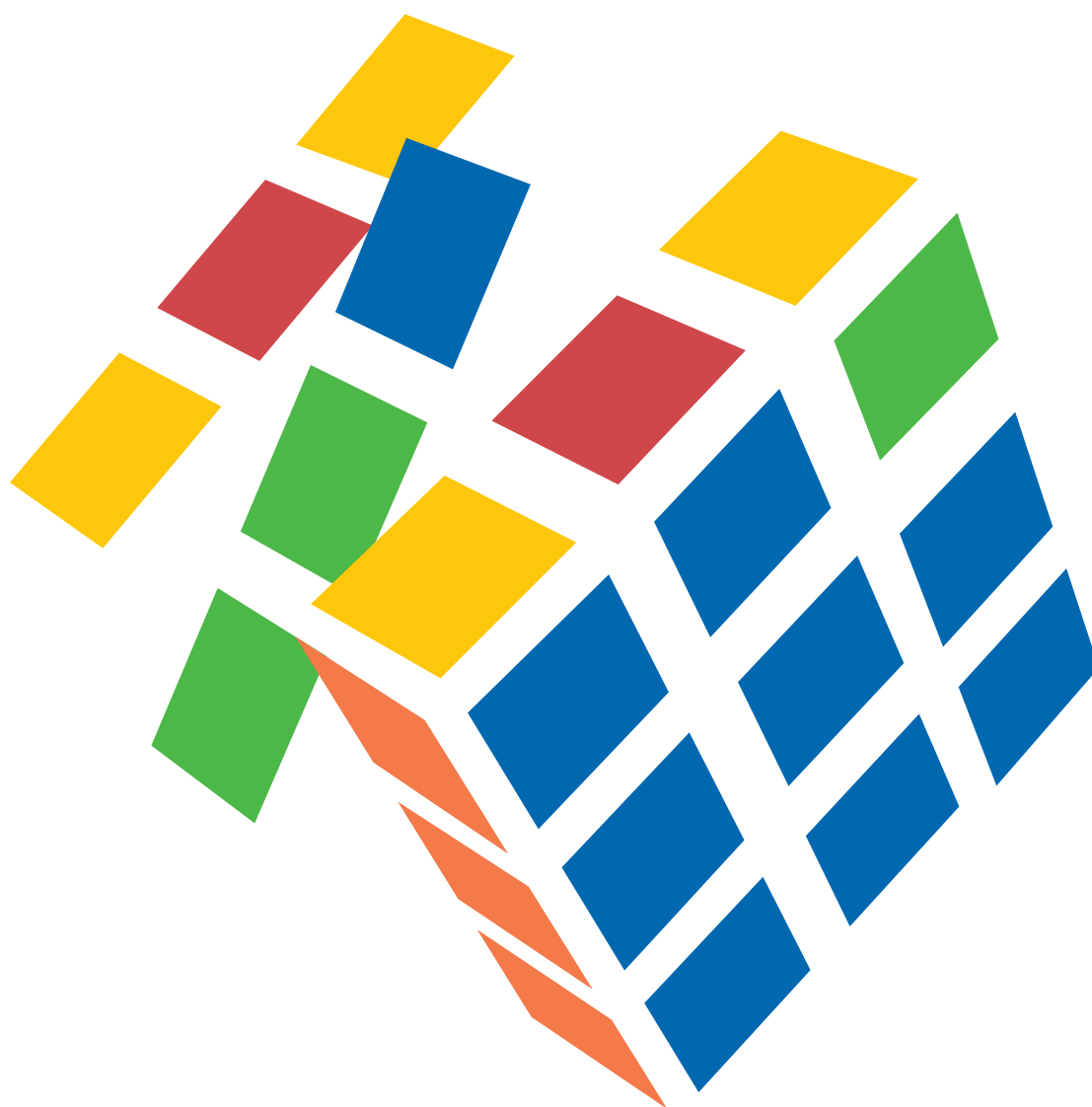




CEDEFOP

European Centre for the Development
of Vocational Training

EN



2020 skills forecast Lithuania





CEDEFOP SKILLS FORECAST 2020

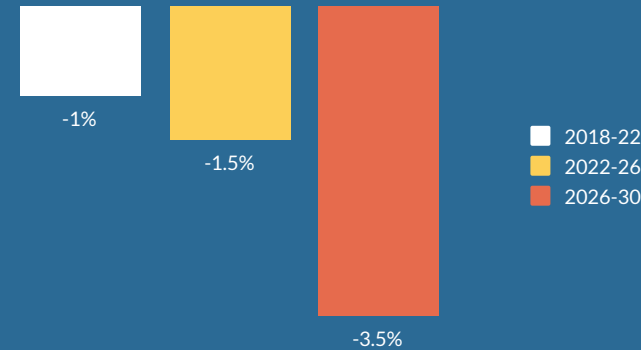
Key facts: Lithuania

1 265 000

Employment in 2030

-6%
Increase
2018-30

% Employment growth 2018-30



FASTEST-GROWING SECTORS

Growth per year 2018-30

Distribution & transport

0.2%



Construction

0.1%



HIGHEST-DEMAND OCCUPATIONS

Total job openings 2018-30

71 000

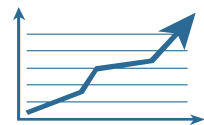
Business & administration professionals

39 000

Building and related trade workers, excluding electricians

37 000

Legal, social, cultural and related associate professionals



4.4%

Increase
in employment
in 2018-30



Fastest-growing sector
Non-marketed services



Highest-demand occupation
Business & administration associate professionals

618 000

Total job openings, 2018-30



Replacement needs (100%)
New job openings (0%)

Total job openings by qualification level 2030:



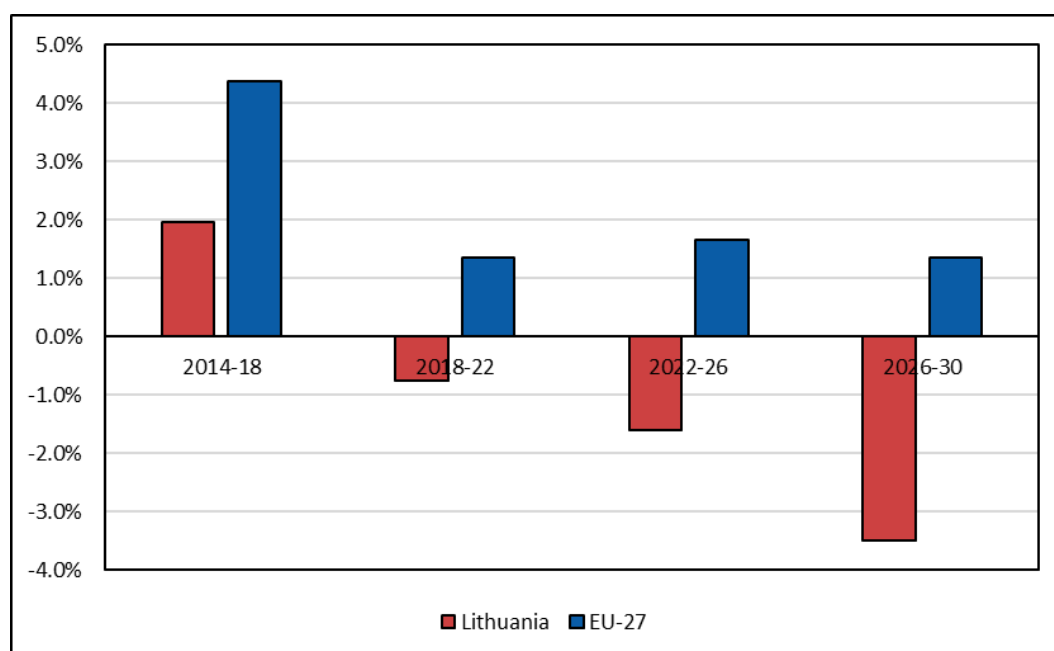
5% Increase in high-skilled
labour supply 2018-30



1. Employment outlook

Employment in Lithuania is forecast to decline over the forecast period (2018-30). It is expected to decline by 0.8% in the short term (2018-22), 1.6% in the medium term (2022-26) and 3.5% in the long term (2026-30). In contrast, employment in the EU-27 as a whole is expected to increase in all periods.

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



Source: Cedefop (2020 Skills Forecast).

2. Labour force overview

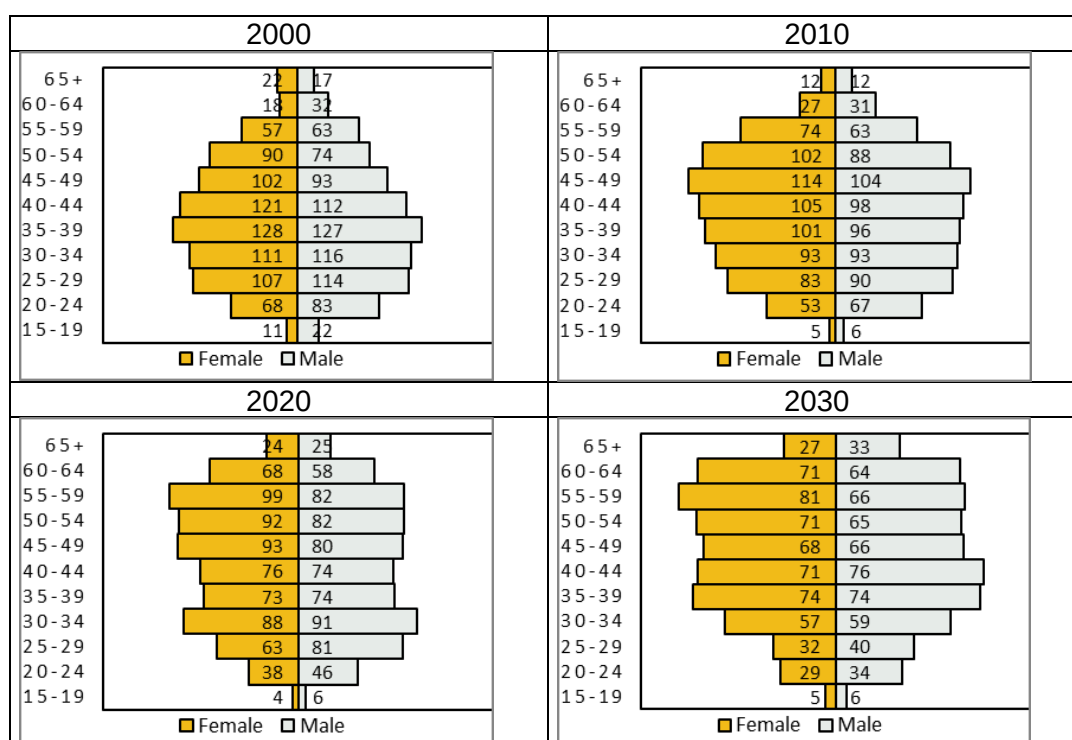
In Lithuania, the labour force is expected to decline by 31% over the three decades from 2000 to 2030. The decline in the labour force is driven by unfavourable demographic developments, whereby population in all age groups is expected to decline between 2000 and 2030, except among those aged 65+. Despite an increase in participation among most age groups, the only age groups whose labour force is expected to increase between 2000 and 2030 are those aged 55 or more. Therefore, a significant increase in the age structure of the labour force can be observed in Lithuania. Between 2000 and 2030, the combined share in the labour force of the three youngest groups (those aged between 15 and 29) is expected to have declined from 24% to 12%, while the

one for the three oldest groups (those aged 55 or more) is expected to have increased from 12% to 29%.

Labour force participation rates are expected to increase for most age groups, with the exception of those aged 29 or less. The increase in participation rate is highest for the 60-64 age group, which is expected to show an increase of 49 percentage points (pp) between 2000 and 2030, followed by the 55-59 age group with an increase of 22 pp. All the other age groups above 29 are expected to show a more modest increase over the same period. Labour force developments are expected to be broadly similar for males and females. Taken together, these developments are expected to lead to a decrease in the overall participation rate (i.e. for the population as a whole) of 3 pp over 2000-30.

Migration patterns have recently changed, with lower emigration, higher return migration and higher immigration from third countries. Preliminary data for 2019 suggests net positive migration – for the first time over the past few decades. If this continues, it could partially alleviate the projected decline in the labour force.

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

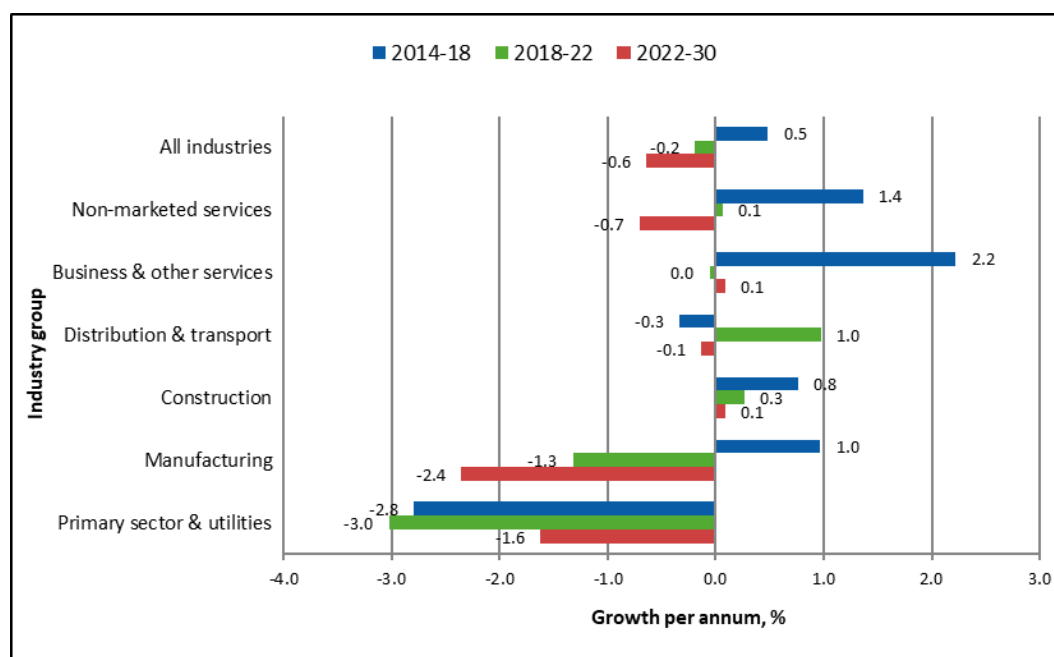


Source: Cedefop (2020 Skills Forecast).

3. Sectoral employment trends

As Figure 3 shows, employment is expected to decline or stagnate in most sectors during the forecast period, after sizeable growth over 2014-18. *Construction* is the only sector expected to increase (albeit very slowly) in both the short term (2018-22), by 0.3% pa, and in the long term (2022-30), by 0.1% pa. *Distribution & transport* is expected to increase by 1% pa in the short term and to decline slightly in the long term. *Business & other services* is expected to stagnate during the forecast period, while *non-marketed services* is expected to stagnate in the short term and decline in the long term. *Manufacturing* and *primary sector & utilities* are expected to decline significantly during the forecast period.

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*, *real estate activities*, *financial and insurance activities* and *legal, accounting and consulting* are expected to be among the fastest growing sectors. In the past, growth in these sectors has been primarily driven by a large inflow of FDI. However, other services such as *architectural and engineering* and *administration and support services* are expected to decline, thus resulting in the stagnation of *business & other services* as a whole. *Accommodation and catering* and *wholesale and retail*

trade are expected to drive the short-term increase in *distribution and transport*. *Public administration & defence* is expected to increase somewhat, but the expected decrease in *health and education* (due to a lower number of students as well as public under-funding of respective sectors) are expected to drive the decline in *non-marketed services* as a whole. Most sectors within *manufacturing* are expected to decline, with the exception of *electrical equipment, optical and electronic equipment* (which is expected to grow because of large planned public investment in the sector) and *other transport equipment*. A sizeable decrease in *agriculture*, especially in the short term, is expected to drive the decline in *primary sector & utilities*.

4. Job openings by occupational group

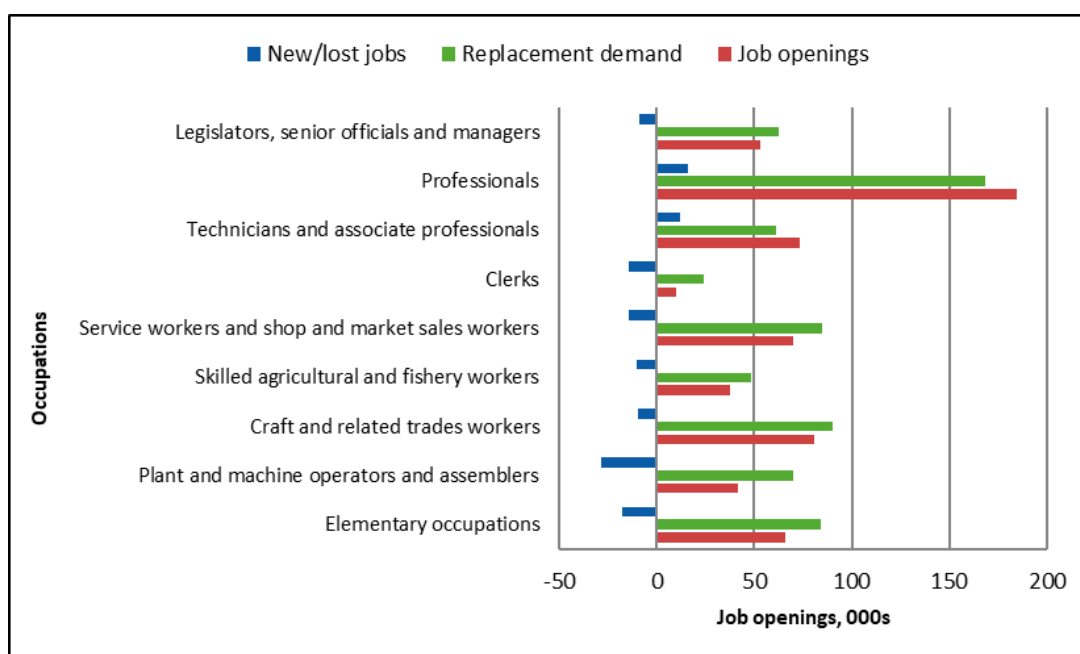
Cedefop skills forecasts estimate the total job openings by occupational group as the sum of net employment change and replacement needs. Net employment change refers to new jobs created due to the expansion of the employment in that sector or occupation. Replacement needs arise as the workforce leaves 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. *Professionals* is expected to be the occupation creating the highest amount of job openings, accounting for 30% of total job openings and providing 16,000 new jobs. *Technicians and associate professionals* is the only other occupation expected to provide new jobs (12 000) while all the others are expected to shrink. *Plant and machine operators and assemblers* is the occupation expected to shrink the most (29 000 less jobs), followed by *elementary occupations* (18 000 less jobs). However, all the shrinking occupations are expected to provide a relatively significant amount of job openings due to replacement needs. In total, there are expected to be 77 000 less jobs in the economy in 2030 compared to 2018, while total job openings, mostly due to replacement needs, will amount to 617 000 over the same period.

At the more detailed level, most job openings (taking both new/lost jobs and replacement needs together) are expected to be in *high skill* occupations such as *legal, social and cultural professionals* and *business and administration associate*

professionals which are among the few examples of occupations expected to provide new jobs, together with a few other *high skill* occupations such as *information and communications technology professionals*. *Building and related trades workers, excluding electricians* is expected to be the second-largest occupation in terms of job openings and the only non-*high skill* occupation that also provides new jobs. *Skilled non-manual* occupations such as *sales workers* and *skilled manual* occupations such as *drivers and mobile plants operator* are also expected to provide many job openings, although, in terms of the overall *level* of jobs, they are expected to decrease.

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



Source: Cedefop (2020 Skills Forecast).

5. Drivers of occupational change

Within the Cedefop skills forecast, 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 than others).

The occupational composition of employment in Lithuania 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 *legislators, senior officials and managers, legal, social, cultural and related associate professionals*. The increase in industry size has a positive impact, alongside a negative but modest occupation effect, only on *business and administration associate professionals* and on *sales workers*. High-skilled occupations that can benefit from these trends are, for example, *chief executives, senior officials and legislators*, and, in particular, *legal, social, cultural and related associate professionals, business and administration associate professionals* 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.

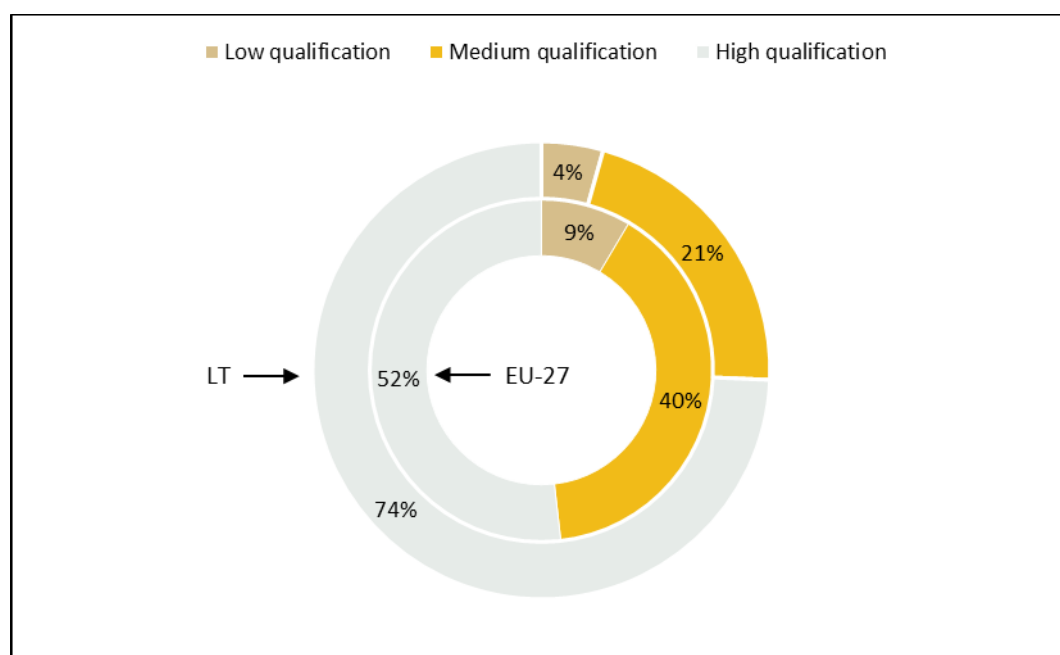
Intermediate occupations are also expected to decrease overall. Among the medium-qualified occupations becoming stronger are *administrative and commercial managers* and *legal, social, cultural and related associate professionals*.

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 Lithuania and the EU-27 over 2018-30. In Lithuania, a very high share (74%) of job openings are expected to require a high qualification. Compared to the EU-27, a much higher share of job openings are expected to require high qualification, while a lower share are expected to require both low and medium qualifications.

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

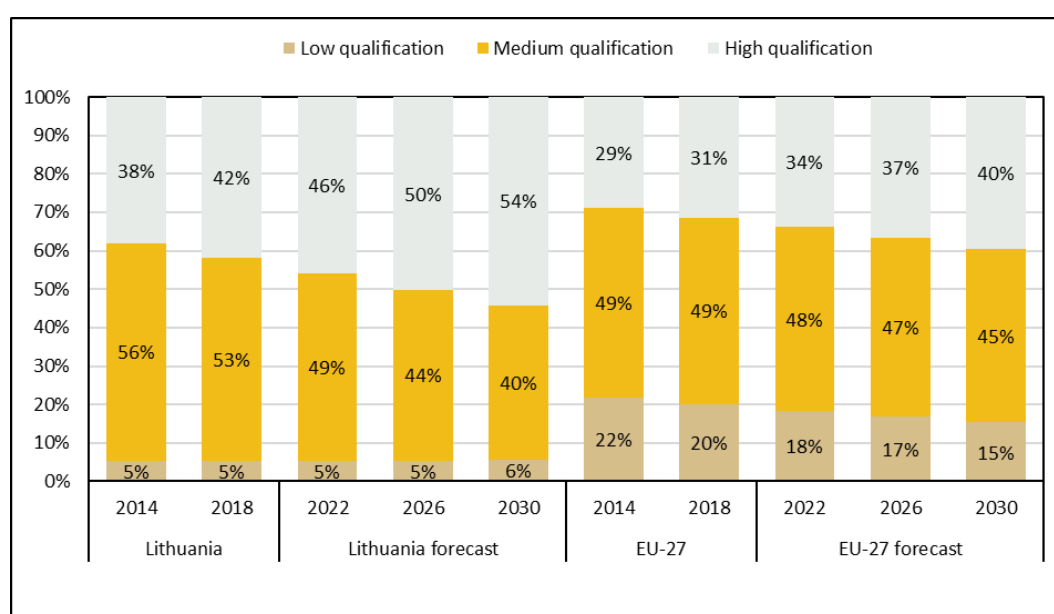


Source: Cedefop (2020 Skills Forecast).

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 shows the development of qualification shares of the labour force in Lithuania and the EU-27. Lithuania is rapidly increasing its share of higher qualified in the labour market. While the share was at 42% in 2018, it is expected to increase to 54% by 2030.

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



Source: Cedefop (2020 Skills Forecast).

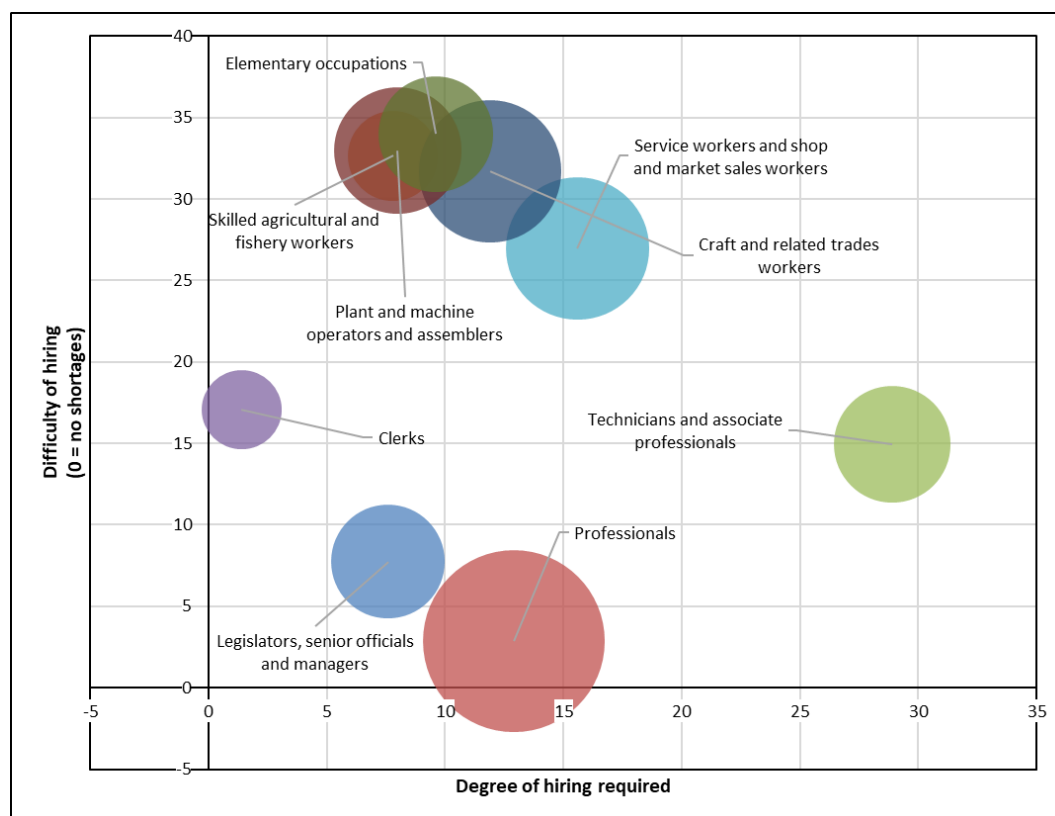
The increase in the share of the higher qualified has been predominantly at the cost of older medium qualified workers. The share of medium qualified workers is expected to decline from 53% in 2018 to 40% in 2030, while the share of low qualified workers is expected to remain broadly stable, albeit at a relatively low level. Relative to the EU-27 average qualification mix, Lithuania is expected to continue to have a higher share of higher qualified, but the share of medium qualified is expected to fall below the EU-27 average during the forecast period.

Overall, the forecast implies an increasing shortage, especially among both low and medium 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 groups. 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 there could be shortages, especially among the medium but also of the lower qualified. These shortages could therefore imply that some of the higher educated will have to be employed within occupations at a lower level than they qualify for, or it will result in hiring difficulties. Medium level occupations such as *service workers and shop and market sales workers*, as well as *plant and machine operators and assemblers* and *craft and related trades workers*, are all expected to show higher levels of hiring difficulties in the forecast (Figure 6). However, these occupations are expected to see low to medium levels of change by qualification over this period, as so a low to medium degree of hiring required. *Professionals* and *legislators, senior officials and managers* are expected to have much lower hiring difficulties, as they usually hire from the supply of higher qualified, and they also show a relatively low degree of hiring required in the forecasting period. A high degree of hiring required along with modest hiring difficulties is expected among *technicians and associate professionals*.

Hiring difficulties among *professionals*, the largest broad occupational group, are low across the underlying occupations, with *health professionals* being somewhat higher than the remaining occupations. The degree hiring required, however, is expected to differ, with *information and communications technology professionals* (44) being much higher, and *business and administration professionals* (21) as well as *legal, social and cultural professionals* (19) still being well above the average for *professionals* as a whole (13), while the degree of hiring required among *health professionals* (<1) and *teaching professionals* (<1) is expected to be well below the average.

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



For more details, please contact Cedefop's Skills Forecast team at: Skills-Forecast@cedefop.europa.eu

The country fiche for Lithuania has been developed in collaboration with Martinaitis Zilvinas, research manager at Visionary Analytics, Lithuania.

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