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European Centre for the Development
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EN



2020 skills forecast Cyprus

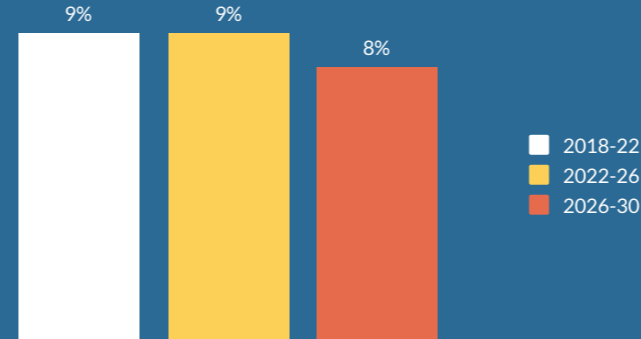




526 000
 Employment in 2030

29%
 Increase
 2018-30

% Employment growth 2018-30



354 000

Total job openings, 2018-30



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

FASTEST-GROWING SECTORS

Growth per year 2018-30

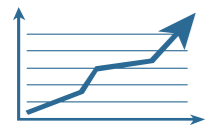
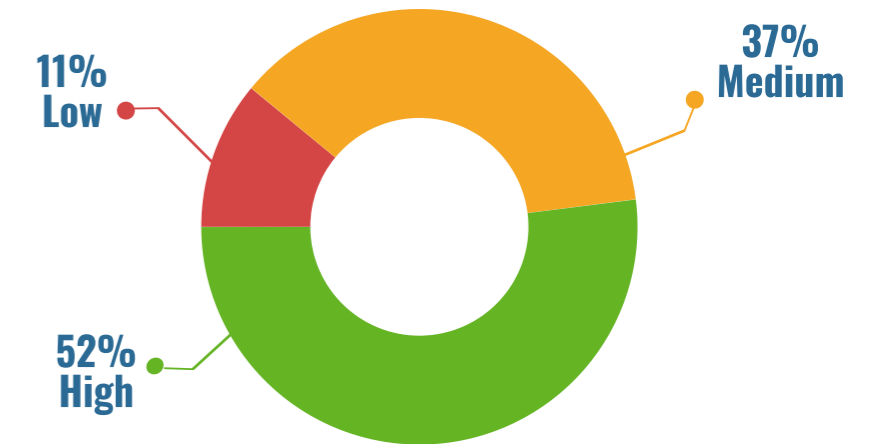


HIGHEST-DEMAND OCCUPATIONS

Total job openings 2018-30



Total job openings by qualification level 2030:



4.4%

Increase
 in employment
 in 2018-30



Fastest-growing sector
 Non-marketed services



Highest-demand occupation
 Business & administration associate
 professionals

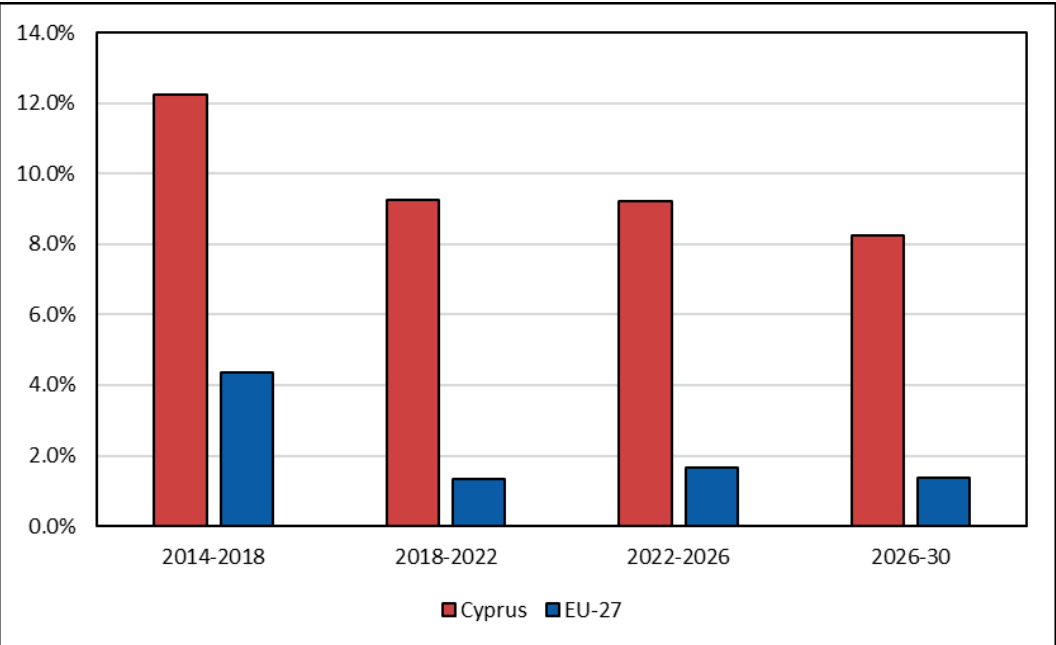
42% Increase in high-skilled
 labour supply 2018-30



1. Employment outlook

Employment in Cyprus is forecast to increase significantly over the period 2018-30, albeit slightly slower than seen over 2014-18. Employment in Cyprus is expected to grow by 9% in the short term (2018-22) and medium term (2022-26) and by 8% in the long term (2026-30). Growth is expected to be well above the EU-27 average, surpassing it by around 7 percentage points (pp) in all subperiods. As a result, labour market conditions in Cyprus will continue to improve and the unemployment rate will maintain its downward trend.

Figure 1. Percentage employment growth in Cyprus and the EU-27, 2014-30



Source: Cedefop (2020 Skills Forecast).

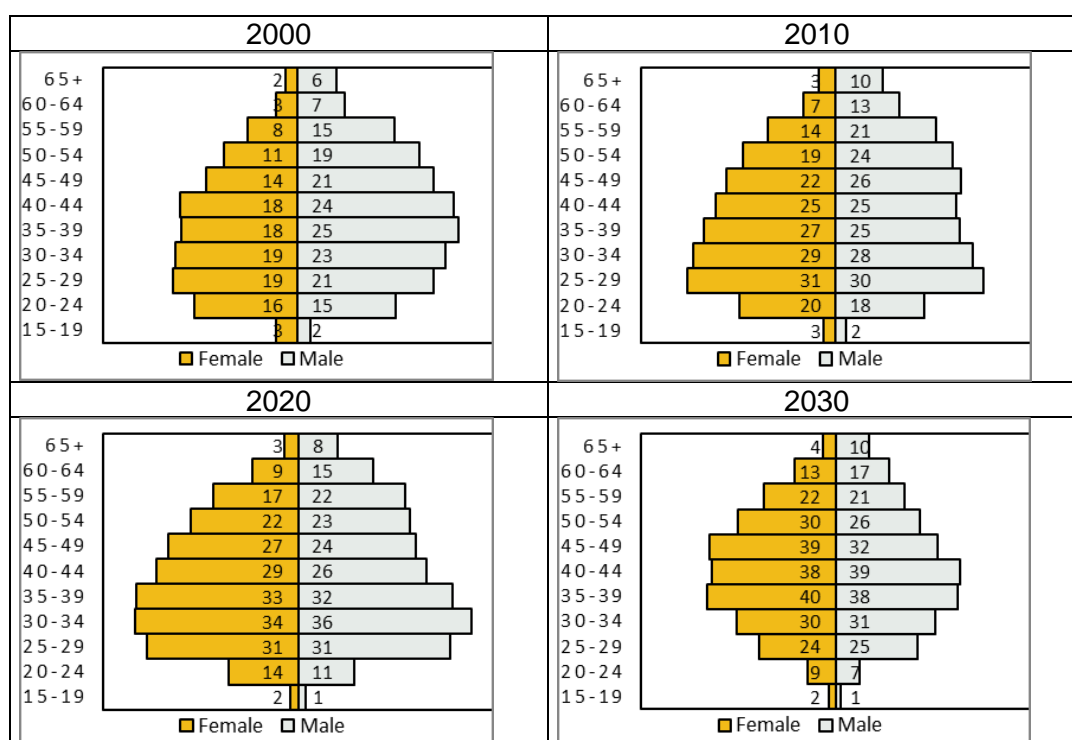
2. Labour force overview

In Cyprus, the labour force is expected to grow by 61% over the three decades from 2000 to 2030. The increase in the labour force is driven by a large increase in the size of the population for all age groups except those aged 24 or less and a contemporaneous increase in labour market participation (see Figure 2). A certain increase in the age structure of the labour force can be observed in Cyprus, but to a lesser extent than in other Member States. Indeed, although growth is expected to be higher for the population aged 60 or more, favourable population developments are expected to affect all other age groups, except

those aged 24 or less. By 2030, the age group 35-39 is expected to be the one with the highest share (16%) of the labour force, followed by the age groups 40-44 (15% share) and 45-49 (14% share).

Labour market participation rates are expected to increase for most age groups, with much of the increase expected to happen between 2020 and 2030. Indeed, the increase in the labour force is expected to surpass the already significant growth in population, resulting from these higher participation rates. The exceptions to this trend are those aged 24 or less and those aged 65 or more. For the former, the decline of the labour force is larger than the decline in the population (because of increasing numbers continuing in education), while for the latter, the increase in female participation rates is expected to be negated by a decrease in male participation rates. Increased participation is expected to be more widespread among females, whose increase in participation rates is expected to be higher than the males for each age group. Taken together, these developments are expected to increase overall participation rates by 5 pp over 2000-30, of which 1 pp is expected to be over 2020-30.

Figure 2. Distribution of the labour force (thousands), 2000-30

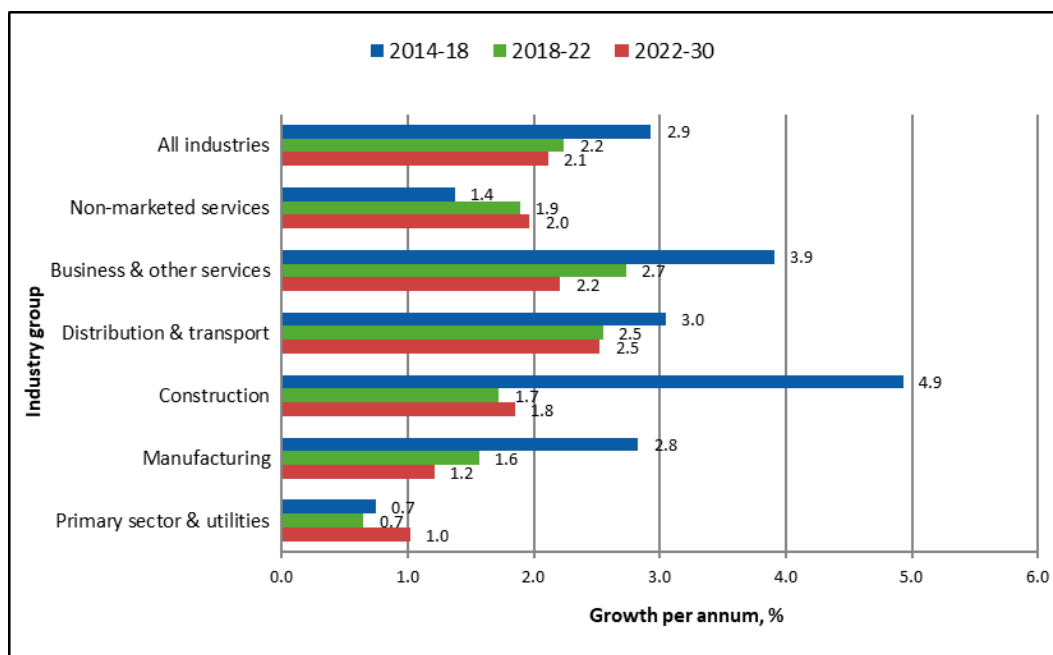


Source: Cedefop (2020 Skills Forecast).

3. Sectoral employment trends

As Figure 3 shows, employment is expected to increase at a sustained pace in all sectors, although below the very high rates seen over 2014-18. *Business & other services* and *distribution & transport* are expected to be the fastest growing sectors, growing by around 2.5% pa or more, followed by *non-marketed services* growing by around 2% pa over the forecast period. *Construction* (which, during 2014-18, recovered strongly from the effects of the financial crisis) and *manufacturing* are expected to increase by more well over 1% pa during the forecast period. *Primary sector & utilities* is the sector expected to increase the least, but nonetheless it is projected to grow by 0.7% pa over 2018-22 and 1% pa over 2022-30.

Figure 3. Employment growth by broad sector of economic activity, 2014-30



Source: Cedefop (2020 Skills Forecast).

In terms of sub-sectors (i.e. below the level of the six broad sectors discussed above), *computer programming and information services* is expected to exhibit strong growth because of the government’s effort to promote the use of ICT technologies across the economy through the implementation of the National Digital Strategy. The objective of this strategy is to achieve the digital transformation of the public sector (e-Government) and the promotion of the digital transformation of the private sector. The Government’s efforts to promote Cyprus as an international business centre are expected to spur employment

growth in *legal, accounting and consulting*. The expected employment growth in *construction* will impact related activities such as *architectural and engineering*, with an emphasis on contemporary building design with high energy efficiency. These developments explain the expected growth in *business & other services* described above. The *accommodation & catering* sector is expected to grow thanks to an upgrading and differentiation of tourism activities, enriching it with alternative forms of tourism and mitigation of seasonality. Increased employment in *water transport* is linked to the establishment of passenger sea connections with Greece, the promotion of the merchant shipping sector by the government and a stronger competitiveness of Cypriot ports. Developments in these sectors, together with increases in *wholesale and retail trade*, are expected to drive growth in the *distribution & transport* sector. A sizeable employment growth expected in the *health* sector is linked to the gradual implementation in 2019 of the National Health System, which marks the transition to a universal healthcare system covering the whole population, as well as with the continuing ageing of the Cyprus population, having increased health care needs. Government investment, the trend of young Cypriots to pursue tertiary education and an increasing number of foreign students are expected to boost employment in the *education* sector. *Health* and *education* are therefore expected to drive the increase in employment within the *non-marketed services* sector. *Food, drink and tobacco* (which accounts for the highest share of manufacturing employment) is expected to increase significantly, thus driving the increase in *manufacturing*. However, due to the small size of the island, lack of natural resources and limited financial resources of companies, heavy industries are almost absent from Cyprus. Therefore, the relevance of *manufacturing* within expected employment growth is limited.

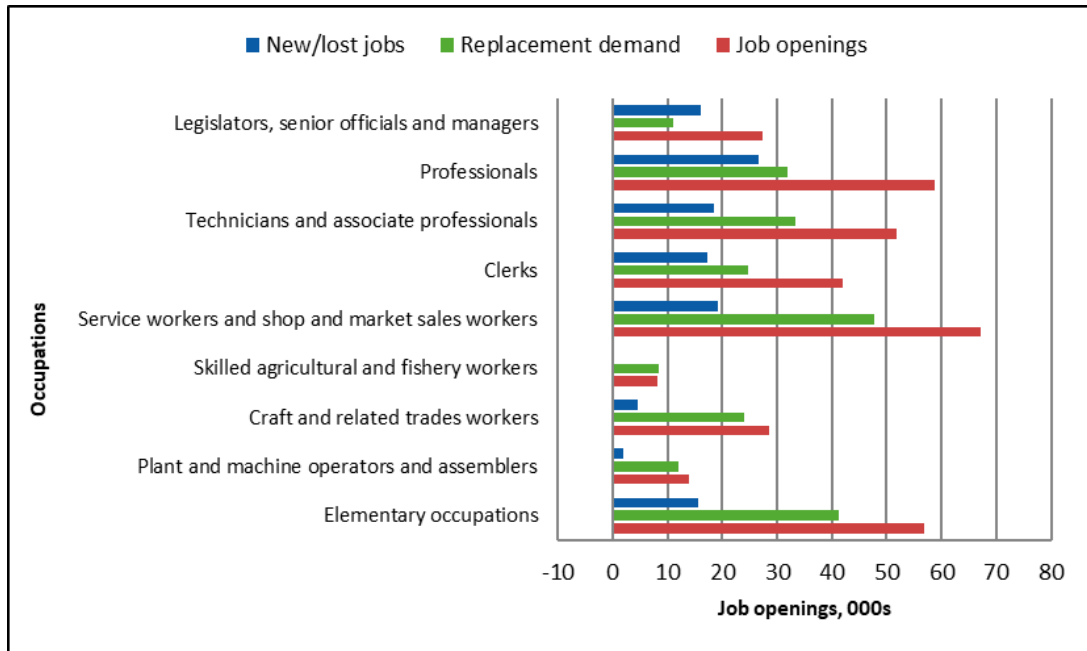
4. Job openings by occupational group

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 due to the expansion of the 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 2018-30. 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. *Service workers and shop and market sales workers* is expected to be the occupation creating the highest amount of job openings, accounting for 19% of total job openings and providing a significant amount of new jobs (19 000). *Professionals* is expected to be the second occupation in terms of total job openings but the first in terms of newly created jobs (27 000). Other occupations providing numerous new jobs are *technicians and associate professionals* (18 000) and, contrary to most other Member States, *clerks* (17 000). Occupations at the opposite side of the occupational spectrum, *legislators, senior officials and managers* and *elementary occupations*, are expected to provide 16 000 new jobs each. *Skilled agricultural and fishery workers, craft and related trade workers* and *plant and machine operators and assemblers* are expected to provide a marginal contribution in terms of new jobs, but because of replacement needs they will provide 51 000 job openings taken together. In total, 119 000 new jobs within a total of 355 000 job openings are expected to be created in Cyprus between 2018 and 2030.

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 *customer service clerks*, consistent with the forecast increase in sectors such as *accommodation and catering* and *wholesale and retail trade*. Among the *high skill* occupations, *business and administration associate professionals* and *legal, social and cultural professionals* are expected to provide the highest number of job openings. 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 the number of private educational institutions. Some *skilled manual* occupations such as *building and related trades workers, excluding electricians*, 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. *Elementary occupations* such as *labourers in mining, construction, manufacturing and transport* are expected to provide many job openings, given the widespread increase in all sectors of the economy.

Figure 4. Job openings by broad occupational group, 2018-30



Source: Cedefop (2020 Skills Forecast).

5. Drivers of occupational change

The occupational composition of employment in Cyprus is mainly characterised both 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, overall, to an increasing share of *professionals* and *legislators, senior officials and managers, technicians and other associate, customer services clerks*. High-skilled occupations that can benefit from these trends are, for example *health professionals, teaching professionals, business and other professionals, general office clerks* and *science and engineering associate professionals*.

The overall effect of occupational change therefore depends on a number of 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 *elementary occupations*.

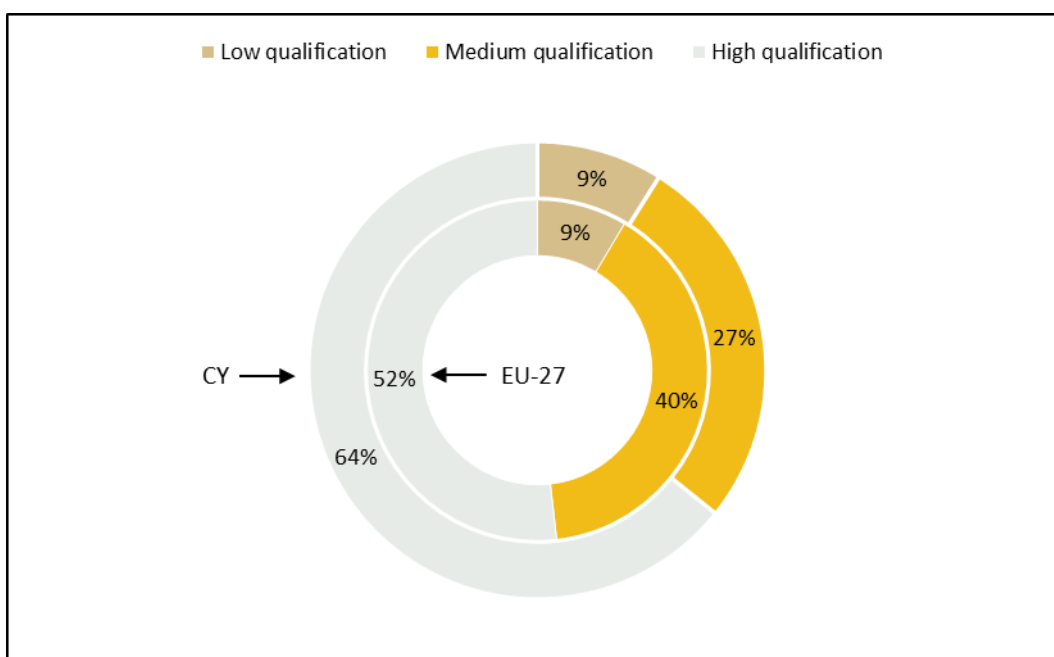
Intermediate occupations are expected, overall, to increase. Among the medium-qualified occupations becoming stronger are *sales workers, building and related trade workers* and workers in *elementary occupations*.

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 2018-30. In Cyprus, almost two-thirds of job openings are expected to require high level qualifications. Compared to the EU-27, a much higher share of job openings is expected to require a high level of qualifications, a lower share of medium qualifications and the same share of low qualifications.

Figure 5. Shares of total job openings by level of qualification, 2018-30

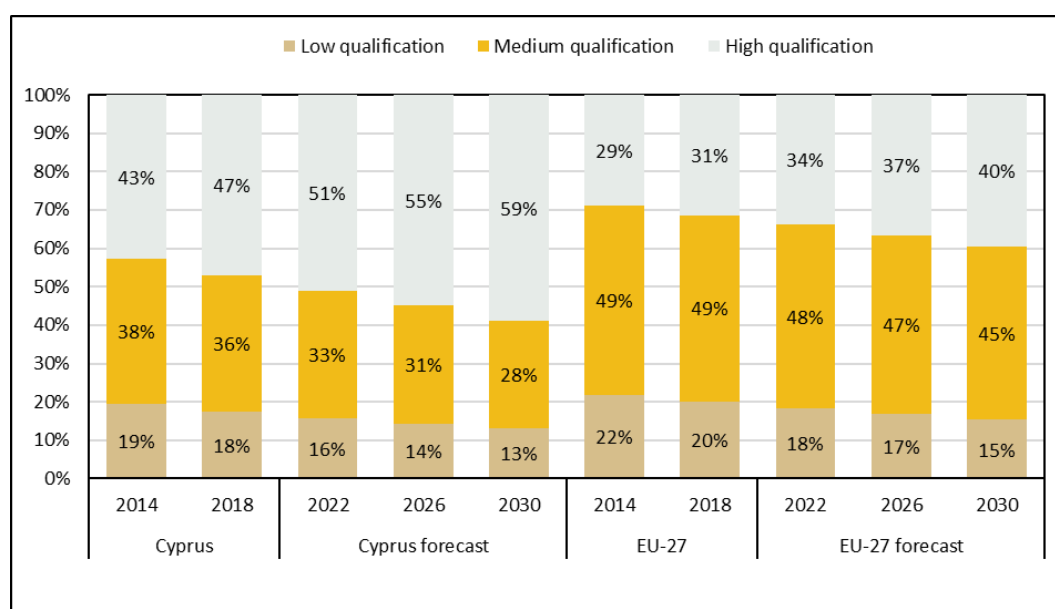


Source: Cedefop (2020 Skills Forecast).

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 qualification shares in the labour force in Cyprus and the EU-27. Cyprus is rapidly increasing its share of higher qualified in the labour market. While the share was at 47% in 2018, it is expected to increase to well over half (59%) the labour force by 2030.

Figure 6. Labour force share by level of qualification, 2014-30



Source: Cedefop (2020 Skills Forecast).

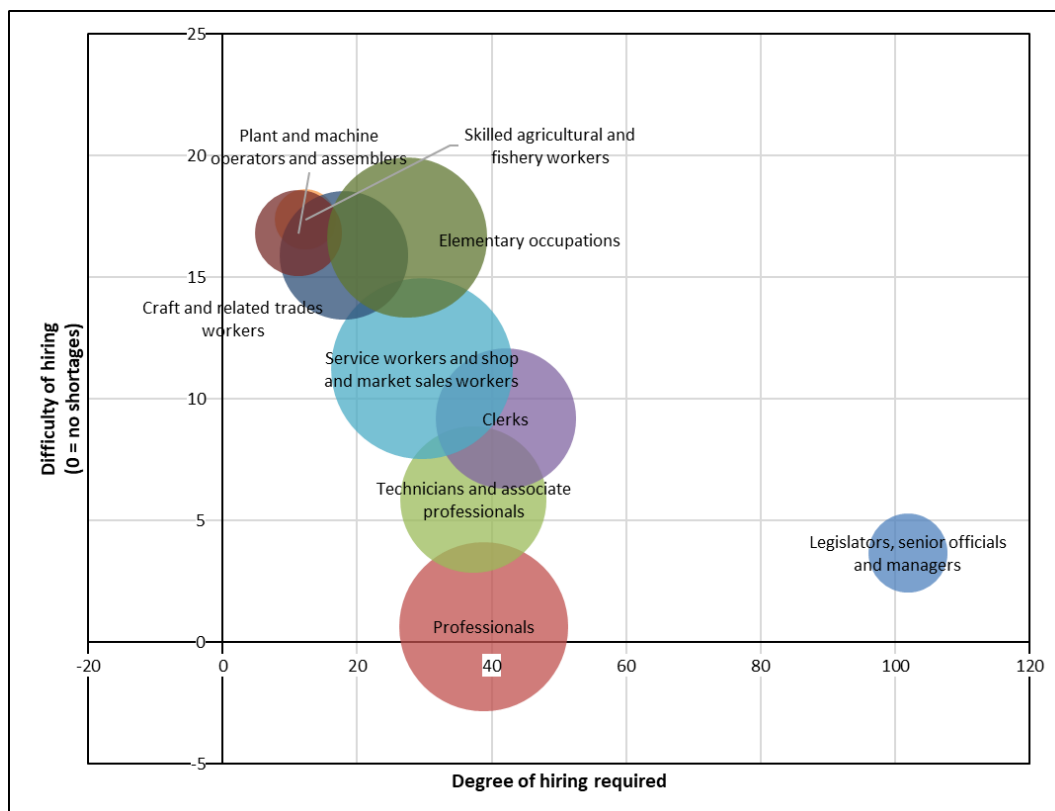
The increasing share of higher qualified is expected to be due to the reduction of older workers, both low and medium qualified, who are expected to decrease their share from 18% and 36% respectively in 2018 to 13% and 28% respectively in 2030. The trend is similar to that of the EU-27, and Cyprus is expected to continue to have higher shares of high qualified workers and lower shares of low and medium qualified compared to the average qualification mix in the EU. Additionally, this trend can be attributed to the high percentage of Cypriot secondary graduates who continue on to higher education (around 70%).

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 (2018) 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, 2018-30



N.B: Indicators were calculated at the level of the underlying two-digit occupation group. Aggregation was based on the employment weights within each one-digit occupation group.

Source: Cedefop (2020 Skills Forecast).

The increasing supply of higher educated workers suggests that there could be shortages, especially among the medium but also of the 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. Medium level occupations in *crafts, plant and machine operators and assemblers*, as well as *skilled agricultural and fishery workers* and to a lesser extent in *service workers and shop and market sales workers* are expected to have higher levels of hiring difficulties in the forecast (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 (2018) 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.

). In this context, Cypriot employers are seeking to hire foreign workers in order to fill the job vacancies, as they face difficulties in hiring Cypriot workers in medium and low level occupations. *Service workers and shop and 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 and managers*, are expected to have less hiring difficulties, as they usually hire from the supply of higher qualified, they also show, respectively, a medium and high degree of hiring required in the forecast period.

Hiring difficulties among *professionals* are very low across the underlying occupations. The degree of hiring required differs, though, with *information and communications technology professionals* (65) as well as *business and administration professionals* (62) reaching almost double the level of the average among all *professionals* (39), while *legal, social and cultural professionals* are projected to need to hire an amount that is at least half the number currently employed (51). Relatively low levels of hiring are expected to be required among *science and engineering professionals* (28), and *teaching professionals* (18).

Cedefop methodology and scenarios

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 2030. The forecast takes account of global economic developments up to May 2019. The European economy is continued to expand for the seventh year in a row in 2019, with real GDP growing in all EU Member States. As global uncertainties continue to weigh, domestic dynamics are set to support the European economy. The key assumptions of the baseline scenario incorporate the Eurostat population forecast available in May 2019 (Europop 2015) ⁽²⁾ and the short-term macroeconomic forecast produced by DG ECFIN in May 2019 ⁽³⁾.

The Cedefop Skills forecast was developed before the global Covid-19 pandemic had begun. The short-term economic impacts of the pandemic and subsequent lockdowns in many countries are very uncertain, and therefore the current short-term forecast is likely to be over-optimistic. However, the key long-term factors (such as the ageing population, increasing use of automation/artificial intelligence, globalisation, resource scarcity and moves towards a carbon neutral economy) will still hold as the EU Member States put plans in place to deal with the virus and their economies move forwards. The trends in the longer-term forecast are therefore still likely to hold.

For the latest update and access to more detailed Cedefop skills forecast data please visit:

<http://www.cedefop.europa.eu/el/events-and-projects/projects/forecasting-skill-demand-and-supply>



⁽²⁾ <https://ec.europa.eu/eurostat/web/population-demography-migration-projections/population-projections-data>

⁽³⁾ https://ec.europa.eu/info/business-economy-euro/economic-performance-and-forecasts/economic-forecasts/spring-2019-economic-forecast-growth-continues-more-moderate-pace_en



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