For example, the population projections used in the 2022 update are generally more pessimistic than those used in the 2019 update (i.e. Europop 2015), with a corresponding impact on labour force figures. The source of historical labour force data is the European Labour Force Survey, which in 2021 underwent important methodological changes causing a break in the time series for several variables, including labour force. As a consequence, in many Member States the participation rates in 2021 are noticeably above/below historical trends, which causes the Cedefop Skills forecast 2022 to be revised in the same direction, compared to the 2019 update. Moreover, some Member States experienced significant revisions in the historical data series for sectoral employment from the National Accounts.

The Cedefop Skills forecast 2022 is made consistent with the objectives set by the European Green Deal by incorporating suitable assumptions in terms of additional investment, power sector technologies, energy balances and carbon pricing.

Energy and commodity price forecasts from the World Bank and the IEA are used as inputs to the Cedefop Skills forecast, which therefore incorporate the recent surge in prices.

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[1]   https://ec.europa.eu/eurostat/web/population-demography/population-projections/database

[2]   https://ec.europa.eu/info/business-economy-euro/economic-performance-and-forecasts/economic-forecasts/spring-2022-economic-forecast_en

For the latest update and access to more detailed Cedefop skills forecast data visit our Skills forecast project page.

The country fiche for Ireland has been developed in collaboration with Joan McNaboe, labour market researcher at SOLAS – Irish Further Education and Training Authority, Ireland.

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