



CEDEFOP

European Centre for the Development  
of Vocational Training

EN



# 2023 skills forecast Cyprus





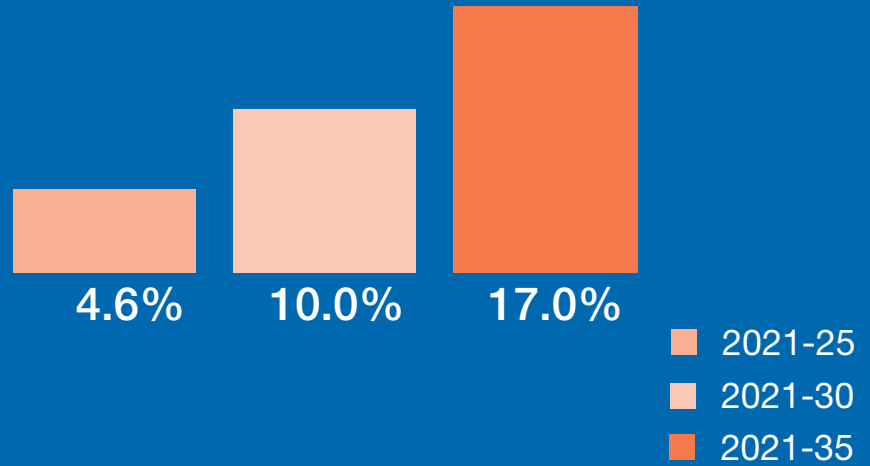
Employment in 2035

524 000

16.99%

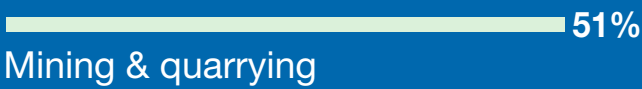
increase 2021-35

% Employment growth 2021-35



Fastest-growing sectors

2021-35% growth



Total job openings, 2021-35

370 000



Highest-demand occupations

Largest creation of new jobs, 2021-35



Business & administration associate professionals

increase in high-skilled labour demand 2021-35

42%

Total job openings by skill level 2021-35



- High-skilled non-manual occupations (38%)
- Skilled non-manual occupations (32%)
- Skilled manual occupations (17%)
- Elementary occupations (13%)



3.4%

employment increase in 2021-35



Fastest growing occupation

Legal, social and cultural professionals



Fastest growing sector

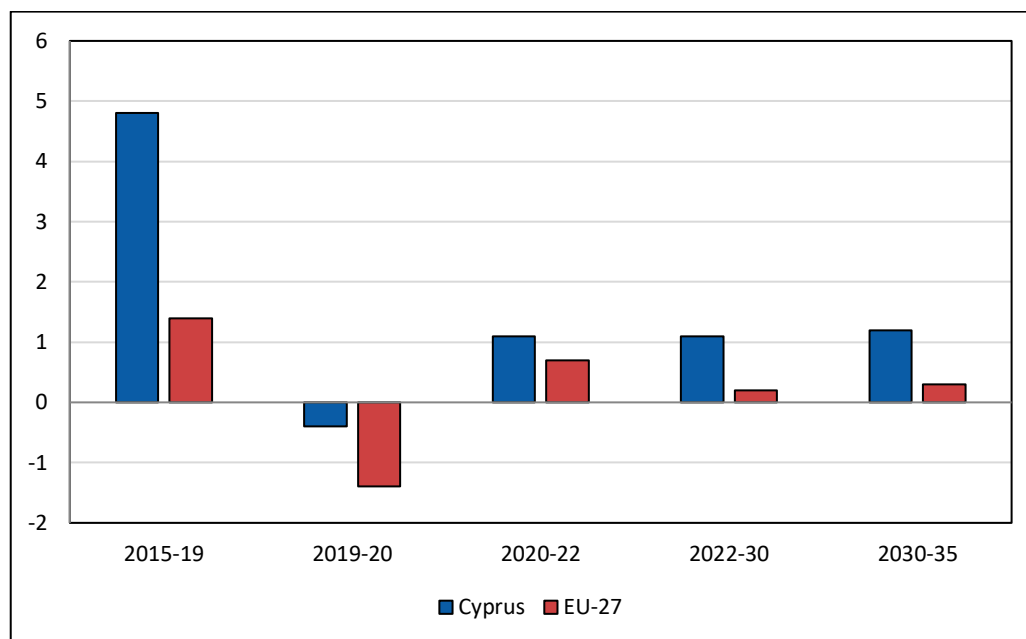
Information and communication

# Cedefop skills forecast: Cyprus

## 1. Employment outlook

Employment in Cyprus is forecast to grow much faster than the EU-27 average, albeit at much slower rates than seen in 2015-19. Figure 1 shows that employment in Cyprus grew much faster than the EU-27 average over 2015-19 and fell less sharply in 2020 as the Covid-19 pandemic hit. Employment in Cyprus is also estimated to have bounced back slightly more strongly than the EU-27 over 2020-22. Across the forecast period, employment in Cyprus is forecast to grow by a little over 1% 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 Cyprus and the EU-27, 2015-35**



Source: Cedefop (2022 Skills Forecast).

## 2. Labour force overview

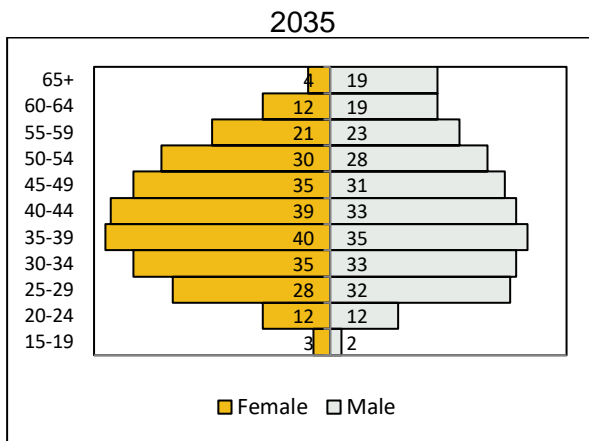
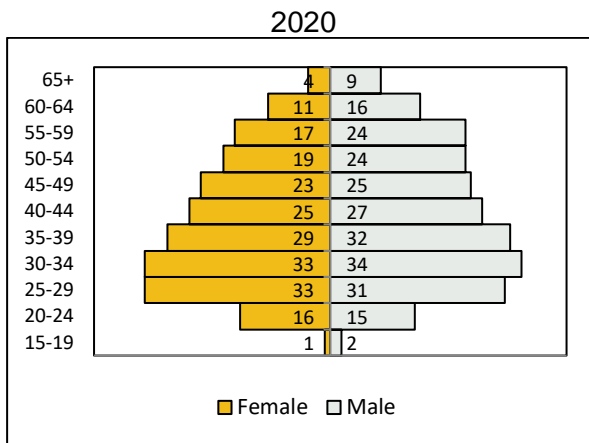
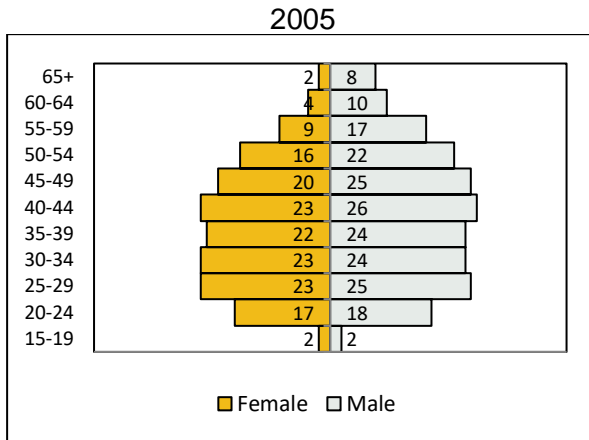
Figure 2 shows the labour force by age group in Cyprus in 2005, 2020 and 2035. Changes in the labour force in Cyprus over the forecast period will continue to be driven by the ageing population and increasing participation rates in most age groups. The total labour force in Cyprus is projected to increase by just over 17% over 2020-35, compared to growth of 24% over the previous 15 years. This forecast is much faster than the expected increase in the labour force of just under 3% during 2020-35 for the EU-27 as a whole. The total participation rate in Cyprus is forecast to increase by 3 pp over 2020-35, compared with a 1 pp increase in the total rate for the EU-27. Total population is forecast to grow by 12% over 2020-35, compared with a growth of 27% over 2005-20.

The population aged 20-34 in Cyprus is forecast to decline sharply during 2020-35, while the population aged 35-54 and 65 and above is forecast to grow strongly, reflecting trends in the relevant younger cohorts in preceding periods.

The participation rates of all age groups in Cyprus except those aged 20-24 are forecast to grow strongly over 2020-35, by 3 pp or above. A sharp decline in the participation rate for those aged 20-24 reflects the increasing number of younger adults continuing in education.

The differences between male and female participation rates in Cyprus are not generally as great as the EU-27 average, but like the EU-27 average, female participation rates in Cyprus are generally forecast to increase more than male rates, reflecting the fact that female participation rates, especially for the older age groups, do have a lower starting point. Overall, the total participation rate for females is forecast to increase by 4 pp and for males to increase by 1 pp over 2020-35.

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

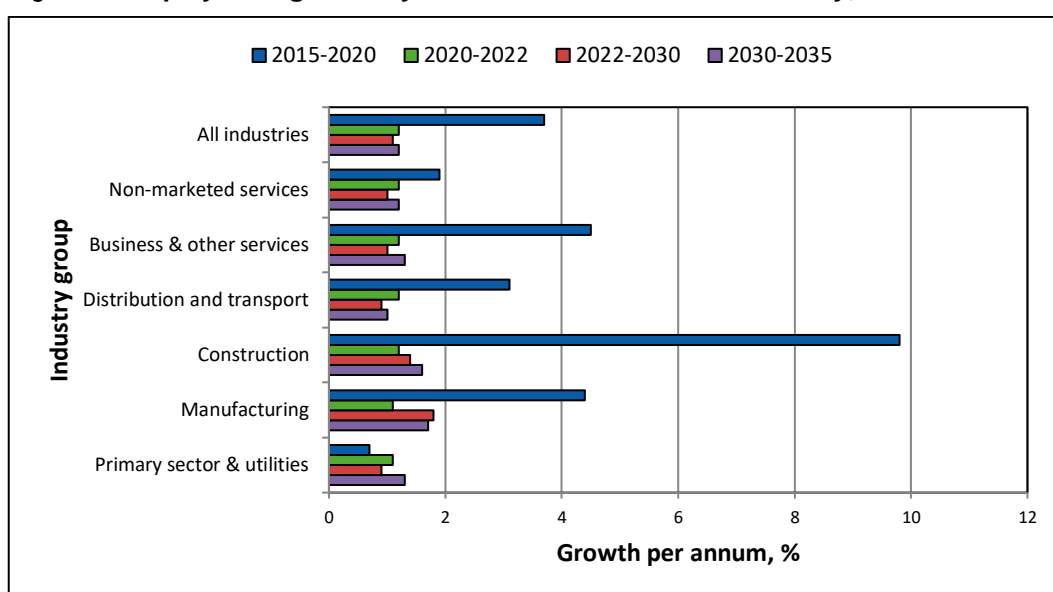


Source: Cedefop (2022 Skills Forecast).

### 3. Sectoral employment trends

Figure 3 shows annual average employment growth by broad sector in Cyprus between 2015 and 2035. All broad sectors in Cyprus are forecast to see an increase in employment over the forecast period, with *Manufacturing* (1.8% pa) and *Construction* (1.4% pa) forecast to see the strongest growth over 2022-30. The remaining broad sectors are forecast to see employment growth of around 1% pa 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), the strong growth in employment in *Manufacturing* is forecast to be driven by growth in *food, drink & tobacco, basic metals & metal products, electrical equipment, optical & electronic equipment, other machinery & equipment, motor vehicles* and *other transport equipment*, all with growth of 2% pa over 2022-30. Of these, *food, drink & tobacco* is the largest sub-sector, accounting for just over 3% of total employment in Cyprus. Within *Business & other services*, employment is forecast to be driven by growth in *market research & other professional services, computer programming & information services, telecommunications, real estate activities* and *research & development*, all with forecast growth of 2% pa or more over 2022-30. Within *Primary sector & utilities*, employment in the *electricity* sub-sector is forecast to grow quite strongly over 2022-30, while the relatively large (accounting for 3.4% of total employment in Cyprus in 2020) *agriculture* sub-sector

is forecast to see a small fall in employment over the same period. In Non-marketed services, the large sub-sectors of *health* and *education* are forecast to see relatively strong growth in employment over 2022-30.

## 4. Job openings by occupational group

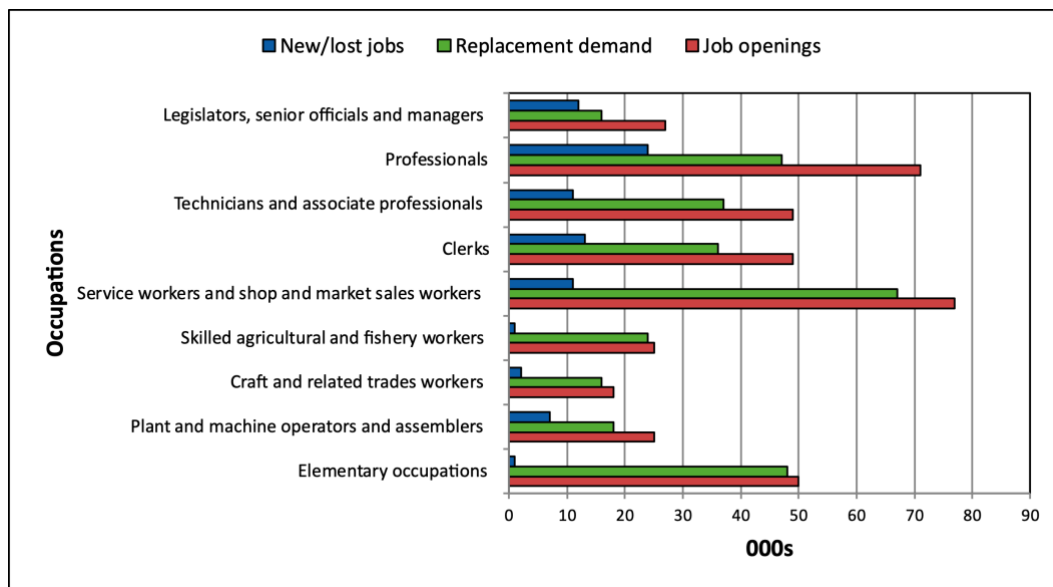
Cedefop skills forecasts estimate the total job openings by occupational group as the sum of net employment change and replacement needs. Net employment change refers to new jobs created or jobs lost due to the expansion or contraction of employment in that sector or occupation. Replacement needs arise 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 total job openings by broad occupational group over 2022-35. 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 see at least some increase in the number of jobs over this period, with *Professionals* seeing the largest expansion. As is usually the case, replacement demand is projected to provide the greatest number of job openings across all broad occupations, particularly for *Service workers & shop & market sales workers*, which is projected to see the greatest number of job openings, followed by *Professionals*. Overall, the number of jobs is forecast to increase by 81,000, while replacement demand is forecast to be 311,000, so the total number of job openings is forecast to be around 390,000.

At the more detailed level, most job openings (taking both new/lost jobs and replacement needs together) are expected to be in skilled non-manual occupations such as *sales workers*, *personal service workers* and *general & keyboard clerks*, consistent with the forecast increase in sectors such as *accommodation & catering* and *wholesale & retail trade*. Among the high skilled non-manual occupations, *business & administration associate professionals* are expected to see by far the greatest number of job openings due to strong replacement demand. A relatively high number of job openings for *teaching professionals* are linked to government investment in education (both at the tertiary and vocational level) and the rise in private educational institutions. Some skilled manual occupations, such as *building & related trades workers*, are expected to provide a significant number of job openings, mostly because of replacement needs in those occupations and the growth of the construction sector. The elementary occupation of *cleaners & helpers*

is expected to provide many job openings, given the widespread increase in all sectors of the economy.

Figure 4. Job openings by broad occupational group, 2022-35



Source: Cedefop (2022 Skills Forecast).

## 5. Drivers of occupational change

The occupational composition of employment in Cyprus 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 an increasing share of *managers and professionals, technicians and other associate professionals and stationary plant & machine operators*. High-skilled occupations that can benefit from these trends are, for example, *health professionals, administrative and commercial managers, and, in particular, managers in services*. Of all occupations, *chief executives, senior officials & legislators* are expected to experience the largest increase due to the positive employment effect and despite the negative impact of industry size for this occupation group.

Therefore, the overall effect of occupational change depends on several factors that need to be considered together. Increasing digitisation and moves toward a service-oriented economy, including within manufacturing, will lead to a greater use of higher-level occupations at the expense of some medium and low-level occupations. All relevant lower-level occupations are expected to decrease apart from *cleaners, refuse, street & related service occupations*.



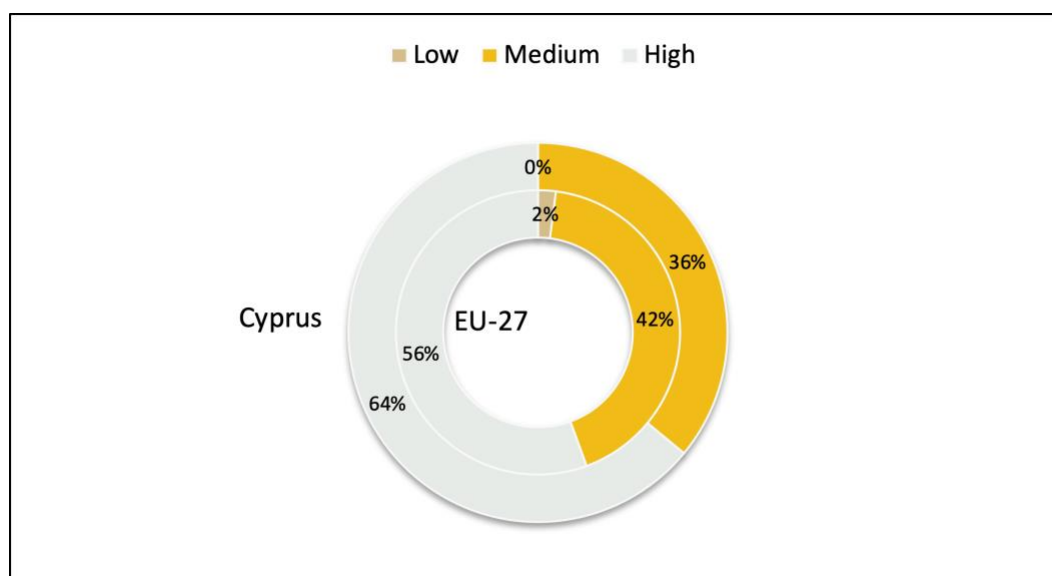
Intermediate occupations are expected, overall, to increase. Among the medium-qualified occupations becoming stronger are *stationary plant & machine operators* and *general office clerks*. Meanwhile, *Agricultural workers* represent the occupations that will suffer the most.

## 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 Cyprus and the EU-27 over 2022-35. In Cyprus, almost two-thirds (64%) of job openings are expected to require high level qualifications. A lower share (36%) of job openings is expected to require a medium qualification, while only few job openings require a low qualification.

Figure 5. **Shares of total job openings by level of qualification, 2022-35**

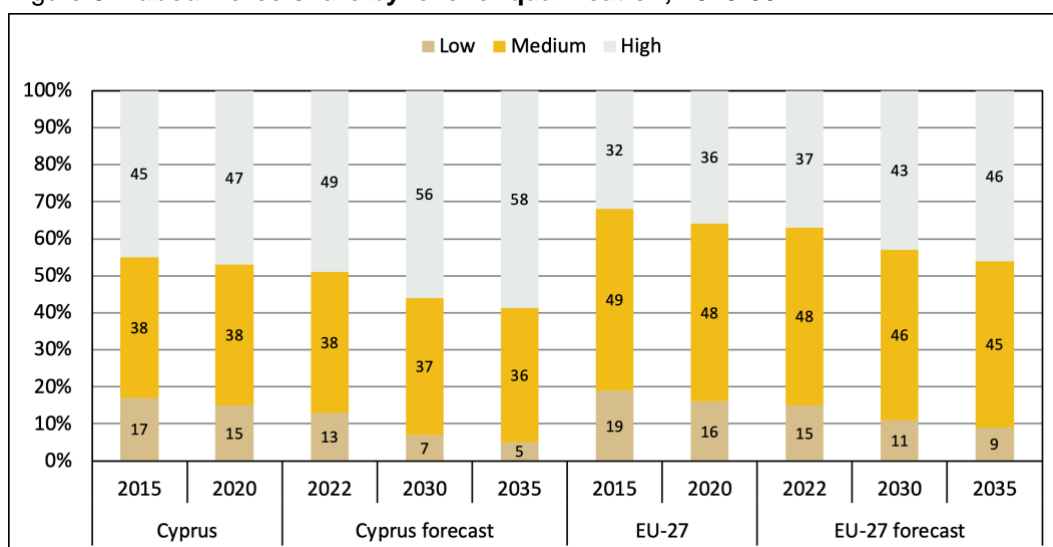


Source: Cedefop (2022 Skills Forecast).

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 shows the development of qualification shares in the labour force in Cyprus and the EU-27. Cyprus is increasing its share of the higher qualified in the labour market. While the share was 49% in 2022, it is expected to increase to 58% by 2035. The increase in the share of the higher qualified has been predominantly through the gradual replacement of older, low qualified workers. The share of low qualified workers is expected to decrease from 13% in 2022 to 5% in 2035, while the share of medium qualified workers is expected to remain fairly stable (38% in 2022 to 36% in 2035). Relative to the EU-27 average qualification mix, Cyprus is expected to continue to have a higher share of the higher qualified.

Figure 6. Labour force share by level of qualification, 2015-35



Source: Cedefop (2022 Skills Forecast).

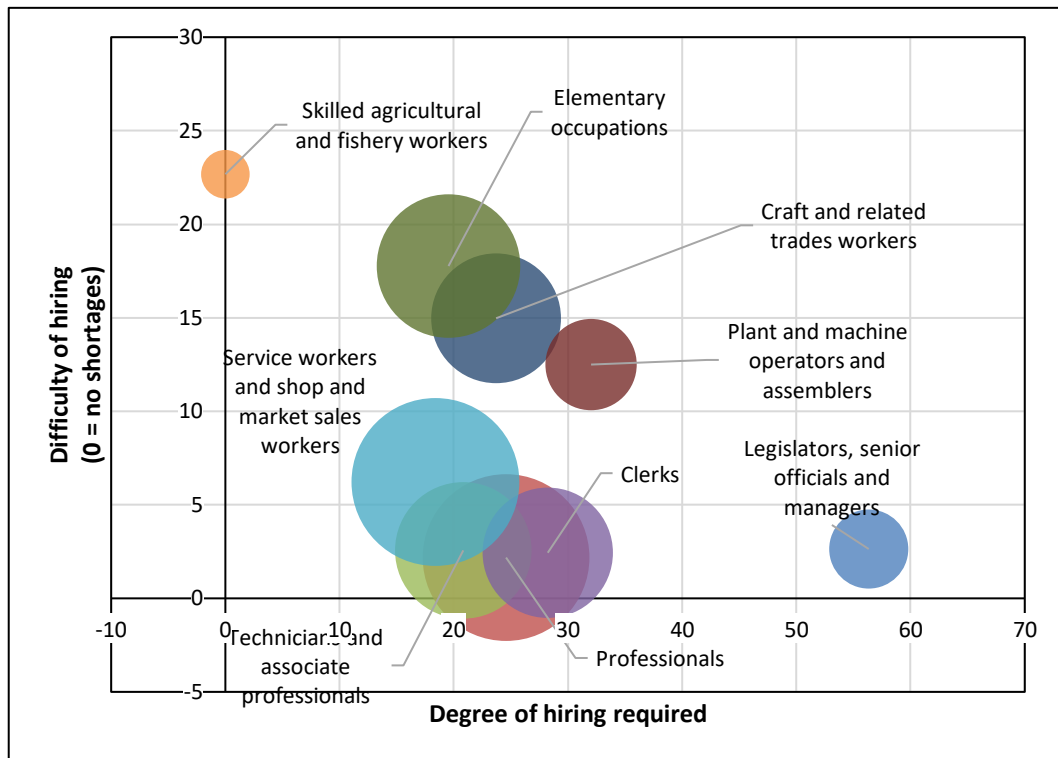
Additionally, this trend can be attributed to the high percentage of Cypriot secondary graduates who continue on to higher education.

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

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 could be shortages, especially among the medium and lower qualified. These shortages therefore imply that some higher educated workers may have to be employed within occupations at a lower level than they qualify for, or it will result in hiring difficulties. There are stronger changes in lower level occupations reflecting the change in qualification mix in those occupations.

Medium level occupations in *Crafts* and *Plant & machine operators & assemblers*, as well as *Skilled agricultural & fishery workers* and to a lesser extent in *Service workers & shop & market sales workers* are expected to have higher levels of hiring difficulties in the forecast (**Error! Reference source not found.**). In this context, Cypriot employers often seek to hire foreign workers to fill job

vacancies, as they face difficulties in hiring them in medium and low level occupations. *Service workers & shop & market sales workers* and *Clerks* are expected to see medium levels of change by qualification, and so medium degrees of hiring required. While *Professionals* and *Legislators, senior officials & managers* are expected to have less hiring difficulties, as they usually hire from the supply of higher qualified, they also show a high degree of hiring required in the forecast period. Hiring difficulties among *Professionals* are very low across the underlying occupations.

## 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) <sup>(1)</sup>, and the short-term macroeconomic forecast produced by DG ECFIN in May 2022 <sup>(2)</sup>. 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](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 Cyprus has been developed in collaboration with Stelios Mytides, Human Resource Development Authority of Cyprus.

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