# 1. Employment outlook

After a significant increase in 2011-16, employment growth up to 2030 is expected to remain strong but on a decreasing trend, as shown in Figure 1. Employment growth is expected to be double the EU-28 average in the period 2016-21 and similar to the EU-28 average growth rate in the period 2021-26. In period 2026-30 employment growth is expected stagnate and to be below the EU-28 average. A total employment growth of 8% is expected over the period 2016-30, a rate similar to Slovenia and well above the EU-28 average.

Figure 1 Percentage employment growth in Slovakia and the EU-28, 2011-30
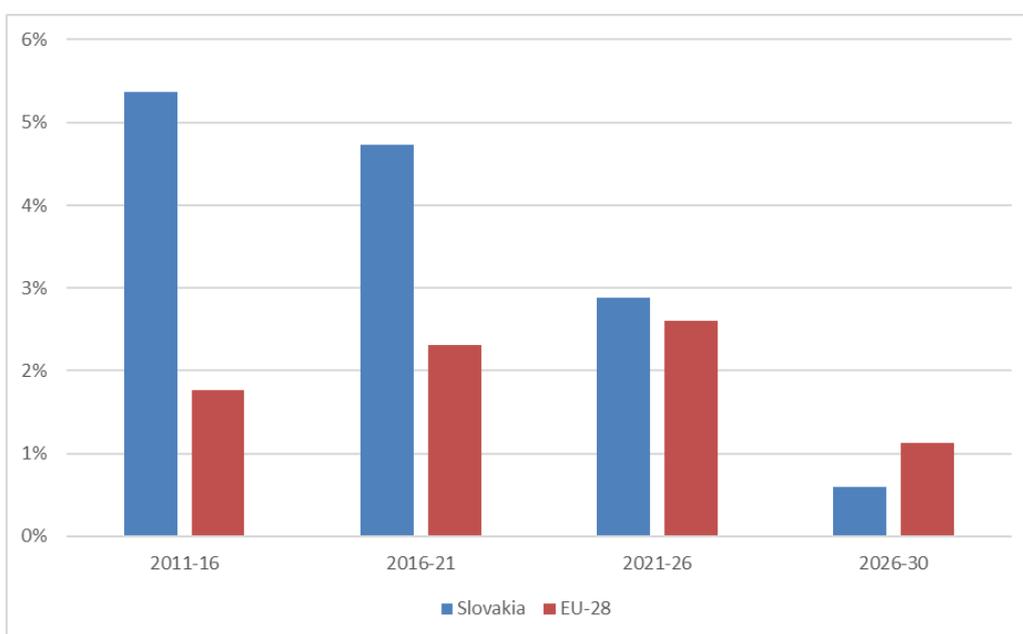
Source: Cedefop (2018 Skills Forecast)

2. Labour force overview

Slovakia's labour force is expected to decline by around 3% over the period up to 2030, a rate close to Italy and Poland, driven by the ageing of the population. The working age population is expected to increase by 2%, which is dominated by the increase in the cohorts aged 45+; this increase is expected to offset the decline in the younger cohorts. As the younger age cohort have higher participation rates

on average, this decline in the most active age cohorts is expected to drive the decline in the labour force.

3. Sectoral employment trends

Employment growth is expected in most sectors over the forecast period with a few exceptions, as shown in Figure 2. *Business and other services* sector is expected to be the fastest growing sector in all periods up to 2030. Other growing sectors are *distribution and transport*, expected to increase in 2016-21 and *primary sector and utilities,* expected to grow in 2021-30. *Manufacturing* is expected to show only a modest growth up to 2030. After growing in 2011-16 and 2016-21, *non-marketed services* sector is expected to be the fastest declining sector in 2021-30, while *construction* is expected to stagnate. In terms of subsectors, *banking and insurance, other business services* and *miscellaneous services* are expected to have the highest increase in employment over the period 2016-30. The subsectors that are expected to decrease the most by 2030 are *public administration and defence* as well as *education*, driving the decline in the *non-marketed services* broad sector.

**Figure 2 Employment growth by broad sector of economic activity, 2011-30**
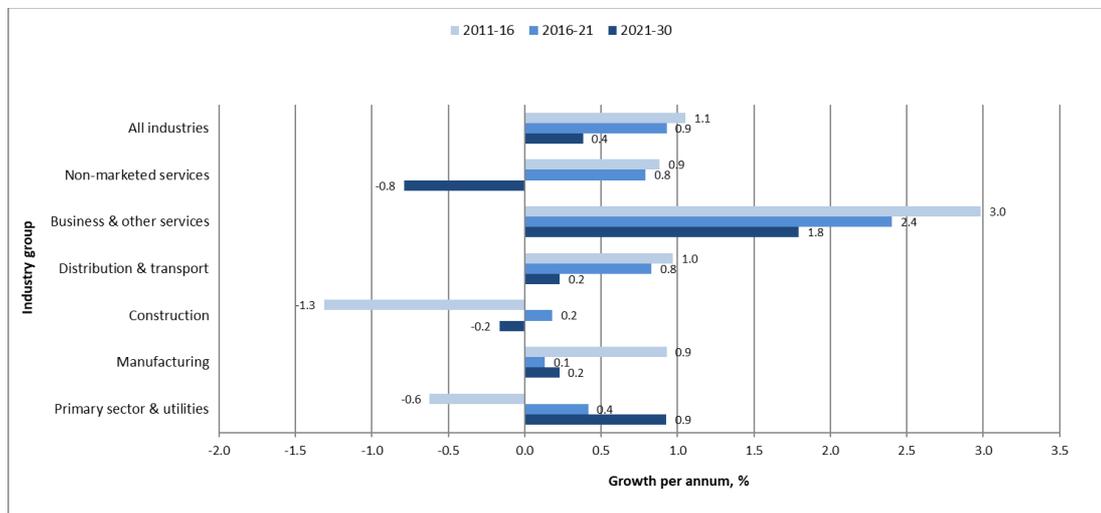
Source: Cedefop (2018 Skills Forecast)

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 3 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. Most jobs will come from the need to replace workers retiring or changing occupations. The occupation expected to have the highest number of job openings, 28% of which are due to new jobs, is *technicians and associate professionals*, which accounts for 21% of total job openings. Other occupations such as *professionals* and *service workers and shop and market sales workers* are expected to provide a significant amount of job openings but with a lower share of new jobs. Other occupations such as *legislators, senior officials and managers* are expected to create a significant number of new jobs. *Clerks* is the only occupation expected to slightly shrink in employment, although the need to replace retiring workers will still provide job openings.

Figure 3 Job openings by broad occupational group, 2016-30
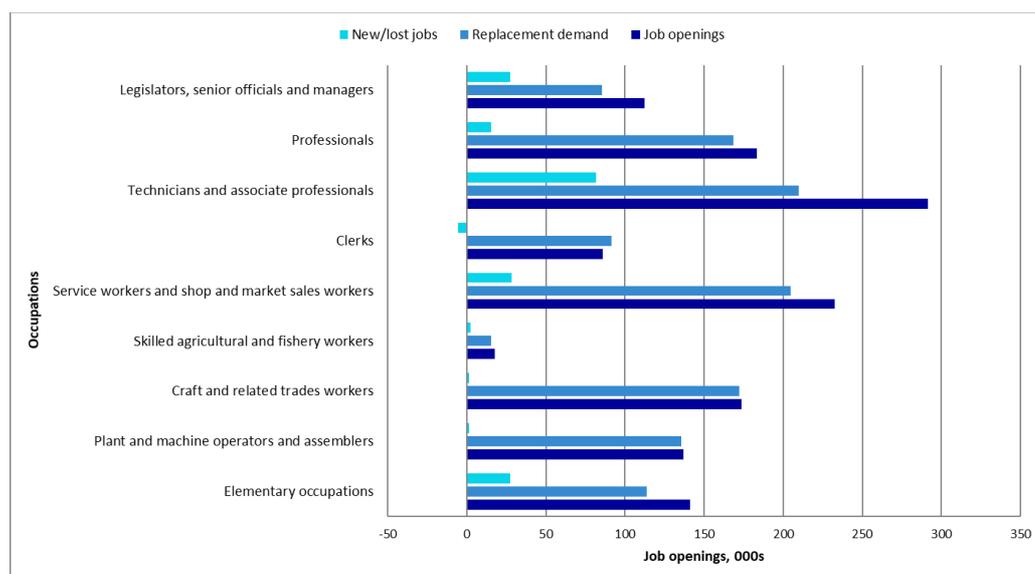
Source: Cedefop (2018 Skills Forecast)

The more detailed analysis of occupational groups shows that most of the **new jobs** are expected to be created in *legal, social, cultural and related associate professionals*, *business and administration associate professionals* and *personals service workers*, which are expected to have also the highest number of **total job openings** among detailed occupational groups.

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 shift toward *business and other services* is expected to create demand for high-skilled occupations such as *business and administration professionals* and *legal, social and cultural professionals* and *associate professionals*, as well for medium/low-skilled occupations such as *customer service clerks* and *personal service workers*. On the other hand, the decline in *non-marketed services* and in *construction* are expected to decrease the employment in *teaching professionals* and *building and related trades workers*.

Development in technology are expected to shrink employment in occupations such as *general and keyboard clerks* and *food preparation assistants* because of the routine content of their job, while employment is expected to decrease for *health associate professionals* because of the demand for higher skills (resulting in an increase in the demand for *health professionals)*.

Taking into accounts both occupation and sector effects, the occupations which are expected to show the highest increase in employment are *legal, social, cultural and related associate professionals*, *chief executives, senior officials and legislators* and *administrative and commercial managers*. On the other hand, among *personal care workers* there will be both negative (sectoral change) and positive effects (within occupation shifts); in the case of this occupation, the positive effects are expected to outweigh negative effects over the period up to 2030.

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 share of **total job openings** by qualification needs. The share of job openings requiring high-level qualifications is expected to be 42%, broadly in line with the EU-28 average, while of 54% of job openings are expected to require medium-level qualifications, 8 pp above the EU-28 average. Only 4% of job openings are expected to require low-level qualifications, 7 pp below the EU-28 average.

**Figure 4 Share of total job openings by level of qualification, 2016-30**
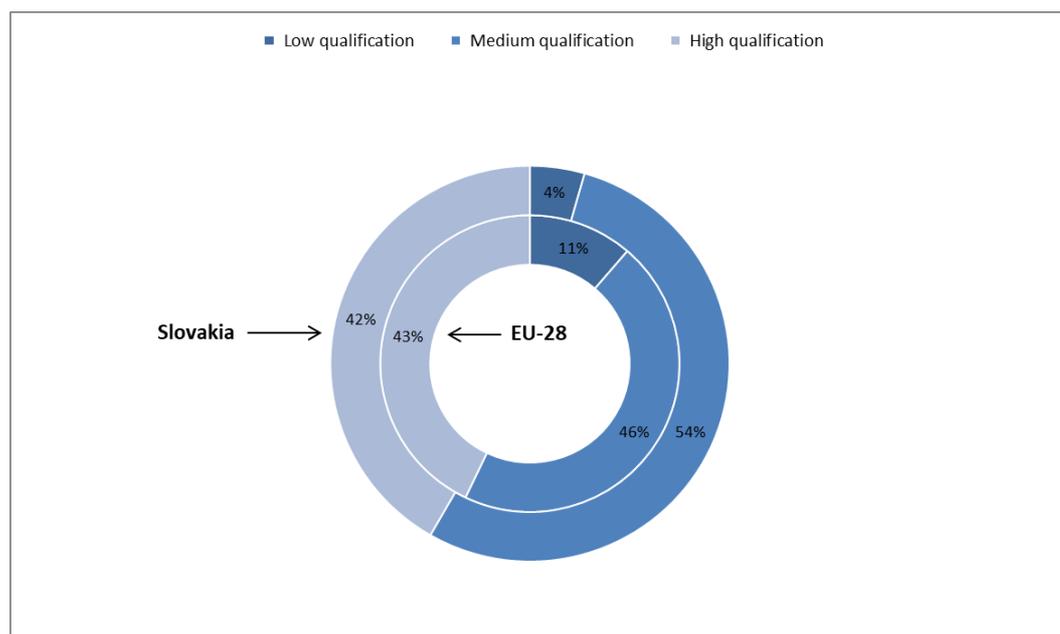
Source: Cedefop (2018 Skills Forecast)

The number of job openings requiring high-level qualifications is expected to increase within occupations such as *business and administration associate professionals*, *legal, social, cultural and related associate professionals*, *teaching professionals* and *science and engineering associate professionals*.

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 5, the share of workers with high-level qualifications is expected to increase to 36% in 2030, 4 pp below the EU-28 average. The share of medium-qualified workers is expected to decrease to 59% in 2030, 14 pp above the EU-28 average, however starting from a very high value. The share of low-qualified workers is expected to remain broadly stable at 5% over time, 10 pp below the EU-28 average.

Figure 5 Labour force share by level of qualification, 2011-30
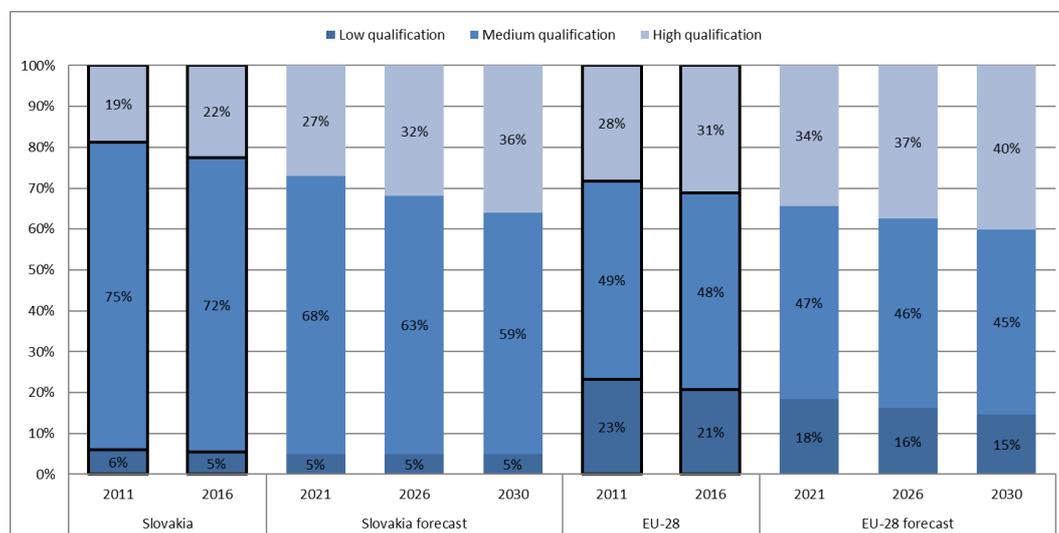
Source: Cedefop (2018 Skills Forecast)

The increasing demand for high-qualified workers is expected to be met by a similar increase in their supply, while the supply for medium-qualified workers is expected to be somewhat lower than the demand, possibly creating some skills mismatch.

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

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([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

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