

1. Employment outlook

Following the decline that continued over the period 2011-16, the employment levels in Greece have started to increase from 2016 onwards, as shown in Figure 1. This trend is projected to continue up to 2026. Specifically, during the period 2021-26, Greece's employment growth is estimated to be almost double the EU-28's (4.6% versus 2.6%) employment growth. In the period 2026-30 employment is expected to stagnate.

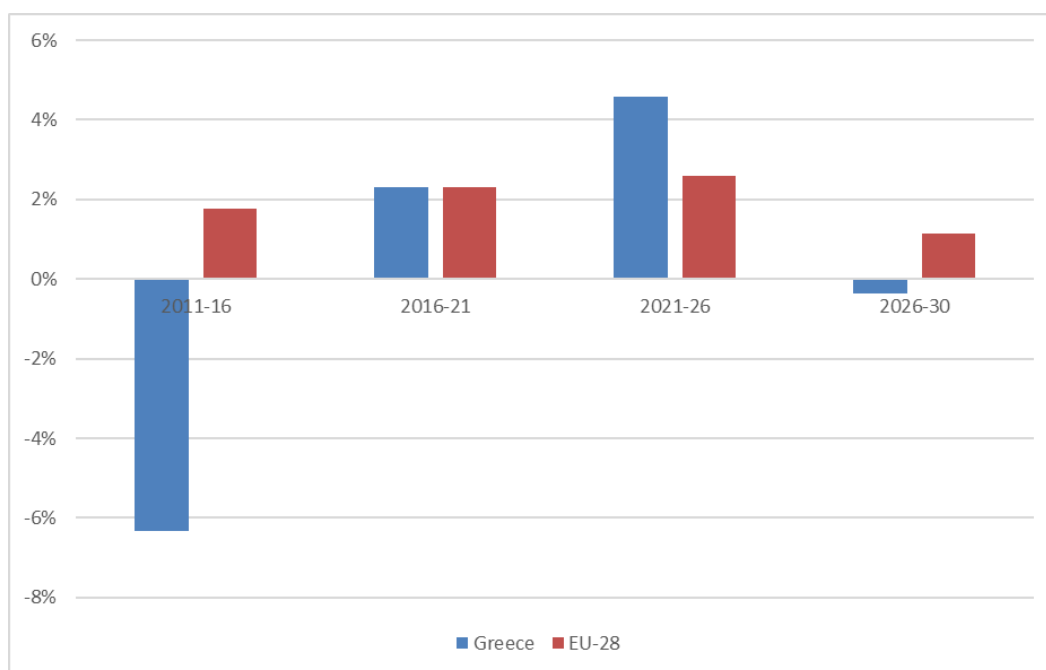


Figure 1 Percentage employment growth in Greece and the EU-28, 2011-30

Source: Cedefop (2018 Skills Forecast)

2. Labour force overview

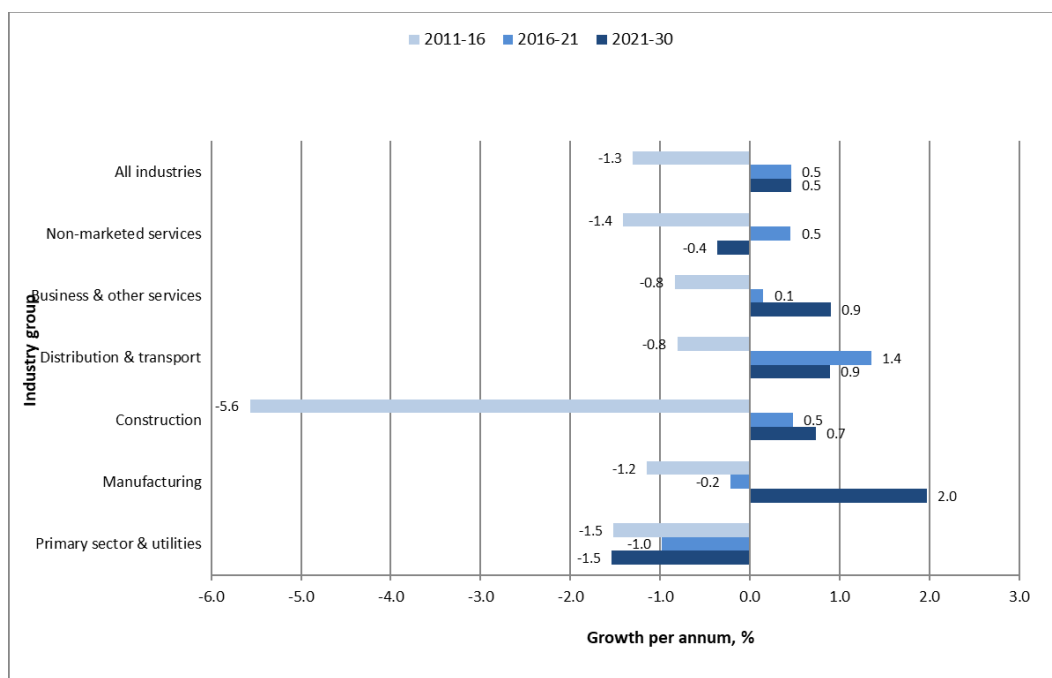
Greece's labour supply is expected to decline substantially (-13%) over the period up to 2030. This can be attributed to a declining working age population (-4.8% over the same period), whose composition is changing as cohorts aged 30-44, with generally very high participation rates for both sexes are expected to decrease in number. On the other hand, the number of workers with traditionally

low participation rates (e.g. 60+) is expected to increase. Overall, the result of this ageing of the workforce results in the forecasted overall decline in labour supply.

3. Sectoral employment trends

The declining trend in employment observed over the period 2011-16 is expected to change. Employment will increase over the forecast period for most broad sectors of economic activity, as shown in Figure 2. In particular, the highest increase per annum in employment will be observed in *distribution & transport* sector (over the period 2016-21) and in *manufacturing* sector (over the period 2021-30). In terms of sub-sectors, *hotels and catering*, and *rest of manufacturing* (i.e. *pharmaceuticals, metal products, motor vehicles, sewerage and waste*) are those where the greatest increase is expected. Especially the latter will see a sharp rise after 2020 (from a recession of -1.3% in 2016-21 to 2.8% between 2021 and 2030). In contrast, *primary sector and utilities* will continue shrinking, while the decrease will be sharpest for *mining and quarrying*, following the trend of the rest of the EU.

Figure 2 Employment growth by broad sector of economic activity, 2016-30



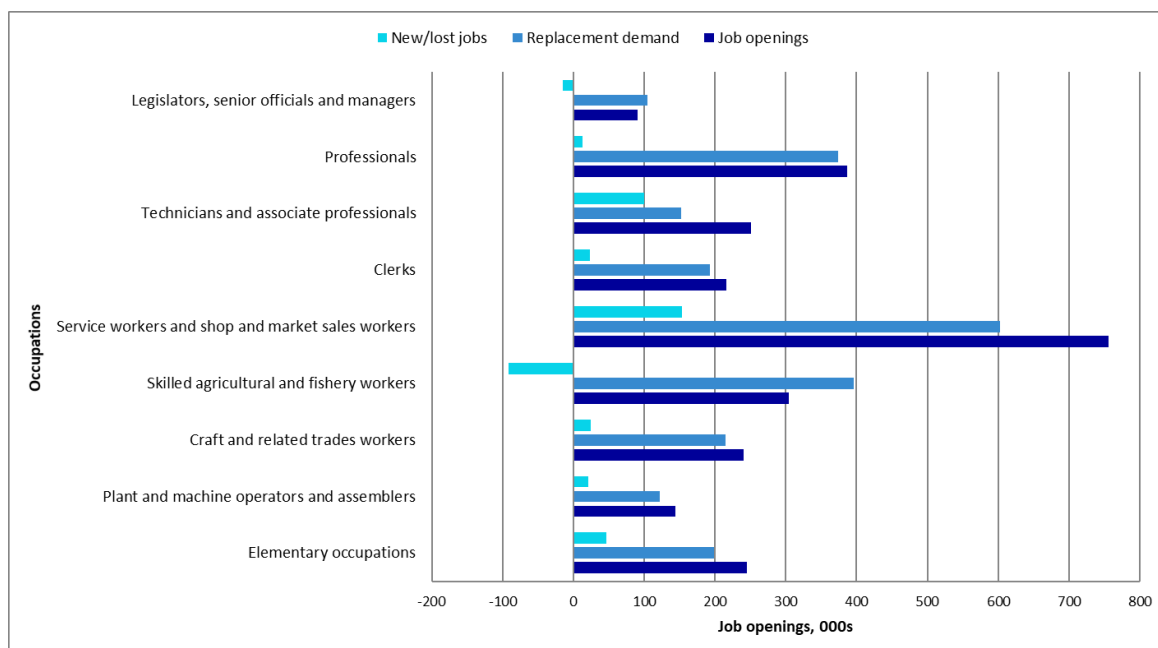
Source: Cedefop (2018 Skills Forecast)

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 the period 2016-30. The number of job openings is determined by the amount of jobs lost/newly created and by the amount of jobs that are created following the retirement of old workers. Figure 4 demonstrates that most of the job creation in Greece will come from the need to replace retiring workers. Therefore, numerous job opportunities will arise for *service workers and shop and market sales workers*, representing 29% of the total job openings, (compared to 16% for the EU-28) with almost 750 000 job openings, 80% of them are the result of replacement demand. Even though *Skilled agricultural and fishery workers* will experience a decline in employment size, as shown by the amount of jobs lost, the need to replace existing workers will create a significant number of new jobs.

Figure 3 Job openings by broad occupational group, 2016-30



Source: Cedefop (2018 Skills Forecast)

When occupational groups are analysed in more detail, it is possible to see that many **new jobs** will be created for legal and health associate professionals. However, most of the **new jobs** will be created for occupations that are traditionally considered as medium-skilled, such as sale workers and personal service workers. Regarding **total job openings** (openings due to both new/lost jobs and replacement needs), the occupations that will contribute the highest numbers to the Greek economy over the period up to 2030 are *sales workers*, *personal service workers* and *market-oriented skilled agricultural workers*.

5. Drivers of occupational change

Within the Cedefop skills forecasts, 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/ others).

The sectoral changes of the Greek economy and the shift towards *business services* and *distribution* will create new demand for several typically low- and

medium-skilled occupations such as *food processing and craft-related trades, food preparation assistants, sales and personal service workers*. However, also some high-skilled occupations, such as *hospitality, retail and other service managers and information and communications technology professionals* will benefit from these sectoral shifts.

Developments in automation technology will cause occupations such as *handicraft and printing workers, metal machinery and related trade workers and general and keyboard clerks* to decrease in the level of employment. These occupations are expected to decrease in employment because of their routine-based nature, which allows to automate processes more easily and thus to replace workers with technology to a certain extent.

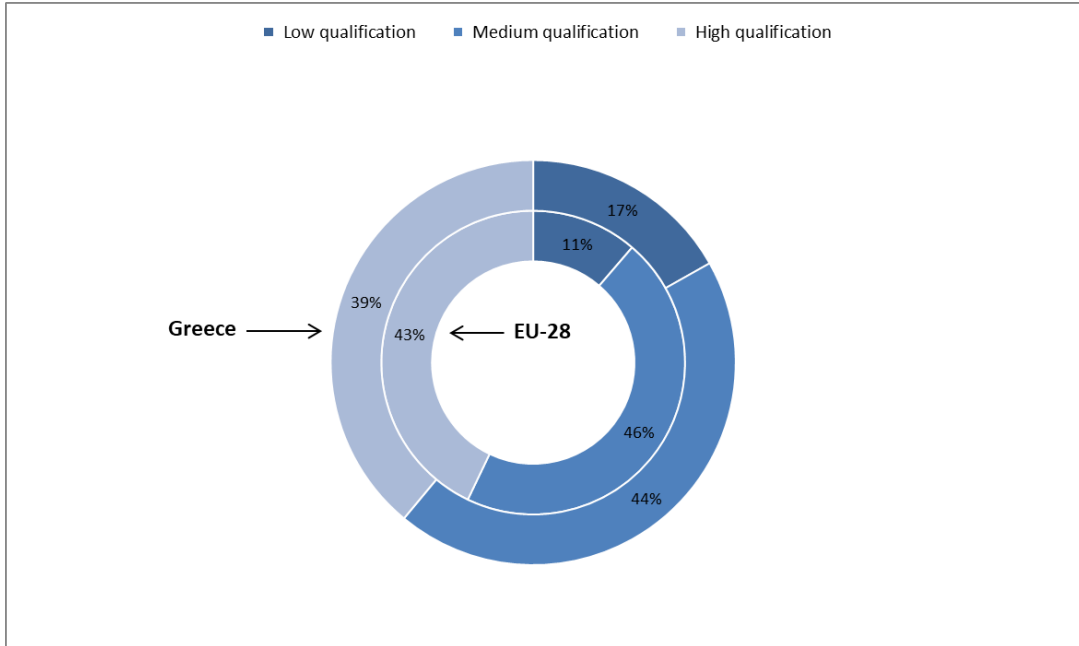
Taking into account all the effects, some of the occupations that are expected to increase the most are *legal, social, cultural and related associate professionals, street and related sales and service workers, and health associate professionals*. On the other hand, occupations in declining industries like agriculture and/or manufacturing affected by automation are expected to decrease, like *market-oriented skilled agricultural workers and handicraft and printing workers*.

6. Demand for and supply of skills

Within the Cedefop skills forecasts, skills are proxied by the highest level of qualification held by individuals in the labour force and 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** for qualifications needs. Most jobs forecast to be created over the period up to 2030 will require medium level of qualification, while about 39% of jobs will require high level. In contrast, close to 17% of total job openings will require low level of qualifications, 6 percentage points more than the EU-28 average.

Figure 4 Share of total job openings by level of qualification, 2016-30



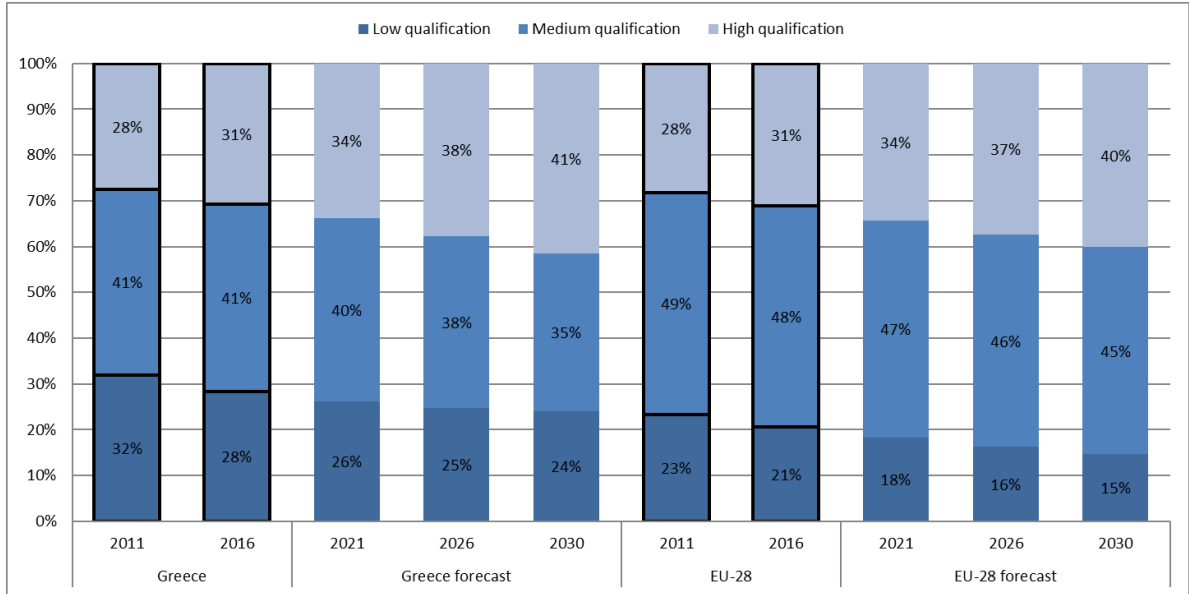
Source: Cedefop (2018 Skills Forecast)

The number of jobs requiring high-level qualification is expected to increase within occupations usually not associated with high qualifications such as *sales workers* and *personal service workers*. However, also traditionally high-skill sector such as *science and engineering professionals*, *health professionals* and *teaching professionals* are expected to see an increase in employment with high level of qualifications.

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.

As seen in Figure 6, the share of people with high-level qualifications is expected to continue increasing over the period up to 2030, while those for medium and low levels of qualifications are expected to decrease slightly. The share of low-qualified in the labour force is expected to remain considerably higher (24% in 2030) than the average EU share (15%), while medium-qualified labour force's share is expected to be lower than the EU's one

Figure 5 Labour force share by level of qualification, 2011-30



Source: Cedefop (2018 Skills Forecast)

The supply of high-qualified workers is expected to exceed the demand, while medium-qualified workers are expected to be in a shortage, a situation which could give rise to skills mismatch. The demand for low qualified workers is expected to fall below the supply.

Cedefop methodology and scenarios

Cedefop skills forecasts offer quantitative projections of future trends in employment by sector of economic activity and occupational group. Future trends on the level of education of the population and the labour force are also estimated. Cedefop's forecasts use harmonised international data and a common methodological approach allowing cross-country comparisons about employment trends in sectors, occupations and qualifications. The forecasts and methodologies applied are validated by a group of national experts. These forecasts do 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 forecasts covers the period up to 2030. The forecasts take account of global economic developments up to May 2017. Despite cross-country differences, the EU economy as a whole is expected to show modest growth, after a better-than-expected performance in 2017. Over 2018 and 2019, the EU economy as a whole is expected to grow, albeit at a slower pace compared to 2017, supported by increased household expenditure and falling unemployment, although wage growth remains muted. Investment is also expected to pick up given favourable financing conditions and an improved economic outlook. The key assumptions of the baseline scenario incorporate the Eurostat population forecast available in 2017 (Europop 2015) ⁽¹⁾ and the short-term macroeconomic forecast produced by DG ECFIN in May 2017 ⁽²⁾.

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

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



For more details, please contact Cedefop expert Ilias Livanos at: ilias.LIVANOS@cedefop.europa.eu

⁽¹⁾ <https://ec.europa.eu/eurostat/web/population-demography-migration-projections/population-projections-data>

⁽²⁾ https://ec.europa.eu/info/business-economy-euro/economic-performance-and-forecasts/economic-forecasts/spring-2017-economic-forecast_it