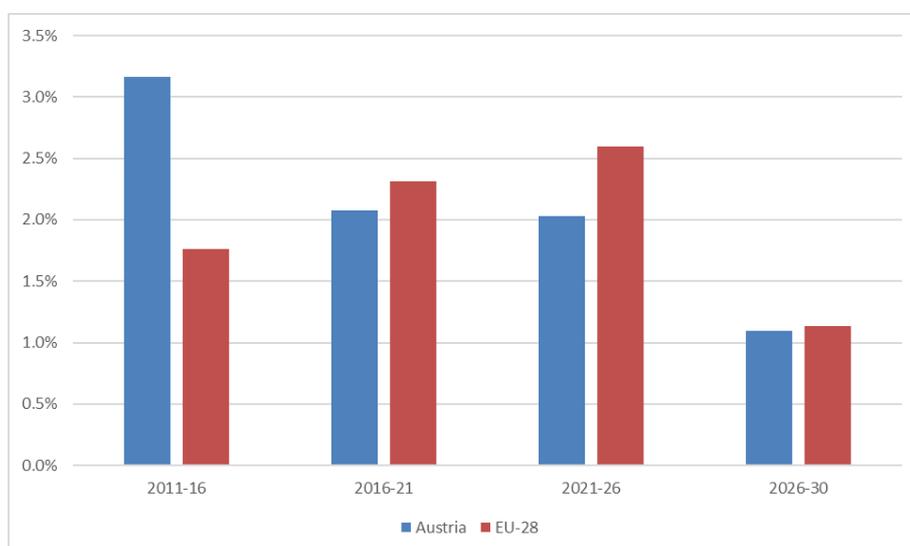


1. Employment outlook

The positive employment growth of the period 2011-16 is expected to continue over the forecasting period, although with somewhat smaller growth from 2016 onwards (see Figure 1). During the 2016-26 period, Austria's employment growth will be slightly below the EU-28 levels, while it will reach the average levels around 2026-30. Overall, the total projected increase over the forecast, 2016-30, will be close to 5%, a similar growth to these of Netherlands and Hungary.

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



Source: Cedefop (2018 Skills Forecast)

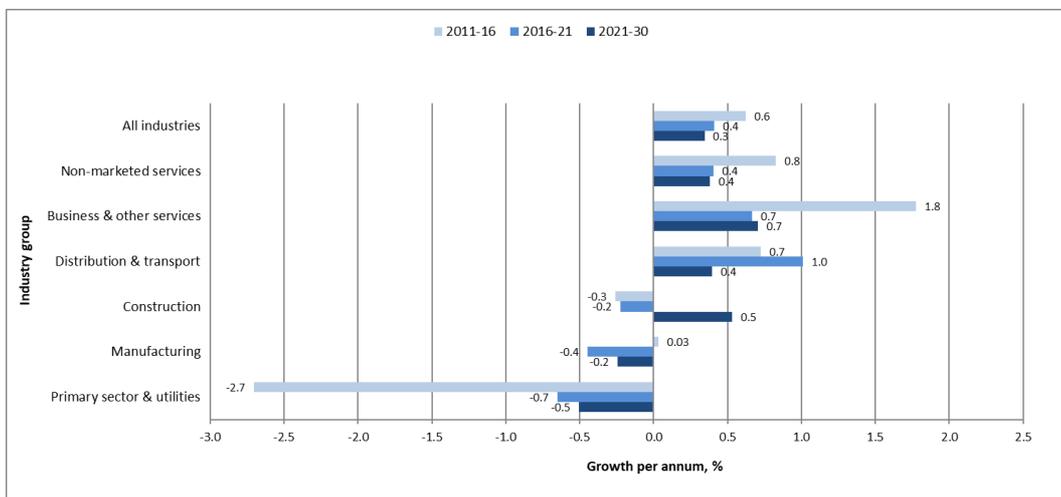
2. Labour force overview

Austria's working age population is expected to increase by 10.7 % over the period up to 2030, while the labour force will rise at a smaller pace (8.3%). Austria's labour supply growth will be amongst the 10 strongest in EU. The participation rate, however, will experience a slight decrease (by 1.3 pp). This fall may be attributed to the changing composition of the population. The cohorts aged 30-44, have generally very high participation rates for both sexes and are projected to increase. At the same time, cohorts aged 60+, which usually have lower participation rates, are expected to increase at an even higher pace, decreasing the overall participation rate.

3. Sectoral employment trends

The increasing trend in employment over the period 2011-16 is expected to continue for most of the broad sectors of economic activity (Figure 2). In particular, the highest increase per annum in employment during 2016-21 is expected in *distribution & transport* while during 2021-30 it is expected in *business & other services*. *Construction* sector is expected to achieve the second highest annual growth during 2021-30, after consecutive years of recession. *Manufacturing* and *primary sector & utilities* will, however, shrink over the entire forecast period.

Figure 2 Employment growth by broad sector of economic activity, 2011-16



Source: Cedefop (2018 Skills Forecast)

In terms of sub-sectors, *hotels and catering, other business services (i.e. telecommunications, real estate activities, advertising and market research)* and *health* as well as *social work* are those where the greatest increase is expected, while the decrease will be strongest for *mining & quarrying*, following the trend of the rest of the EU.

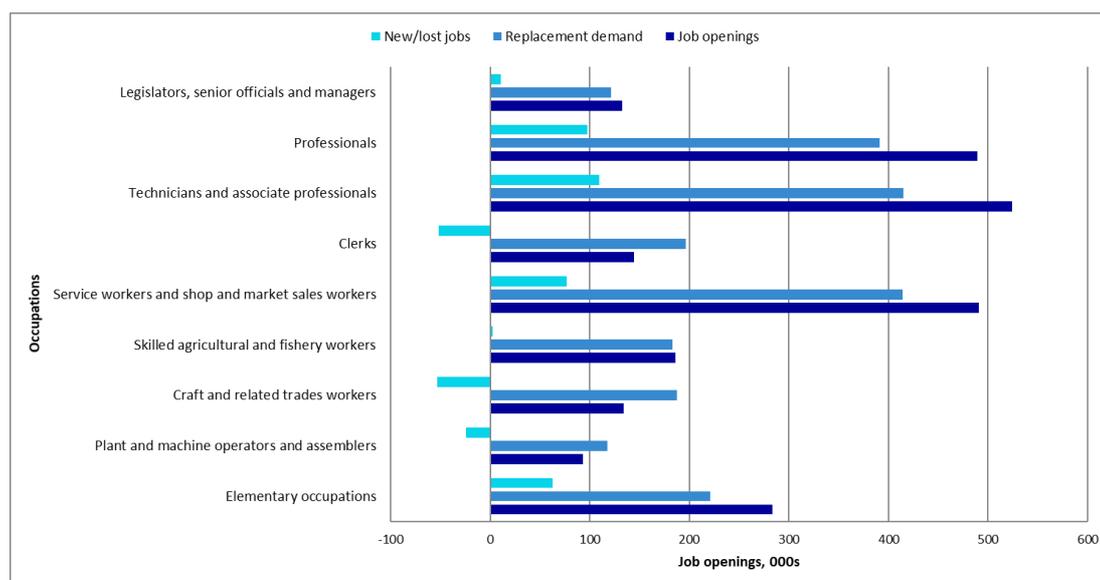
4. Job openings by occupational group

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 3 gives the **total job openings** by broad occupational group over the period 2016-30. It shows that most jobs expected to be created in Austria will come from the need to replace workers leaving, e.g. retiring. Therefore, numerous job opportunities will arise for *technicians and associate professionals*, representing 21% of the total job openings in Austria (compared to 18% for EU28) with almost 524 thousand job openings (80% of them due to replacement demand). *Clerks, craft and related trades workers* and *plant operators* will shrink in terms of employment but the need to replace existing workers will still create job openings.

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 most of the **new jobs** will be created for *legal, social, cultural and related associate professionals* and *science and engineering professionals*. Regarding The occupations that will contribute the highest numbers of to the **total job openings** in the Austria are *business and administration associate professionals, sales 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 Austrian economy and the shift towards *business and other services, hotels and catering and health and social work* will create new demand for high-skilled occupations such as *hospitality, retail and other services managers, health professionals and legal, social and cultural professionals*. However, some medium- and low-skilled occupations, such as *food preparation assistants and personal service workers* will also benefit from these sectoral shifts. On the contrary, the shrinking in *manufacturing, the primary sector and utilities and construction* will result in employment losses for occupations such as *agricultural, forestry and fishery labourers and drivers and mobile plant operator*,

On the other hand, the advances of automation technology and ICT will have a negative impact on various routine-based occupations such as *numerical and material recording clerks, keyboard clerks and metal, machinery and related trades workers*.

Taking into account the combined effects, some of the occupations that are expected to increase the most are *science and engineering professionals, personal care workers and legal, social cultural and related associate professionals*. On the other hand, occupations in affected by automation like *metal, machinery and related trade workers and clerks* are expected to decrease

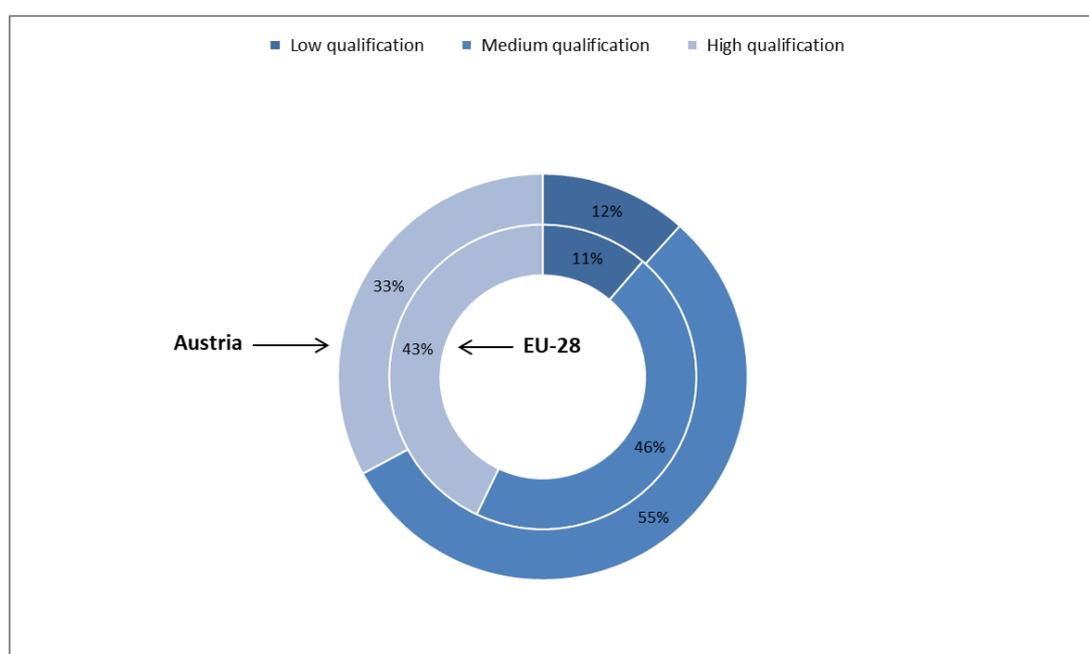
6. Demand for and supply of skills

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 4 shows the shares of total job openings for qualifications needs. Most jobs, forecasted to be created over the period up to 2030, will require medium level of education, while about 33% of jobs will require high qualifications, implying a 10-percentage point difference to the EU-28 average. Close to 11% of total job openings will require low level qualifications.

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



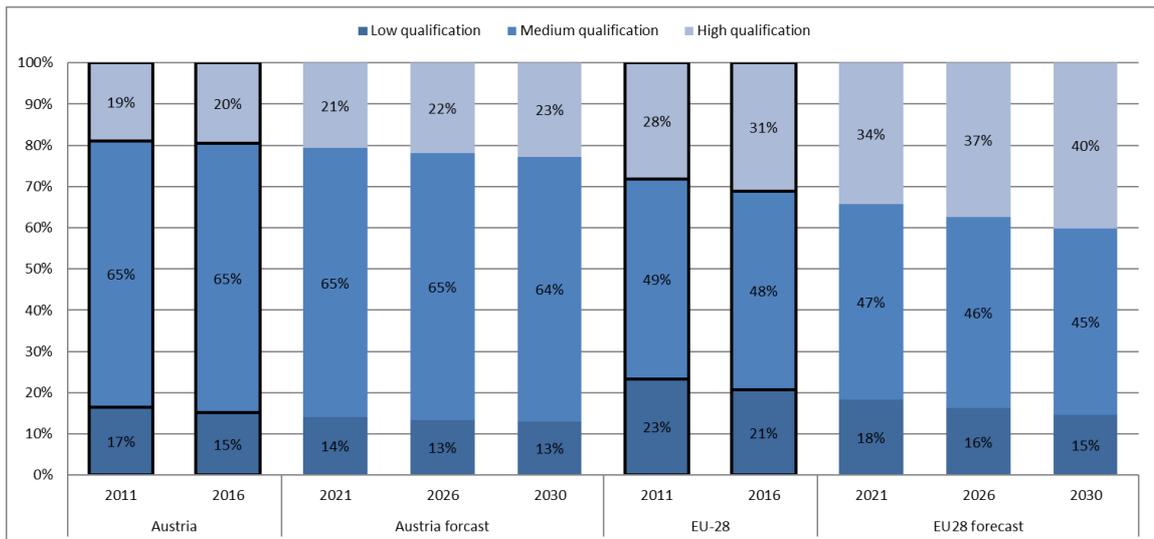
Source: Cedefop (2018 Skills Forecast)

The number of jobs requiring high level qualification is expected to increase within occupations such as *teaching professionals, science and engineering associate professionals, and legal, social and cultural professionals*. Moreover, *health professionals and business and administration associate professionals* are expected to need highly-qualified workers.

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 can be seen from Figure 5, the percentages of people with high level qualifications are expected to continue increasing over the period up to 2030. On the other hand, those with medium level of education are expected to remain stable and considerably higher (64% in 2030) than the EU-28 level (45%). The levels of low qualified labour force will experience a slight decrease over the period following the EU-28 trend.

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



Source: Cedefop (2018 Skills Forecast)

The demand for highly-qualified workers is expected to exceed the supply over the forecast period, while there might be a surplus of medium-qualified workers, a situation which could give rise to significant skills mismatches. The demand for low-qualified workers is expected to broadly match the demand.

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 forecast data please visit:

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



⁽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

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