Human resources status report is the first analysis of Lithuanian human resources that used combined data from the State Social Insurance Fund Board, the State Tax Inspectorate, Lithuanian Labour Exchange, the Center of Registers, the Education Management Information System and other state registers and information systems. For more information on the data and methodology used, please see the full report or contact the MOSTA team (info@mosta.lt).

The report analyzes general situation and trends of human resources in Lithuania. A more detailed analysis is provided for each region. Also the integration of specialists into the labour market is examined, specifically the beginning of their career and the correspondence of higher education (HE) and vocational education and training (VET) to the labour market needs.

The second part is dedicated to this year’s topic – the migration of human resources. The main focus is on those departing from Lithuania, their characteristics and possible causes of emigration. Information is also provided on the returning emigrants, their directions of return, education level, employment and average income. In addition, the available information on internal migration flows is analyzed.

HUMAN RESOURCES STATUS

2010-2016 the total number of human resources (employed and unemployed persons) in Lithuania remained similar (between 1.42 and 1.52 million) and did not fluctuate much. However, in the future a significant decline in human resources due to the ageing population is foreseen.

The largest share of the human resources in 2016 consisted of persons aged 50-59 years. In 2010 the largest generations were 40-49 and 30-39 years old. At present, two of the largest generations (50-59 and 40-49) are relatively close (or approaching) to the retirement age and in the near future these people are likely to leave the labour market. Currently, the number of young people is lower than the number of older people, therefore if the current trends
persist, the total number of human resources in Lithuania will begin to decrease. It is also clear that there will be significant differences of this process between regions.

During the period of 2010-2016 older people take parental leave with an increasing share of 30-39-year-olds. This is probably due to both demographic reasons (a sufficiently large group of 30-39-year-olds) and social changes, such as getting married and having children later in life. In terms of the highest average income, this age group is the most productive and highest-earning.

The share of employed persons in 2010-2016 remained almost stable and in 2010-2016 was around 75-80%, but the share of the unemployed from 20% gradually decreased and in 2016 was less than 10%. The share of self-employed increased significantly – from 3% (2010) to almost 6% (2016). This growth could be related to the growth of entrepreneurship in Lithuania and the decrease in the number of the unemployed, but this may also be attributed to the tax differences in different forms of employment.

Figure 2 The distribution of human resources by employment group in 2010-2016

REGIONAL DIFFERENCES

The number of employers grew in all counties. The larger the main city in the county, the greater the concentration of employers, since most of them are registered in the largest city. In less-populated counties employers are more evenly distributed among municipalities.

In some counties there are more jobs than employees who have declared their place of residence in the county (Vilnius, Kaunas, Klaipėda, Šiauliai, Panevėžys and Telšiai counties). The possible reasons are that in these counties employees may be more likely to have several jobs or there is a significant number of those who have declared their place of residence in another county. It can also be that a large share of employers have registered their headquarters in these counties, but they are active throughout Lithuania and employ the population of all counties (jobs are assigned to the county according to the employer’s headquarters).

The number of jobs in Alytus, Utena, Marijampolė and Tauragė counties is lower than the number of employees who have declared their place of residence in that county. This is probably because workers in these counties are more likely to have only one job and a larger share of population who have declared their place of residence in these counties have left the county or Lithuania altogether. It may also be that most of the employers have registered their headquarters in other counties, so the jobs created by them are counted elsewhere.

On average, about one third of jobs are in public sector. This proportion is steadily declining from 2010, both due to the decline in public sector jobs and the growth of the private sector. Public sector jobs have
decreased since 2010 from 486 thousand up to 467 thousand in 2017. During the same period the number of private sector jobs grew from 941 thousand up to 1.171 thousand.

Figure 3 Distribution of jobs and employers by public and private sector in 2010-2017

Although there are no significant differences between counties, except for a slightly higher Utena county indicator (Figure 4), the situation in municipalities differs considerably. In the municipalities containing large cities the share of public sector jobs is smaller. Also, there are several less populated municipalities with a small share of public sector jobs: Mažeikiai (23%), Plungė (24%), Druskininkai (26%) and Neringa (29%). However, in most cases, municipalities away from large centers and without major cities are quite strongly dependent on public sector jobs. Among these are Lazdijai (61%), Ignalina (57%), Zarasai (54%), Visaginas (54%), Kalvarija (49%) and others.

In most counties manufacturing jobs are predominant. But at municipal level this is largely due to the high number of such jobs in major cities and their districts while smaller municipalities focus on the distinctive features of recreation, health care, transport, etc.

INTEGRATION OF SPECIALISTS IN THE LABOUR MARKET

The Lithuanian labour market lacks highly skilled workers (managers, professionals, technicians and associate professionals) and there are too many people who are seeking elementary (unqualified) employment. There are more graduates from HE than from VET in Lithuania. However, at the beginning of the career almost half (47%) of the first cycle (bachelor and professional bachelor) and integrated studies graduates work in lower qualification jobs (clerical support, service and sales, skilled agricultural, forestry and fishery, craft and related trades workers, plant and machine operators, and assemblers).
In all counties, there are more high-skilled (LPK\(^1\) 0-3) vacancy notices than unemployed persons in the labour exchange that are seeking a high-skilled job (Figure 5). This shows the shortage of these workers. Students and recent graduates will not cover the whole shortage, because each year the first cycle and integrated studies in Lithuania is completed by about 20 thousand students. In 2017 in Lithuania, the difference between the demand for high-skilled occupations in job advertisements and supply in the Labour exchange office was more than 50 thousand. Several possible causes of the mismatch are: the training of high-skilled workers is not sufficient, they do not meet the needs of employers and work in lower positions, or highly qualified employees are leaving Lithuania.

One of the measures to reduce the gap between the supply and demand is the re-qualification of unemployed and / or employed persons. A very large proportion (from 29% to 51%) of registered unemployed people in all counties are looking for elementary occupations (LPK 9). The total number of such unemployed persons is 2–3 times the number of jobs offered in advertisements. However, re-qualification is usually applied to unskilled workers (LPK 9) for qualification or for qualified staff (4-8 LPK) with a new qualification in the 4-8 LPK profession. The differences in supply and demand in 4-8 LPK professions are not as high as 0-3 LPK and in Vilnius and Kaunas counties there are even more 4-8 LPK jobs than those seeking.

Among graduates from VET only 54% in 6 months after graduation had a job. Some of those who were registered as unemployed at the Labour Exchange (9%), continued to study in VET (13%) or emigrated (2%). The activities of about 22% of graduates are unknown, which may also indicate undeclared emigration or unofficial income.

Having the highest share of employment (in total and by level of qualification) and the highest income are the graduates of Informatics, Health and Medicine science. The lowest employment and earnings are among graduates of Technological sciences, Sport, Life sciences and Agriculture sciences. Considering the graduates of VET, the highest employment and income are in the fields of Fisheries, Forestry, Security services, Health Care, the lowest – graduates in Architectural and Construction, Arts and Services.

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\(^1\) Lithuanian Classification of Occupations (Lietuvos profesių klasifikatoriumis) based on the International Standard Classification of Occupations ISCO-08
TOPIC: MIGRATION OF HUMAN RESOURCES

Annually a significant part of the population – about 30 thousand people are emigrating from Lithuania. After 2009 the worsening economic situation in the country led to significant emigration flows, which only started to decline in 2011. Since 2015 a more moderate growth of the flows is seen again. More importantly, the majority of the emigrants (of those who are over 16 years old) are young people under 29. Due to the aging workforce and a large proportion of young people among emigrants, if the situation does not change, a shortage of labour force can be forecasted in the coming years.

27 percent of 16–24 years old Lithuanian residents who emigrated in 2016 had only completed secondary education. Some of emigrants (16–18 years old) according to their age may still had not completed secondary school, but they accounted for only 11% of all 16-24 years old emigrants. Thus, part of young people leaving Lithuania do not tend to wait for the graduation from a secondary, higher or vocational school. A higher proportion of graduates with higher education should not come as a surprise, as those graduates also leave to continue their studies (postgraduate studies, doctoral studies) abroad.

The majority (over 75%) of those leaving the country did not have any registered activity (work or study) in the year of departure. Although, some of these people could have declared their departure from Lithuania in later years than they actually left. It is likely that the recent graduates have not decided on the duration of their residence abroad and therefore do not declare their departure immediately.

Among those who worked in Lithuania before emigration, 36% worked in high-skilled positions (managers, professionals, technicians and associate professionals). High-skilled employees account for 45% of the total labour force in Lithuania. Less qualified workers emigrate more frequently: skilled workers (clerical support, service and sales, production and operational activities) account for 38%.
skilled agricultural, forestry and fishery, craft and related trades workers, plant and machine operators, and assemblers) – 52%. Unskilled workers among the outgoing workers account for a similar proportion among all employees in Lithuania – 12%.

More residents are emigrating from cities which is also common in other countries. Nevertheless, the share of emigrating inhabitants from rural areas is also large (7%), knowing that they have an option of internal migration to other Lithuanian cities and cities with a higher labour demand (see Section 1.3 in the full report). A tendency is observed that people living in Lithuanian areas far from the city of Vilnius are emigrating more often. However, Vilnius is not a sufficient attraction center as a rather large part of the population emigrates from the Vilnius region. Some municipalities of Central and Western Lithuania also the municipality of Visaginas have the highest rate of emigration.

Measures to reduce emigration and increase the return of emigrants should be tailored to regional trends and those regions that have the highest share of emigrants. The municipalities that stand out with major emigration flows are distinguished by higher share of youth in the population, higher unemployment and lower salaries, larger distances to Vilnius or other large cities. Among the largest emigration flows are the municipalities of Visaginas, Šilutė, Pagėgiai, Šiauliai and Alytus municipalities. If the situation will not change, the extent of emigration will only decrease because of the decrease in the share of potential emigrants, especially young people in Lithuania.

The number of returning citizens to Lithuania in 2012-2017 was unstable. In 2012 reaching about 9 thousand, in 2015 it increased to almost 13 thousand and fell again to 11 thousand in 2017. During the years of 2015-2017, the number of returning emigrants dropped by 8 percent annually. About 97% of persons in 2012-2017 returned for the first time, 3% returned to Lithuania twice, another 24 people - three times.

The largest group, almost a third of migrants returning to Lithuania is 25-29 years old young people. One fifth of the returnees are 30-34 years old people.

About 80 percent of returning emigrants are from the European Union. People living in the United Kingdom (the country that is the first in terms of popularity as the country of emigration) account for almost half of all returnees. Other large numbers of returnees are from Ireland (11%), Norway (10%) and Germany (6%). Among the returnees of 2017 from the UK 19-24-year-olds account for one fifth, among those returning from Norway, this group accounts for only 8%. The larger group, compared to the UK (19%), is the 30–34-year-olds returning from Norway (26%). Also stands out a 55 years and older age group returning from the United States (30%). It is likely they are the descendants of the first emigration waves of Lithuanians to the United States who still hold the Lithuanian citizenship.

The myth that those who have lived in the rural areas of Lithuania before emigration are more likely to return to the cities, can be denied. Only one fifth of people who emigrated from rural areas in 2017 have returned to a city or a large city. Moreover, 82% of recent emigrants have returned to live in the same municipality where they lived before departure. Of course, the real place of residence of a person may not match the one that is declared, but it is likely that returnees after a long time prefer to register in the newly chosen place of residence.

Although most of the returning emigrants return to the same county they left from, however, 8 out of 10 counties have suffered a decline. Only Klaipėda and Vilnius attracted more returning persons in 2017 who have lived in other counties before emigration. In other words, those who move into a different county than the one they lived in before emigration, are not compensating for those who do not return to their previous county.
The highest level of education acquired in Lithuania prior to leaving by the returning 16-24-year-olds in 2017 is as follows: 7 percent of the 16-24-year-olds returning in 2017 had acquired higher education degree in Lithuania.

About 22 percent of those who returned in 2016 during the first year of their return in January were engaged in some activity: employed, self-employed, practice or military service (Figure 9). Most of them (66%) were employed and self-employed work. Such tendencies coincide with the whole labour market in Lithuania. Men were more frequently employed (32% of all returning men in 2016) than women (24% of women). This situation can probably be explained by the fact that women (58%) more often than men (46%) did not have any employment or activity status. This could indicate that women find it more difficult to find a job or other employment activities than men or women more often choose to raise children over employment. A significant proportion of returnees (11%) are registered as unemployed and raising children under 3 years old.

About 13% of all returning migrants in January 2016 were registered as unemployed in the Lithuanian Labour Exchange. On average about 20%, 45-54-year-olds were registered as unemployed in the Lithuanian Labour Exchange. On average about 13% of all returning migrants in January 2016 were registered as unemployed, it is more difficult to integrate into the local labour market, therefore the skills might become obsolete. It is also returning it becomes difficult to catch up with the new trends and apply the available skills. About 12% of all returning migrants in January 2016 were registered as unemployed in the Lithuanian Labour Exchange. On average about 20%, 45-54-year-olds were registered as unemployed in the Lithuanian Labour Exchange. On average about 13% of all returning migrants in January 2016 were registered as unemployed, it is more difficult to integrate into the local labour market, therefore the skills might become obsolete.
likely that some of those who worked in the low-skilled or unskilled positions abroad do not acquire the necessary new skills.

As time goes on, the situation changes: the proportion of employed returnees on average increased by 4 percentage points a year from the return. Some of these newly hired were those who had previously been registered as unemployed or had no employment activity. Also, in all flows of returnees, there was a decrease in the number of persons in the formal education system, on parental leave and those who do not have any official income. Altogether around 11% of the returnees re-emigrate from Lithuania in one year. Most of these people do not have any employment status in the year of return. It is likely that some of them register in Lithuania formally but do not plan to live here. On the other hand, they may have not found employment opportunities during their stay and therefore re-emigrated. 24-29-year-olds re-emigrate (also return) to Lithuania more often than the other age groups. Also, among them there are more men than women.

Figure 10 The change of types of activities of return migrants of 2015 after one year in Lithuania (the inactive group includes people who are on a parental leave)

About 37 percent of those who registered as unemployed immediately after returning, got employed, but 2% of them in a year became long-term unemployed. One quarter of the unemployed returnees already had long-term unemployed status in the year of their return. It is likely that some of them were in Lithuania at the beginning of the previous year, which is why such persons could already obtain long-term unemployment status. About 10 percent all long-term unemployed people do not find any employment and keep this status. After a year some of the employed (or in other type of activity) persons also become unemployed (4% of all returning in 2015). This situation is likely to indicate that the integration of these returnees is really difficult – some of them lost their job and needed some assistance in finding another, some of them acquired long-term unemployed status or maintained it.

On average about 30% employed returnees work in highly-qualified jobs (mostly professionals, 62%), 52% – lower qualifications (craft and related trades workers and service and sales workers, both 33%), 13% – elementary occupations (unskilled work). Among 20-24-year-old employees 60% were
employed as low qualified employees. Most highly skilled workers are among older people, especially between 50-59 years old age group (about 60%).

Over time, the number of highly qualified employees increases on average by 2 percentage points, while the low qualified employees remains the largest group. About 45% of employees in the Lithuanian labour market are highly qualified specialists. Low qualified workers account for the similar size share of 43%. Therefore the distribution of the group of returnees by occupational groups does not match the entire Lithuanian labour market.

The average insured income of employed returnees exceeded the minimum salary for that year (from 232 EUR in 2012 it increased to 380 EUR in 2017), partly due to the fact that most of the returnees concentrated in big cities. However, the income of the returnees did not reach the average gross national salary of that year (I quarter of 2017, 809 Eur). More than the average wage was earned by employees of only five economic sectors of NACE2. Particularly high income is earned by employees in financial and insurance activities (1161 EUR), information and communication (1146 EUR), and very small groups – employees of the electricity, gas, steam supply and air conditioning industry (1106 EUR). This could indicate that the returnees did not have a high qualification or did not raise it during emigration, or that the brain drain is happening one way: only a small part of the highly qualified (or those who have gained it abroad) return to Lithuania.

Very small but high-income group of employees comprises of managers (1100 Eur), which is far ahead of the other two highly qualified groups of professions – professionals (840 Eur) and technicians and associate professionals (692 Eur). The highest share of people who have returned and are employed in highly qualified professions are in the information and communication sector: as many as 70% of the employees in this sector are professionals who earn an average of 1250 Eur. There are also many highly qualified specialists working in the education sector (59%), but their average salary reach only 544 EUR. Sectors such as administrative and service activities, water supply and agriculture are mostly made up of unskilled workers.

**INTERNAL MIGRATION**

The main attraction centers in Lithuania are Vilnius and Kaunas counties, which show the largest numbers of registered official migration. Also an undeclared migration is seen through the number of persons who register in health care institutions in these counties. There is also a greater connection between the neighboring counties, usually the place of residence is changed within the same county, except for the smaller counties (Marijampolė, Telšiai, Tauragė, Utena), where the closest metropolitan area – Vilnius, Kaunas or Klaipeda – was the most popular.

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2 NACE (Statistical classification of economic activities in the European Community)
Part of this difference can be explained by the migration for education purposes. More than one fifth of those registered in Vilnius and Kaunas county health care institutions but officially living in other counties are studying in formal education programs.

Such inconsistencies in statistics influence regional policy and public service planning, which are based on the official statistics of the Population Register, the Department of Statistics and adjusted according to the data of the general census. These statistics do not show a large proportion of people who are likely to actually live in Vilnius and Kaunas counties, but are officially considered to be residents of other counties. Municipal-level mismatches also indicate that actual cities and their suburbs function as a single socio-economic system, although they and their services are still planned separately.