# 1. Employment outlook

After significant growth in the period 2011-16, employment up to 2030 is expected to decline. As shown in Figure 1. employment growth is expected to be half of the EU-28 average in 2016-21, to decline slightly in 2021-26 and to reach a decline of -3% in the period 2026-30. A total employment growth of -2% is expected over the period 2016-30, a rate similar to Estonia and well below the EU-28 average growth rate.

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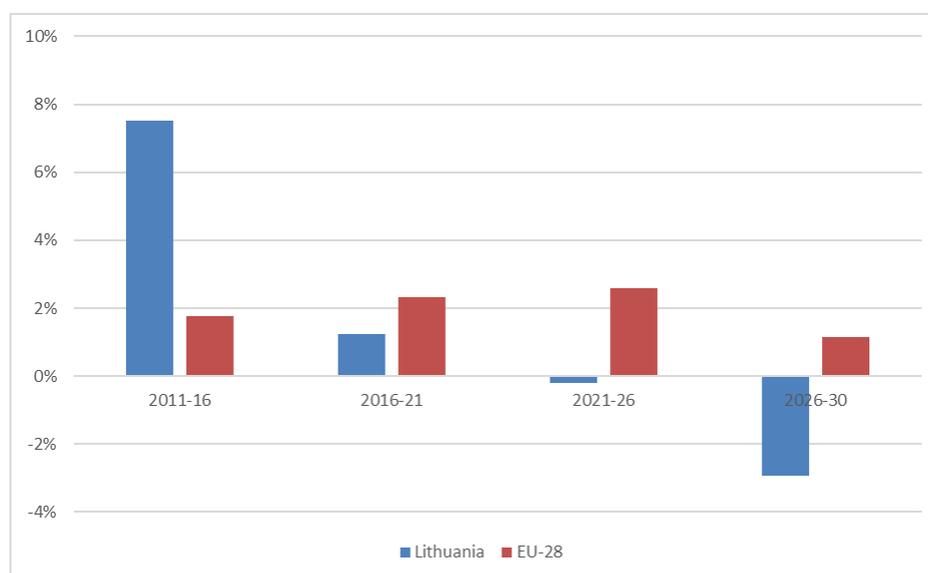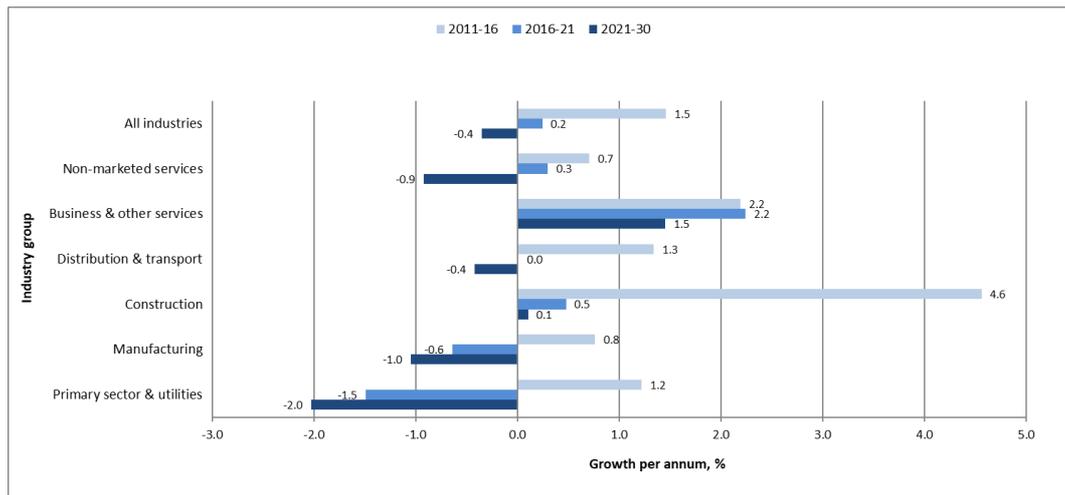

Source: Cedefop (2018 Skills Forecast)

2. Labour force overview

Lithuania's labour force is expected to decline by 20% over the period up to 2030, the sharpest decline in all EU-28 Member States. It is driven by a decline in the working age population. The working age population is expected to decline by 17%; all age cohorts with high participation rates are expected to decrease. The age cohorts above 60, with low participation rates, are expected to increase, but without significant effect on the overall decline in the labour force.

3. Sectoral employment trends

After a significant growth in all sectors in period 2011-16, employment is expected to decrease in most sectors by 2030, as shown in Figure 2. *Business and other services* is expected to be the fastest growing sector in both forecast periods, 2016-21 and 2021-30, followed by *construction*, which is expected to show a modest growth after a strong increase in 2011-16. *Primary sector and utilities* is expected to be the fastest shrinking sector both in 2016-21 and 2021-30, but also *manufacturing* and *non-marketed services* are expected to shrink. In terms of subsectors, *banking and insurances*, *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 *agriculture* as well as *hotels and catering*.

**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, 13% of which due to new jobs, is *professionals*, which accounts for 26% of total job openings in Lithuania, followed by *technicians and associate professionals*, which accounts for 15% of total job openings and has a share of 24% of new jobs. All the other occupations are expected to shrink in employment, although the need to replace retiring workers will still provide numerous job openings in those occupations.

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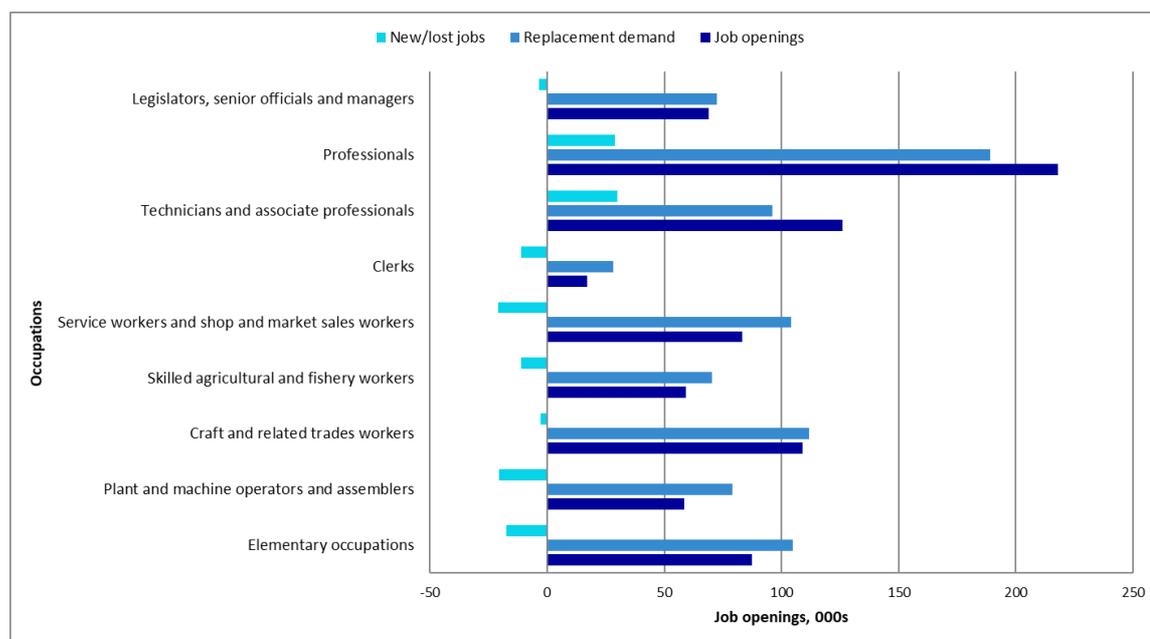
Source: Cedefop (2018 Skills Forecast)

The more detailed analysis of occupational groups shows that most of the **new jobs** are expected to be created for *legal, social, cultural and professionals* and *related associate professionals* and *business and administration professionals*. The highest number of **total job openings** among detailed occupational groups is expected among *business and administration professionals*, *legal, social, cultural and related associate professionals* as well as in *building and related trade 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 shift toward *business and other services* is expected to create demand for high-skilled occupations such as *information and communication technology professionals* and *technicians* and *legal, social and cultural professionals*, as well for medium-skilled occupations such as *customer service clerks*. On the other hand, the decline in *primary sector and utilities* and *manufacturing* is expected to reduce employment in occupations such as *market-oriented skilled agricultural workers*, *agricultural, forestry and fishery labourers* and *handicraft and printing workers*.

Developments in technology are expected to diminish employment in occupations such as *general and keyboard clerks* and *other clerical support workers*, because of the routine content of their job, and *information and communication technicians* because of automation and the demand for higher skills, while resulting also in an increase in the demand for *information and communication technology professionals*.

Taking into accounts both the occupation and sector effects, the occupations which are expected to show the highest increase in employment are *legal, social, cultural and professionals* and *related associate professionals* and *information and communication technology professionals.* On the other hand, among *customer service clerks* there will be both positive (sectoral change) and negative

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 43%, the same as the EU-28 average, while 51% of job openings are expected to require medium-level qualifications, 5 pp above the EU-28 average. Only 5% of job openings are expected to require low-level qualifications, 6 pp below the EU-28 average.

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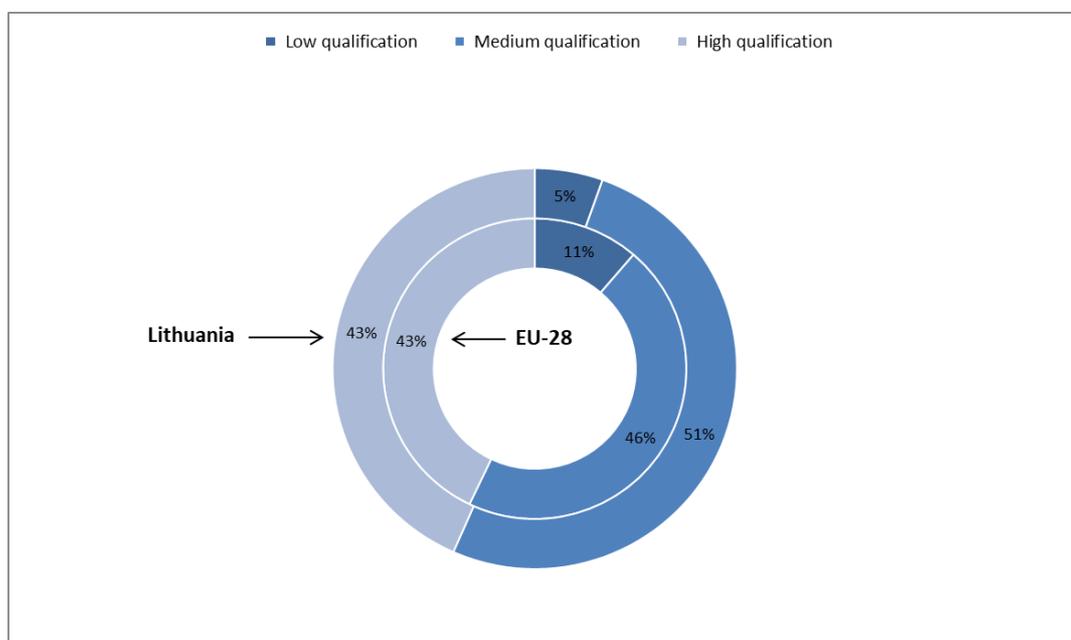
Source: Cedefop (2018 Skills Forecast)

The number of job openings requiring high-level qualifications is expected to increase within occupations such as *business and administration professionals* and *associate professionals*, *teaching professionals* and *legal, social, cultural professionals* and *related 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 54% in 2030, 14 pp above the EU-28 average. The share of medium-qualified workers is expected to decrease to 40%, 5 pp below the EU-28 average. The share of low-qualified workers is expected to remain broadly stable over time at 5%, staying 10 pp below the EU-28 average.

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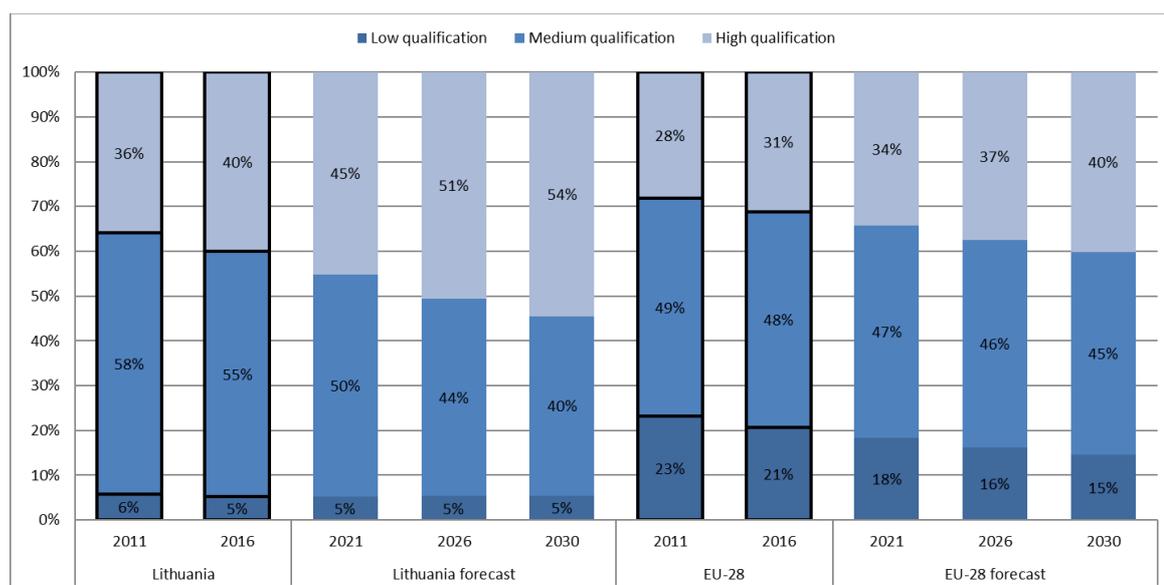
Source: Cedefop (2018 Skills Forecast)

Overall, the demand for workers is expected to exceed their supply by the end of the forecast period. Strong imbalances between the supply of and demand for high and medium qualification levels are expected.

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