The analysis of the labour market and labour force needs in the context of migration governance

The analysis was undertaken under Activity 2.2.2 of the Action Plan (2021-2023) implementing the Economic Migration Strategy of the Republic of Serbia (2021-2027)

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List of acronyms

» **APZ –** Active employment measures

» **BITF –** Business and Technology Incubator of Technical Faculties in Belgrade

» **BMZ –** Federal Ministry for Economic Cooperation and Development of the Government of the Federal Republic of Germany

» **CRM –** Commissariat for Refugees and Migration

» **DIMAK –** German information center for migration, professional training and career

» **EU –** European Union

» **EURES –** European Network of Employment Services

» **IMF –** International Monetary Fund

» **JPOA –** Publicly recognized organizers of adult education activities

» **LFS –** Labor Force Survey

» **Med-VET –** Medium Vocational education & training

» **MESTD –** Ministry of Education, Science and Technological Development

» **MoLEVSA –** Ministry of Labour, Employment, Veterans and Social Affairs

» **NEET –** (Young people) not in Education, Employment, or Training

» **NES –** National Employment Service

» **NEUMS –** New EU member states

» **NOKS –** National Qualifications Framework

» **OECD –** Organization for Economic Cooperation and Development

» **OEUMS –** Old EU member states

» **PKS –** Chamber of Commerce of Serbia

» **SORS –** Statistical Office of the Republic of Serbia

» **UN –** United Nations

» **VKV –** Highly skilled occupations

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» Preface

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This analysis was conducted with the support of the Global Programmes "Migration for Development" (PME) and "Migration and Diaspora" (PMD) implemented in Serbia by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH in cooperation with the Ministry of Labour, Employment, Veteran and Social Affairs, National Employment Service and Commissariat for Refugees and Migration. Programs are funded by the German Federal Ministry for Economic Cooperation and Development (BMZ).

The Global PME Programme aims to improve living conditions and enhance the prospects of people to stay in their countries, both now and in the future.

Through qualification and skills development measures, the PME programme supports the economic and social reintegration of returnees in their local communities after their return as well as the economic and social prospects for the local population. The Programme helps individuals find their place in the Serbian labour market and supports those searching for education and training opportunities, same as those wishing to start their own business in Serbia.

At the same time, Global PMD Programme is focused on strengthening key stakeholders to better use the positive effects of regular migration and diaspora engagement in local social and economic development. The project strongly supports migration governance, i.e. political, organisational and strategic development in the area of migration. Supported by PMD, the Serbian Government drafted and adopted the first Economic Migration Strategy for the period 2021-2027, and its implementing Action Plan for the period 2021-2023.

Both programmes offer comprehensive counselling at DIMAK Serbia – German Information Center on Migration, Training and Career.

In that context, the labour market analysis was undertaken based on the accurate and latest data and other relevant employment and employability indicators. The factors affecting economic migration were hereby analysed relying on the findings of the labour market analysis.

The analysis is geared towards the implementation of Activity 2.2.2 of the Action Plan 2021-2023 implementing the Economic Migration Strategy of the Republic of Serbia (2021-2027) – the analysis of labour force potential in the context of emigration. The purpose of the Strategy implementation is to contribute to slowing down the emigration of the working-age population, establish an economic migration governance system, strengthen capacities for retaining highly skilled workers in the country and attract such profiles from abroad.

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Executive Summary

Serbian labour market registers enhanced performance, however, it is still lagging behind the EU-27 countries as per the majority of baseline indicators; it primarily records one of the highest unemployment rates, accompanied by low employment and activity rates.

Even 29.7% of the working-age population is inactive (1.3 million people), while 11.4% are unemployed (351.2 thousand people). In addition, women find themselves in a considerably worse position in the labour market having in mind the 1.8 percentage points higher unemployment rate and 14.5 percentage points lower activity rate. Moreover, 50% of all unemployed have been looking for work for longer than one year. When the significant volume of working-age population outflow caused by the higher exit cohorts compared to the entry ones (ca. 60 thousand people annually), and the outflow caused by emigration (ca. 10 thousand people annually) are added, the enhancing the labour force market performance in Serbia is perceived as a basic barrier to the future economic development.

Key indicators
that should be improved in the coming period

29,7%
(1,3 MILLION)
PEOPLE OF WORKING AGE POPULATION IS INACTIVE

11,4%
(351,2 THOUSAND)
UNEMPLOYED

WOMEN ARE IN A SIGNIFICANTLY WORSE POSITION ON THE LABOR MARKET, BEARING IN MIND A 1.8% HIGHER UNEMPLOYMENT RATE

14,5%
LOWER ACTIVITY RATE

1,8%

50% OF ALL UNEMPLOYED ARE LOOKING FOR A JOB FOR MORE THAN A YEAR.

A certain paradox in the Serbian labour market is reflected in the fact that at the same time there is a large number of people searching for jobs, while simultaneously employers point to the labour force deficiency as a key limiting factor for business development.

A minimum of one-third of companies are faced with major problems in locating people with adequate qualifications.

The situation is the most aggravating for the companies operating in the accommodation and food sectors (58.7% have problems filling up vacancies), construction (43.9%), manufacturing industry (42.1%) and transport and storage (39.8%).

The most frequent causes of the problems related to finding a skilled labour force are deficient occupations (35.4%), lack of knowledge and skills (24.1%) and lack of professional experience

(17.1%). The specific deficient occupations mainly include the workers engaged in service and craft professions, same as technicians and drivers. Additionally, there is also a shortage of specialist professions, primarily mechanical engineers, electrical engineers, IT engineers, civil engineers and managers.

The analysis has shown that the demand for these profiles will rise even more in the future. The companies are bridging this gap by announcing permanent calls, downgrading the criteria, introducing extra benefits, and lately, even hiring foreign labour force from underdeveloped countries.

DIFFICULTIES IN FINDING SUITABLE QUALIFICATIONS

1 2 3 4 5 6 7
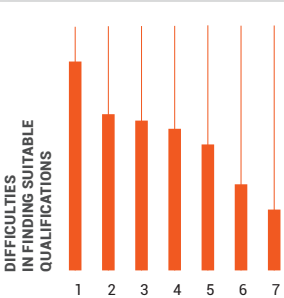
They are in the most difficult position companies in the sector:

1 – Accommodation and food service (58.7%)
2 – Construction (43.9%)
3 – Manufacturing industries (42.1%)
4 – Transportation and storage (39.8%)

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The most common causes of retrieval problems skilled workers:

5 – Shortage of occupations (35.4%)
6 – Lack of knowledge and skills (24.1%)
7 – Lack of work experience (17.1%)

The solution to this paradox is found in the mismatch between the supply and demand of skills, discouragement of people who have been out of contact with the labour market for quite a while, and surely, emigration.

These three causes are interconnected and could be overcome only by implementing joint implementation of education, labour market and migration governance policies. In the area of education significant steps have been made to implement the National Qualification Framework, however, further efforts are needed to modernise the curriculum and manage enrollment quotas, same as to introduce mechanisms to make the deficient profiles more attractive to students.

In the labour market policy domain, the focus needs to be shifted as much as possible to training, retraining and additional training, given that these programmes have proven to be successful and in high demand in the case of the NES and other nongovernmental and donor organisations offering these services. Likewise, the changes in the taxation system aimed at lowering the tax burden on low-income and stimulating youth employment may prove effective in including and retaining these people in the Serbian labour market. These activities, along with the activities supporting circular migration and emigration would greatly resolve the issue of a negative migration balance in Serbia. As economic migration is central in this analysis, special focus will be dedicated to this particular area.

The analysis unveiled the complexity of the migration phenomenon: the complexity of statistical monitoring, the importance of quantitative, but also qualitative migration studies, the necessity of understanding the motives underlying migration trends, the importance of a comprehensive, coordinated institutional response of the state, however it primarily underscores the inter-dependence between the migration policies and situation in different sectors of social and economic development.

Moreover, it confirms the economic theory of migration and causality between the desire for higher income, better working conditions and other economic and social benefits in destination countries and emigration from Serbia, primarily of low-skilled workers, but also of special and necessary skills proven to be deficient in the Serbian labour market. Although not dominant any more, still important for Serbia is the phenomenon of highly-skilled labour mobility, who in addition to higher wages, also recognise better working conditions and professional development and advancement opportunities abroad.

There is no consolidated, accurate and reliable data on emigration from Serbia. The latest available data on bilateral migration suggests that the total number of Serbian emigrants worldwide in 2017 equalled ca. 1 million.

The official data on the number of Serbian emigrants is presented in the latest population census, and according to this data in 2011 311,500 Serbian nationals lived and/or worked abroad. In this analysis, the preference was given to immigration data of destination countries (EUROSTAT). Assuming that the migration balance with the rest of the world outside the "Eurostat-Europe" is neutral, the annual net outflow of Serbian citizens in the past decade would range between 4,000 to 13,000 persons. The most in-demand destination countries of Serbian emigrants in the EU are Germany, Austria, Italy, France, Slovenia, Slovakia, Croatia, Sweden, Hungary, the Czech Republic, Malta, Belgium and Poland, and two non-EU member states reporting to Eurostat (Switzerland and Norway).

The latest studies show that the highest increase in the number of Serbian emigrants was reached cumulatively predominantly in the Eastern wing EU countries (Arandarenko, 2022).

Observed at the EU level, the period 2010-2019 can be divided into two post-periods. The first, between 2010 and 2016, is characterised by a sharp drop in the number of Serbian citizens, with a cumulative decline of ca. 175,000. The second, after 2017, registers a rise in the total number of people with residence permits of ca. 118,000. A three-year upward trend was sharply interrupted in 2020, mainly due to the consequences of the pandemic outbreak. Proof of the concept that the Serbian diaspora is actually not shrinking is corroborated by the continuous rise in remittances reaching EUR 4.6 billion in 2019. Even with the considerable decline in the number of Serbian citizens holding residence permits in 2020, the remittances registered only a slight drop to EUR 4.35 billion.

Moreover, the analysis of circular migration trends via labour force surveys and "cohort approach" shows that the outflow of medium-skilled migrants from Serbia is rather high among those with Med-VET qualifications, which is a significant increase compared to other qualification levels. Contrary to the usual narrative of "brain drain", the latest studies point to the fact that the outflow of the highly educated is not a dominant type of emigration among Serbian citizens.

It concerns labour force mobility, where the focus should be placed on the programmes of circular and return migration and attracting foreign labour force.

» **The issue of migration has already been the focus of governmental and international stakeholders and civil society for quite some time,** which is confirmed by the adoption of the Economic Migration Strategy of the Republic of Serbia for the period 2021-2027 and its implementing Action Plan for the period 2021-2023.

The largest number of identified established programmes and initiatives is focused on fostering the return and circulation of the most educated members of the diaspora, including the introduced Government incentives.

The programmes focusing on circulation, namely the return of persons with lower qualification levels, are not sufficiently present.There are numerous reasons why this is the case: expert public and relevant stakeholders are only becoming aware of the fact that a part of the emigration flows simply remains uncaptured by the researchers, as this type of emigration takes place in the so-called grey zone, **using a visa-free regime with the EU countries,** and then in the **insufficient knowledge and understanding of emigration motives found** in this part of the Serbian labour force, which is important for the design of adequate measures and policies.

In that sense, the presented comparative analysis has shown that the relative cost-effectiveness of emigration for those with a medium education level becomes even more pronounced.

Although the motivation of potential emigrants from Serbia towards the developed countries in Europe and globally provides a very clear picture wof the relevance of economic and social factors attracting and additionally stimulating migration flows, on the other side it is equally important to consider the potential of the institutional response of stakeholders in the migration governance system playing a rather important role in migration trends' monitoring, protection of emigrants' rights in destination countries, engaging diaspora in development projects in the country of origin, fostering circular and return migration.

» Introductory considerations

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In the past two decades, the Serbian economy is characterised by a relatively unstable ratio of economic growth and labour market parameters. Transition in Serbia began back in the early 2000s, involving a slow shift from the social and state-owned to the market-based production method. In economic terms, it depended on the speed of privatisation of socially-owned enterprises, attracting new foreign direct investments and construction of a new domestic private economy. However, privatisation of the state-owned and socially-owned enterprises outside the food, tobacco and telecommunication sectors was unfolding rather slowly.

The privatisation programmes were primarily focused on maintaining employment, almost at any cost, while the mistrust between investors and the state was mutual and often led to the termination of contracts forcing individual processes back to their beginning. Another unfavourable aspect was the inherent lack of local capital typical for all post-socialist countries, additionally intensified in Serbia by the devastation in the 1990s.

The resulting consequence is that a considerable number of untransformed enterprises operated only on paper until the 2008 crisis, maintained by the implicit and explicit governmental subsidies, while the domestic private economy had only started truly developing. On the other hand, the enterprises undergoing transformation did not generate new jobs, still, they positively affected the renewal of economic activity. The economic crisis effects on the labour market indicators were prompt, given that the unemployment rate in 2010 had already reached ca. 20% (compared to 14.4% in 2008), while GDP dropped by only 2% compared to 2008. In the period 2010-2012, the worsening in the labour market statistics continued, the unemployment reached a record-breaking 24.6% although the net positive growth was slightly positive (1.3% in these two years).

In the period 2013-2014, the trend reversed, since the economic crisis persisted, while the labour market indicators indicated a slight recovery. The post-crisis episode covering the period until the global pandemic outbreak was characterised by an opposite pattern of that in the previous decade-employment was rising much faster than GDP.

The discrepancy in the trends of these indicators may be explained by a combined action of the well-known effect of regression to the mean and the effect of autonomous factors on the side of labour supply (Arandarenko et al. 2016).

The negative effect of the pandemic-induced crisis in the labour market was only of a temporary nature and referred primarily to informal employment (Medić and Udovički 2021).

The data presented in Chart 1 illustrates the uniform improvement of the labour market performance in the period before and after the pandemic crisis outbreak. In 2020 the activity and employment rates were rather close to the targets planned in the National Employment Strategy for the period 2011-2020 amounting to 68.8% and 61.4% respectively, while in the case of unemployment, the projected value was reached a year before its expiry.

The Employment Strategy in the Republic of Serbia for the period 2021-2026 foresees further improvement of the labour market indicators, namely the working-age population activity rate to 72.8%, employment rate to 66.1% and the unemployment rate to 9.2%. These improvements in terms of the activity and employment rates would bring Serbia closer to the values nowadays found in old EU member countries (OEUMS), while still significantly lagging behind the new EU member states (NEUMS).

Chart 1: The activity, employment (left axis) and unemployment (right axes) rates
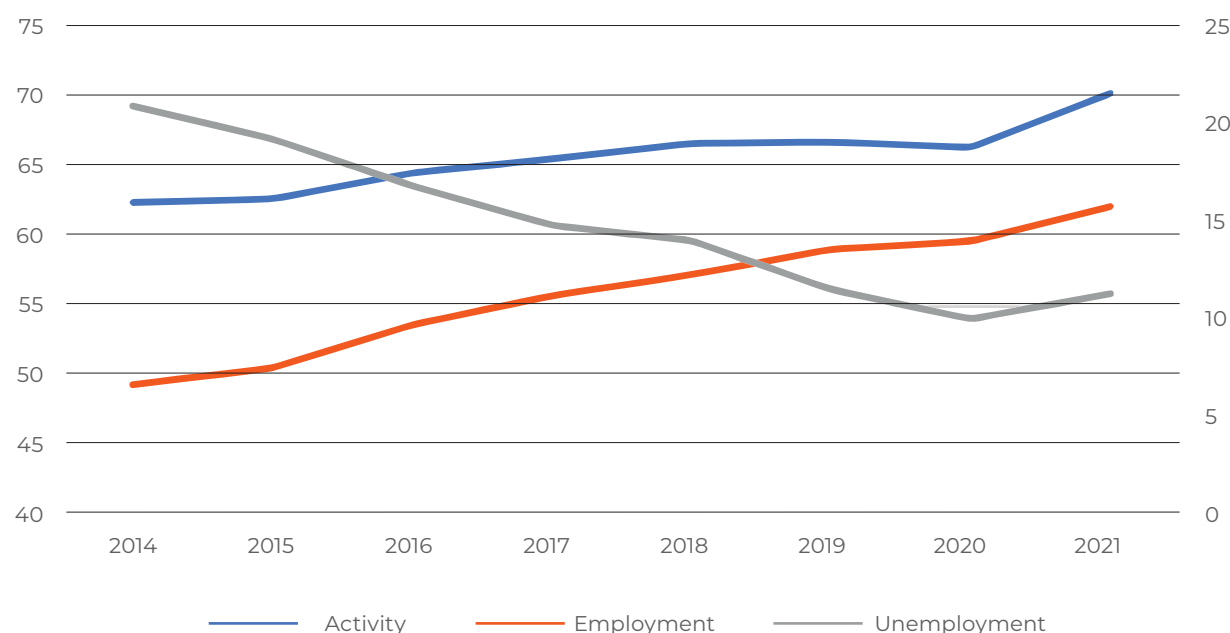
Source: SORS

It is important to stress that the outlined improvements in the labour market were achieved owing to the combined action of multiple factors.

Economic policy (and labour market policy more narrowly taken) after the 2008 crisis effectively came down to attracting foreign direct investments, namely, subsidised employment. The role of the NES in preserving the labour force capacity was immense, however, its capacity was extremely limited by the notable inflow of newly unemployed.

Major impact also pertained to natural factors like demographic and migratory ones. As presented in the second part of this analysis, Serbia is characterised by intensive emigration, primarily labour emigration. Emigration is a release valve for the majority of those who failed to find jobs in Serbia corresponding to their knowledge and skills. The working-age population leaving the country leads to the shrinking of the labour force and above all, a declining number of unemployed persons, and along with the rising employment, this led to the unemployment rate in Serbia decline from 25% in 2012 to almost single-digit level in 2019 (Medić and Udovički 2021).

Demographic factors also contributed to the enhanced labour market performance. Namely, the five-year exit cohort comprising the so-called baby boomers who have retired in the past period or are about to retire in the coming years is relatively large. On the other side, the entry cohort encompassing young people 15 to 19 years of age is up to five times smaller than the exit cohort. The reduced pressure

on the labour market on this ground as well affected the improvement of its performance measured by baseline indicators (Ibid.).

However, it needs to be underlined that although the said effect of natural factors enhances the labour market indicators in the short run, this is not sustainable long-term as it already became evident that Serbia will need to import an additional labour force.

Even if we set demographic and migratory challenges faced by Serbia aside, a considerable improvement in the labour market indicators registered in the previous period seems less impressive if compared to other countries. According to the activity rate and employment rate levels, Serbia is still significantly lagging behind the European Union average – the activity rate is lower by 4, and the employment rate by even 6 percentage points. Despite major improvements being recorded concerning the unemployment rate, in 2021 it was almost double the EU 27 average (6.6%) and new EU member states (4%). Generally, assessed by the labour market performance, Serbia is still lagging behind the new EU member states.

Moreover, there are notable regional disparities present in the Serbian territory. The highest activity and employment rates are typical for the Belgrade region (74.0% and 67.4% respectively), while the worst situation is found in the South and East Serbia region (65.6% and 56.3%, respectively), which is, particularly regarding the unemployment rate (14.1% vs. 9.0% in

the Belgrade region) but all other parameters as well, lagging behind other regions.[1]

In addition, there are major differences in the Serbian labour market in terms of men and women. Concerning the unemployment rate, men are in a better position (10.6% vs. 12.4%). This difference of ca. two percentage points is consistent in all regions except Vojvodina, where the women's unemployment rate is higher by 0.4 percentage points. However, the traditional way of doing business is still broadly present in Serbia which is reflected in the drastically lower activity rate (77.5% vs. 63%) and employment rate (69.3 vs. 55.2%) in women.

Likewise, there are substantial differences between employed women and employed men in terms of their salaries. Compared to men, women earn 12% lower salaries irrespective of their qualification level. When qualifications are taken into account, these differences become even more pronounced. The women with low education levels earn 15.6% lower salaries, medium level 15.9%, and highest level 23.5%.

This challenge was recognised in the applicable employment strategy, however, it just the same sets the five-year targets insufficiently ambitiously given that it almost does not foresee relative improvement in the position of women against men, except when women are concerned. Moreover, apart from the gender-balanced approach which is predominant, further work is required to additionally elaborate on

the measures and their implementation that would result in positive discrimination against women. As a part of the broader social policy, it is worth considering introducing measures, programmes and necessary legislative amendments to equalise *de facto* the position of men and women as much as possible when it comes to looking after children.

One of the specificities of the Serbian labour market is also the duration of unemployment. Regardless of unemployment not being particularly high in the past several years compared to its historical context, the average duration of job-seeking is above the average. So in 2012 ¾ of all unemployed workers were considered long-term unemployed, which means they were actively looking for work for 12 months or longer.

In the previous period, this share shrank, so now half of the unemployed are looking for a job for longer than one year, which is still significantly higher than the EU 27 average amounting to 40% (Eurostat). The period of long-term unemployment imposes multiple damages on the unemployed person, both psychologically, as it may discourage the person and drive them into inactivity, and concerning the atrophy of human capital which additionally diminishes the prospects for employment and puts the person into a vicious circle or a trap of long-term unemployment.

The mismatch between the GDP and employment growth discussed previously is reflected in the slow productivity growth and relatively lower wages.

Cumulative productivity growth in the period 2014-2019 was relatively modest (3%) and shows that the majority of jobs created in this period were at the economy average level (Ibid.). In other words, currently, unambiguous evidence is lacking to corroborate the improved quality of jobs in the view of the creation of more productive jobs. The resulting consequence is that when it comes to productivity adjusted by the purchasing power parity, Serbia is lagging by 30-40% behind the new EU member states, at the same time lagging behind the least productive Bulgaria by almost 18%.

In line with the productivity arrears, Serbia is lagging behind many countries in terms of salaries which is one of the leading factors motivating the population to emigrate. As a consequence of the economic crisis, and then fiscal consolidation and slow productivity growth, the real wage growth rate after 2012 was rather moderate (averaging 1.2% annually). Compared to the pre-pandemic 2019, nominal cumulative wage growth amounted to 33.6% in April 2022.

However, taking into account the inflation of 13.5% in the same period, we come to the conclusion that wage growth equalled 17.7% cumulatively or 5.6% annually. Having in mind that in the same period wages in the public sector went up by the nominal 27.3% cumulatively, the conclusion is that the indicated total increase was affected significantly by other wages in the public sector, the same as the increase in the minimum wage.

In other words, the quality of new and existing jobs (reflected in wages) needs to be enhanced faster and more efficiently. Another fact to be taken into account is that the real wage growth stated in percentages in Serbia would need to be considerably higher than in the neighbouring countries, especially compared to the new EU member states. So the average net wage in Slovakia is 48% higher than wages in Serbia, in Poland 60%, in the Czech Republic 90% and 3.5 times in Germany, while in the least developed Bulgaria, wages are 6.4% higher.[2] Including the living standard, i.e. the price level reduces these differences, but not sufficient to mitigate emigration pressure. The second part of this document addresses in more detail the migration and effects of wages and employment on this phenomenon.

The most serious challenges for the Serbian labour market are the issues of improved performance and migration governance. The potential for further improvement of the labour market indicators is rather limited, even if we neglect the exogenous shocks caused by the COVID-19 pandemic, and energy and geopolitical crises in 2022. These limitations are found both on the supply and demand sides. The first refers to demographic and migratory factors discussed in detail in the second part of this analysis, which will affect the shrinking of the working population.

Each economy registers a certain natural unemployment rate, therefore it is only natural

1 2021 SORS data.

2 The data on the level of wages in the listed countries is taken over from the statistical offices of these countries in the period March-April 2022.

for a certain number of people to be inactive in any society (education, illness, disability, dependent care, maternity leave, etc.), namely that the part of the population unavoidably needs to be unemployed and inactive.

However, an issue arises about the opportunities to activate inactive population and create space for intensifying such policies, the same as how the potential of circular migration is to be used in the coming period to slow down emigration and support labour migration in sectors where the labour force is particularly deficient.

Further adaptation of educational policies is necessary, but, at least when formal education is concerned, it can yield effects only in the long run.

Therefore, the second best solution is further promotion and capacity building for delivering training for the known employer, both under the existing NES programmes and programmes of international donor organisations.

Apart from the high inactivity and relatively high unemployment rates, the need for training and retraining is reinforced by the existing mismatch between the available and needed skills and qualifications in the labour market. In addition, the focus should be on incentives provided by legal employment protection and labour taxation on labour demand.

I. Characteristics of the Serbian labour market

» Labour force supply

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For the needs of the labour force supply analysis in Serbia, the data collected via the Labour Force Survey was used, as well as findings of the Ex-post analysis of the implementation of the National Employment Strategy for the period 2011-2020.

The Labour Force Survey provides insight into the state of play in the labour market based on the trends in the baseline activity, inactivity, employment and unemployment indicators. The labour market performance baseline indicators' trends in the past few years indicate its recovery reflected in the increased employment rate and reduced unemployment and inactivity rates.

However, Serbia is still significantly lagging behind the EU-27 countries[3] and according to the majority of labour market indicators, it is at the bottom of the list with one of the highest unemployment rates and low employment and activity rates.

Understanding the situation in the labour market calls for an analysis of other indicators such as the quality and structure of employment, the structure of the unemployed and the structure of the inactive population, all aimed at designing recommendations for the economic and social policy makers to adopt appropriate measures.

In the course of this analysis drafting, the 2020 Labour Force Survey microdata was available. Still, due to the immense effect of the COVID-19 pandemic on the labour market at the global and national levels, the 2019 data was used for the analysis.

Since this is a structural analysis whose elements and their relative position change slowly over the years, the conclusions remain relevant even after a longer period. The analysis covered a body comprising a working-age population of 20-64[4] years of age according to their gender, age, education level, profession, settlement type, region and status in the labour market.

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3 Eurostat
4 We opted for this age group given that the majority of population aged 15-19 is still in the formal education system, therefore is considered inactive and artificially adversely affects the conclusions about the educational and age structure observed via different modalities.

» The employed

Employment addressed in the Labour Force Survey includes persons between 15 and 89 years of age who have performed a paid job (in money or in-kind) in the week observed for an employer, independently or as a contributing member of the household, in the duration of minimum one hour, and persons having a job they are temporarily absent from, but are tied to it. The employment defined in this way enables including informal employment in total employment, employment quality monitoring and international comparability of data[5].

The outcomes of the survey enable the evaluation of the labour force supply quality and its comparison with European countries, with a view to improving the situation and performance of the Serbian labour market via adequate employment policy programmes and measures.

The dominant status in the labour market is defined by the following three categories: employed, unemployed and inactive persons. The share of the employed in the age group 20 to 64 is 65.1% or 2,714,904 persons in total. The share of men in total employment is higher than the share of women (55.1% and 44.9% respectively). The data indicates regional disparities regarding the number of employed persons. The least developed region of Southern and Eastern Serbia registers a notable arrear compared to the rest of Serbia, while the highest employment rate is recorded in the Vojvodina region. The total number and share of the employed in the age group 20-64 by regions are presented in Table 1.

Table 1: The employed in the age group 20-64 by regions, 2019.

	In thous.	% against employment
Belgrade region	715.4	26,3%
Vojvodina region	737.7	27,2%
Western and Central Serbia region	734.2	27%
Southern and Eastern Serbia region	527.7	19,4%

Source: SORS, Author's calculation based on the LFS data

The findings of the analysis illustrate the differences in employment opportunities by regions, namely that the employed predominantly live in urban settlements (59.9%), while in other types of settlements inclusion in the labour market is more difficult (40.1%).

Structure of the employed

The structure of the employed in the age group 20-64 is analysed from the aspect of gender, age, type of settlement, region and education level.

Observed from the gender perspective, notable differences were identified in the level of employment. Namely, out of the total number of women in the observed age category, only 56.3% are employed, while more than one-third of women are not active in the labour market (36.5%). The exclusion of men from the labour market is lower, implying that 70.9% are employed, while 20.7% are inactive. The unemployment rate at the level of the age group concerned illustrates a slightly more favourable position of women amounting to 10.2%, while 10.7% of men are unemployed.

The mismatch between the men and women employment rates is most found in youth between 20 and 24 years of age, where the registered women employment rate amounts to 36.9%, while deviations from the national average in other age groups are smaller. The more difficult or late access to the labour market of working women as of the earliest age is replicated over the years in shorter professional experience, while potential maternity leave additionally pushes women away from the labour market, i.e. it additionally affects the pay gap deepening. Young women mainly opt to continue their education at universities and colleges, while men of the same age most frequently complete their education at the secondary level and join the labour market earlier, which can partially explain the gender differences in the youngest age group (20-24) – Chart 2.

Chart 2. The employment rates by gender

Age group	Male	Female
20-24	63,10%	36,90%
25-34	55,60%	44,40%
35-44	53,90%	46,10%
45-54	52,70%	47,30%
55-64	57,70%	42,30%
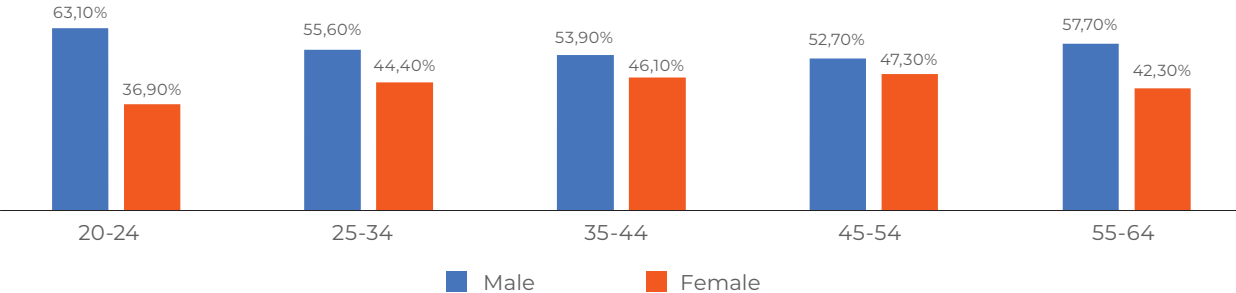
Source: SORS, Author's calculation based on the LFS data

Observed based on the activity sectors, women aged 20-64 are predominantly employed in the service sector (64.9%), with only every fifth woman working in industry (19.8%). The presence of women in agriculture is negligible, implying that only every ninth woman is employed in this sector of the economy (11.5%).

Most men are employed in the service sector (47%), although considerably less than women, followed by industry (36.2%) and agriculture (14.8%).

Observed by the narrower activity sectors, men are predominantly present in the manufacturing and construction industry, while women are more frequently found in education, health and medical care, administration and wholesale and retail.

By the occupation groups, the concentration of employed men is traditionally the highest in military professions, managerial positions, and crafts, but also in the group of machinery and plant operators, fitters and drivers. Women are more found in administrative, art and expert professions, however, they do not hold a predominant share in any of them (Chart 3).

The labour market disparity tendency is visible when the share of genders is considered in the total number of the employed by occupation groups. Namely, almost every fifth working woman is engaged in service and trade activities (19.9%), with the high share of women (19%) found in the position of professional and art experts and in the group engineers, technicians and related professionals (14.0%).
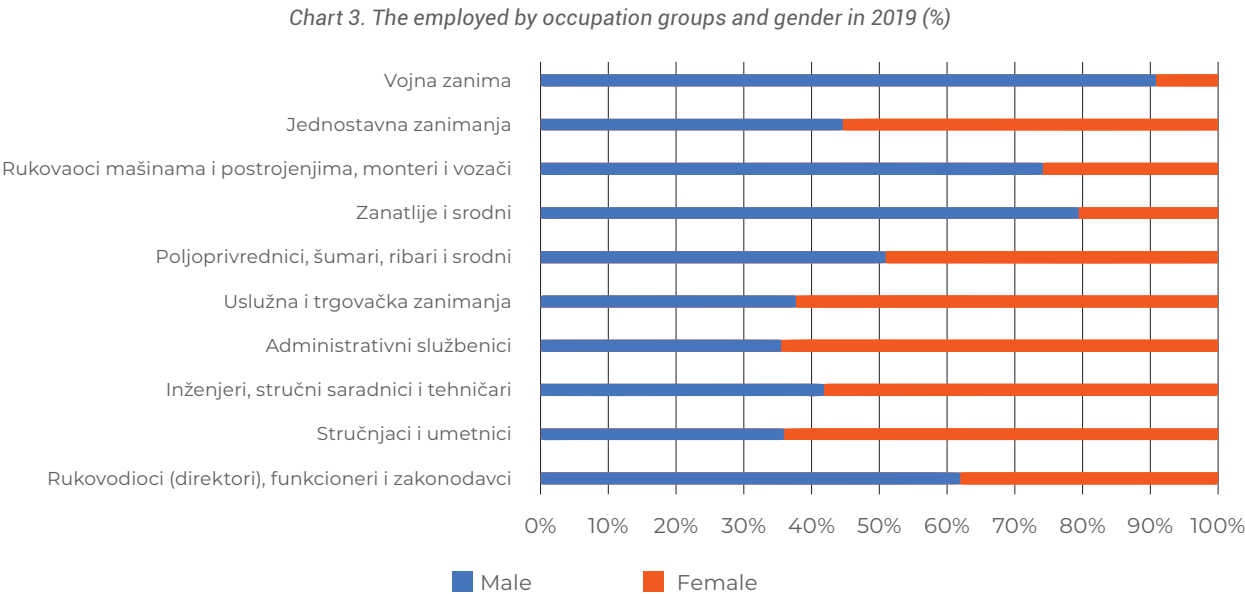
Over one-half of working women aged 20 to 64 years are found in the latter three occupation groups which re-affirms the importance of the service sector for the inclusion of women in the labour market.

In the group of agriculture, forestry, fishing and related occupations, the share of men and women is almost equal (13.6^ and 13% respectively).

Almost one-fifth or 18.2% of employed men are categorised in the occupation group Craft workers[6], fewer of them (18.2%) are in the group machinery and plant operators, assemblers and drivers, while only every tenth man is employed in the position of an engineer, expert associate (10.2%), or expert and artist (10.7%). The employment by occupation groups and gender is presented in Table 2.

Chart 3. The employed by occupation groups and gender in 2019 (%)

Source: SORS, Author's calculation based on the LFS data

Table 2: The employment by occupation groups and gender is presented in 2019 (%)

Occupation groupst	Men		Women	
	%	,000	%	,000
Managers (directors), officials and legislators	3,6%	54,3	2,2%	27,3
Experts and artists	10,7%	160,0	19,0%	230,9
Engineers, technicians and related professionals	10,2%	153,1	14,0%	170,9
Administrative workers	6,2%	92,1	11,2%	136,2
Service and trade occupations	12,1%	181,8	19,9%	242,4
Agricultural, forestry and fishery workers	13,6%	202,9	13,0%	158,3
Craft and related trades workers	18,2%	271,9	4,7%	56,9
Plant and machinery operators, assemblers and drivers	15,9%	238,7	5,5%	66,5
Simple occupations	8,5%	127,1	10,5%	127,6
Military occupations	1,0%	15,1	0,1%	0,7

Source: SORS, Author's calculation based on the LFS data

6 Source: SORS, Author's calculation based on the LFS data

The Labour Force Survey data shows that more than half of men complete their formal education after finishing secondary vocational education in a duration of three or four years.

Namely, even 61.8% of men hold secondary school diplomas, while only 14.2% hold university degrees. On the other side, women more often continue their university and college education keeping in mind that every fifth woman (21.6%) employed holds a university degree.

Neither men nor women are particularly interested in additional professional development via seminars, private tuition, courses or similar training outside formal education (1.5% and 2.8% respectively), but when they are, it is predominantly related to their jobs.

The data analysed shows that women are more prepared to get additional education for the needs of their jobs (72.9%) compared to men (66.3%), while every third man attends additional courses on the account of their personal interests and ambitions (33.7%).

The most commonly found type of work engagement both in men and women is fixed-term employment (77.1% and 78.4% respectively). A slightly higher percentage of women employed under the fixed-term contract can be explained by their presence in the public sector, namely in the education and

healthcare sectors where fixed-term contracts are much more common than in the private sector.

Temporary employment and job insecurity are mainly connected with younger age categories[7] as young people start working under fixed-term (46%) and open-ended contracts (47.4%) which shows that they are particularly exposed to problems pertaining to labour market entry and retention and that they are not recognised as a special category in active labour market measures.

The substandard conditions are more often found in the forms of work outside employment, with an identified increased presence of contracts on temporary and occasional employment.

This type of work is not attractive to employees and they opt for it mainly, or in 88.7% of the cases, due to their inability of finding permanent employment, with only 2.4% of employees considering jobs of temporary duration acceptable and desirable.

Job security is only one of the important elements of employment, with wage being the second, probably equally important segment. The wages of employed employees compared to that of outside employment are 55% higher (Wage Structure Survey, SORS, 2021), however, this comparison overemphasises the difference between these two categories as they include completely different professions, education levels and employment sectors.

In the situation of controlled wages for a particular profession or sector, workers outside employment earn on average ca. 20% lower wages compared to employed workers (author's calculation based on the LFS microdata). It is evident and expected for the employed workers to indicate a more favourable educational structure – there are fewer of them among the low-educated ones (7.3% vs. 11%) and more among the highly-educated workers (33.4% vs. 18.9%).

The temporary forms of employment are more present in sectors characterised by short-term demand or seasonal fluctuation of demand for the labour force.

Fixed-term contract employment, the same as work outside employment, is found in the construction industry, agriculture, and certain segments of the service sector.

From the perspective of occupations, the highest percentage of these workers perform simple and routine tasks (19.7%), while almost every fifth worker performs tasks in the groups of service and trade occupations (19.1%), followed by the group of machinery and plant operators, assemblers and drivers (13.9%), craft and related occupations (12.3%) (Table 3).

Table 3: The employed based on the fixed-term contract by occupation groups, 2019

	,000	%
Managers (directors), officials and legislators	2,3	0,5%
Experts and artists	69,2	15,0%
Engineers, technicians and related professionals	44,4	9,6%
Administrative workers	37,1	8,1%
Service and trade occupations	88,0	19,1%
Agricultural, forestry and fishery workers	2,9	0,6%
Craft and related trades workers	56,8	12,3%
Plant and machinery operators, assemblers and drivers	64,1	13,9%
Simple occupations	90,8	19,7%
Military occupations	4,8	1,0%

Source: SORS, Author's calculation based on the LFS data

7 Age group 20 to 24 years.

The unfavourable position of these workers in the labour market is influenced by the intensified workload after the working week has ended, as only one-third of temporarily employed does not work on Saturdays (37.4%), while 17.5% of temporary employed often work on Sundays as well, as illustrated in Table 4.

Table 4: The share of the fixed-contract employed working at weekends, 2019

	On Saturdays	On Sundays
Often	34,6%	17,5%
Sometimes	28,0%	19,2%
No	37,4%	63,4%

Source: SORS, Author's calculation based on the LFS data

Based on the analysed data, an average worker profile may be defined in informal forms of working engagement as being a young person, with secondary education, earning twice lower salary than the average salary in the Republic of Serbia, frequently performing simple tasks not requiring higher education levels than primary school, in groups of service and craft professions, finding it difficult to exercise their legal rights, and often working at weekends.

Despite the identified trend of increased formal and declining informal employment, the presence of informality is still considerable in the labour market. Namely, every fifth worker in Serbia is informally engaged.

Unlike formal employment entailing significant differences in terms of rights, position and protection of workers, informal workers do not enjoy any employment-related formal rights.

The largest number of informally employed was recorded in the age group 25-54 years, in self-employed workers in the Šumadija and Western Serbia region.

The number of the employed in formal and informal employment, by age groups and regions is presented in the Table on the next page.

Table 5. The employed in formal and informal employment, by age groups and regions, 2019 (in thous.)

	Total	Srbija − North		Srbija − South	
		Belgrade	Vojvodina	Šumadija and Western Serbia	Southern and Western Serbia
Employed	2901,0	740,5	768,1	812,4	580,0
Formally employed (15+ years)	2371,8	661,8	651,7	617,9	440,4
15-24	116,3	24,8	42,4	25,2	23,8
25-54	1803,3	525,8	493,4	449,7	334,3
55-64	384,9	98,6	104,3	112,4	69,6
65+ years	67,3	12,5	11,6	30,6	12,6
Informally employed (15+ years)	529,2	78,7	116,4	194,5	139,6
15-24	37,5	6,6	8,6	14,8	7,5
25-54	275,2	47,7	70,8	92,9	63,8
55-64	116,3	15,2	23,2	46,1	31,8
65+ years	100,2	9,2	13,7	40,8	36,5

Source: SORS, Author's calculation based on the LFS data

» Inactive population

The labour force supply and quality are determined by negative demographic trends like the ageing population, negative birth rate and migration trends. The accelerated ageing of the population is a trend which can hardly be slowed down or stopped, calling for the monitoring of leading parameters of labour market activity in the situation of increased emigration, and the use of such data to inform decision-making and policy-making aiming at adequately addressing the identified challenges in the labour market. The underutilisation of the working potential of an economy questions the existential status of an individual and opportunities for meeting basic living needs, at the same time stimulating social and societal exclusion. The long-term exclusion from the labour market leaves permanent psychological consequences on the members of the society and results in human capital quality erosion making return and work engagement additionally difficult.

By establishing a standard definition of inactivity and other baseline labour market indicators, the International Labour Organisation enabled monitoring of their trends over time and international comparability. The active part of the population comprises both employed and unemployed persons, while the remaining portion of the population is in

the inactivity status. Active persons account for the labour force supply and represent the basis of the economic development of a country, and as a rule, provide for the inactive part of the population. According to the definition, inactive persons are persons aged 15 and above, who in the observed week did not perform any paid jobs, nor have been actively searching for a job or taken up a job within two weeks after the expiry of the week concerned. However, the assumption based on which all inactive persons do not have preferences and interests in being included in the labour market or that they do not maintain ties to the labour market is not sustainable.

Despite certain progress achieved in terms of the labour market indicators' values, the inactivity rate in the working-age population in Serbia is still high and registers values regarded as among the highest in Europe. According to the 2019 Labour Force Survey, the inactivity rate amounted to 27.1% for the age group 20-64 years.

The overemphasised gender mismatch of labour market inclusion reflected in the predominant inactivity of women (63.%%) compared to men (36.5%) is a subject for further analysis with a special focus on the underlying reasons and duration of inactivity period,

opportunities for resuming the active working status, the position of the inactive population according to their age groups, education levels, regions and socio-economic status.

The inactive population structure

The high inactivity rates of heterogeneous population groups and subgroups in the national market corroborate the underutilisation of human potential, as a key resource of the economy. According to the 2019 Labour Force Survey, the total number of inactive persons in Serbia amounted to 1,131,384, accounting for almost one-third of the age category 20 to 64 years. The largest share or 40.9% of inactive persons were registered among the older working-age population (55-64) and the least (11.4%) among the middle-aged population (35-44), while youth (20-24) account for 17.6% of the inactive population. The reasons for the most pronounced labour inactivity

of the population are mainly connected to the high share of exercising the right to retirement (47.2%) and gradual loss of work abilities, mostly due to illness or inability to work (25.6%). Young people most often give up on the process of inclusion in the labour market due to the training or education (81.7%), due to the difficult alignment of the respective obligations.

The structure of the inactive population is partially conditioned by dominant causes of inactivity and dropping out of the process. The large number of inactive persons not seeking employment (98.7%), indicated as the main reason illness or inability to work (21.4%) or retirement (21.2%). Education or training is the third most common reason for giving up on work engagement (18.5%), and particularly concerning is the piece of data that every tenth individual (9.1%) not included in the labour market has lost hope in finding work (Chart 4).

Chart 4. The inactive by inactivity reasons, 2019 (%)

Reason	Value
Other reasons	8,0%
You have lost hope of finding a job	9,1%
Retirement	21,2%
Schooling or training	18,5%
Other personal or family reasons	11,8%
Caring for children or incapacitated adults	9,3%
Your illness or disability	21,4%
You expect to return to your previous job (temporarily laid off)	0,7%

Source: SORS, Author's calculation based on the LFS data

The exercised right to retirement and personal illness or inability to work as reasons underlying inactivity in the labour market indicate regular and balanced values among regional units. Giving up in looking for a job due to training or education is more pronounced in the most developed region – the Belgrade region (22.2%) while being less present in the Vojvodina region (14.7%). Compared to other regions, child care and family or personal reasons are the most frequently listed reasons for inactivity in the labour market in the Vojvodina region, while discouragement about finding an adequate job is more present in the Šumadija and Western Serbia and Southern and Eastern Serbia regions.

Observed by gender, the mismatch between the inactivity indicators in the labour market is a consequence of the greater involvement of women in housework and child and household care, and the absence of the need for additional work engagement.

The high share of inactive women, insufficient need for active participation in the labour market, and the evident gender pay gap only additionally deepen the vulnerability of women in the Serbian labour market. In line with the aforesaid, the subject of further analysis is the inactivity of women, their subjective feeling of exclusion, reasons for abandoning work and prospects and needs of their return to work.

In the structure of inactive women, the largest share belongs to unemployed inactive women not searching for employment (27.1%), pensioners (26.9%) and women engaged in housework in their households – housewives (25.8%), followed by pupils and students (16%). As the main reason underlying women's inactivity in the labour market, women outline the non-exercised right to a pension (21.6%), personal illness or inability to work (17.9%), child or dependant care (14.10%) and other personal or family reasons (14%). (Chart 5)

The reasons why inactive women are not looking for work differ by age groups – while young women state education or training (80.1%) as their main reason, women belonging to age groups 25-34 and 35-44 years mainly point out the child or dependant care (43.4% and 31.7% respectively).

As the need for care of others is reduced with the transition to an older age, inactive women in the age group 45-54 indicate as the main reason for their inactivity personal illness or inability to work or other personal or family reasons. Almost half of the oldest working-age women[8] who are not employed (48.9%) consider there is no need for them to get additionally active and participate in the labour market once they have met the requirements for retirement, while almost one-fourth (22.5%) are prevented from getting actively engaged in job search due to own illness or inability to work.

A further overview of data for the age group 20 to 64 years confirms the unequal position and limited opportunities for participation of women in the labour market. The job search is insecure in terms of its duration and outcome.

More than one-half of women outside employment actively searching for work do find jobs in the period of two years (56.5%), while every fifth unemployed woman (19.6%) finds work within two to six years.

Eighteen per cent of unemployed women were looking for work for more than 7 years which contributes to long-term discouragement concerning finding an adequate job and additionally hampers the access to labour market, thus reducing the prospects for their active engagement. (Chart 6).

Chart 5. Women by inactivity reasons, 2019 (%)

Category	%
Other reasons	6,80%
You have lost hope of finding a job	8,90%
Retirement	21,6%
Schooling or training	16,30%
Other personal or family reasons	14,00%
Caring for children or incapacitated adults	14,10%
Your illness or disability	17,90%
You expect to return to your previous job (temporarily laid off)	0,40%

Source: SORS, Author's calculation based on the LFS data

Chart 6. The length of uninterrupted job search in women aged 20-64, 2019

Category	%
Over 7 years	18,0%
From 2 to 6 years	19,6%
Less than two years	56,6%
You haven't started looking for a job	6,0%
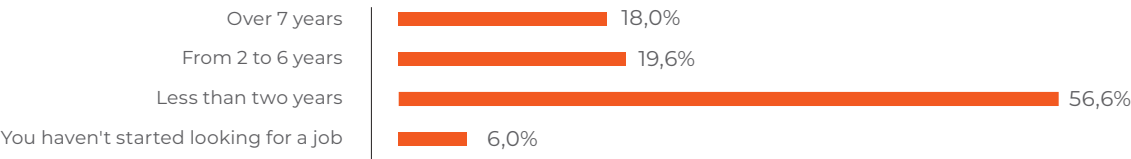
Source: SORS, Author's calculation based on the LFS data

8 The oldest analysed population category is 55-64 years of age.

The labour force supply data shows low expectations of women concerning their salary. Namely, if the average net salary in 2019 in Serbia amounted to RSD 54,919[9], the minimum salary inactive women would accept to start working was RSD 35,615, with the mean salary being even lower and equaling RSD 30,000[10].

The preparedness of women to accept unfavourable employment conditions is present also regarding the desired position at work. Women are more willing to accept jobs not fully corresponding to their preferences, despite the majority of working-age inactive women (53.8%) seeking full-time jobs which, as a rule, ensure security in terms of health and social protection, higher salaries and standardised working conditions.

However, a considerable number of women are prepared to accept less secure employment conditions, so every fourth woman doesn't care about working hours (25.4%), and 13.8% would accept part-time jobs. Women outside employment actively engaged in job search most frequently do not turn down a job offered (92.9%), and if they do it is mostly due to inappropriate type of work (0.9%), inadequate salary (2.9%), other reasons (1%) and illness at the moment the job was offered (2.3%).

The fact of women being willing to accept less favourable working conditions is substantiated by the piece of data illustrating that none of the surveyed women in 2019 declined employment due to the place of work being too far away from their place of residence, inappropriate qualifications or inadequate working hours.

As for the situation they were in immediately before starting to actively search for a job, half of the inactive women said they had some working experience (49.8%), while every fourth (24.7%) had personal or family obligations and only 17.7% were in education or training. (Table 6)

Table 6. Situation prior to active job search, women aged 20-64, 2019

	%
Working (including trial or trainee work)	49,8%
You were in education/training	17,7%
You had personal or family obligations	24,7%
Other (e.g. pensioner)	7,7%

Source: SORS, Author's calculation based on the LFS data

The obtained education level most affects the motivation of inactive women to engage in the labour market. The share of inactive women with VET education is significantly higher compared to highly educated inactive women (60.8% and 26.7% respectively) as illustrated in Chart 7.

The low education level and absence of professional experience adversely affect the prospects and opportunities for the inclusion of inactive women in the labour market.

Chart 7. Education level in inactive women, 2019

High education 10,50%
High school 60,80%
Primary Education 26,70%
No school 2,10%

Source: SORS, Author's calculation based on the LFS data

9 Data of the Statistical Office of the Republic of Serbia
10 Due to the option not to answer financial questions, the data was calculated based on the available answers of respondents participating in the LFS, 2019
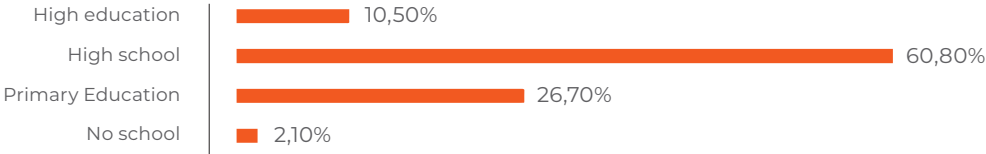
» The unemployed population

Unemployment is a multi-decade feature of the national labour market due to the insufficient efficiency of the economic system and development policies.

Unemployment is linked with social marginalisation, low living standard and the risk of exclusion from economic, social and societal life.

Despite the considerable progress achieved concerning the labour market performance in the past years, the unemployment rate in Serbia is still among the highest in the EU (in 2019 it amounted to 10.4%[11]), thus reflecting an insufficient capacity of the economy to generate new jobs and a high inefficiency of the long-term employment policy.

Particularly concerning is the high unemployment rate in youth aged 15 to 24, equaling 27.5% in 2019. The high youth unemployment, in the situation of unfavourable demographic trends and rising emigration, represents a serious economic and social challenge.

The 2019 Labour Force Survey data indicates the presence of long-term unemployment given that even 43.5% of the working-age population, aged between 20 and 64 years, were searching for employment for more than two years.

The difficult and slow adjustment of the labour force supply to the market demand implies the presence of structural unemployment.The piece of data showing that even 97.7% of the unemployed are actively searching for a job and wanting to be included in the labour market also speaks about the imbalance between the labour market supply and demand. The mismatch between the supply and demand in the labour market is visible the most in the group of VET unemployed.

Namely, out of the total number of the unemployed working-age population, 56.5% have completed secondary vocational schools, with the youth (20-24 years) with vocational education being in the most disadvantaged position[12] registering an unemployment rate of 71.7%.

The analysed data unambiguously shows that the active labour market policy measures implemented to date have failed to eliminate difficulties in entering the labour market for youth, women and persons between 50 and 65 years of age, left jobless due to the transition and transformation processes.

Further analysis is focused on the population categories faced with difficulties in finding jobs and being included in the labour market.

The structure of the unemployed

According to the methodology applied by the SORS in their Labour Force Survey which is aligned with the methodology of the International Labour Organisation, the unemployed population includes persons aged 15 to 74 years, who: (I) in the week observed were not employed in line with the definition of employment; (ii) are currently available to work, i.e. available to start working as employed or self-employed within two weeks following the week of observation; (iii) actively search for jobs, either by taking actions in the past four weeks conclusive with the week concerned to find a paid job or become self-employed or have found a job they will assume within three months at the latest after the observed week.

The unemployed are a part of the contingent of the working-age population, therefore they represent an important but unused economic potential.

The Labour Force Survey data outlines the unequal unemployment rate trends depending on the age group.

Namely, the highest unemployment rate was registered in the age group 25 to 34 accounting for almost one-third (31.2%) of the unemployed population aged 20-64. As the number of years increases, the unemployment rate declines.

As observed by regions, unemployment is relatively balanced. The highest youth unemployment rate of 34.8% (25-34) was recorded in the least developed region (Southern and Eastern Serbia region), while in the Vojvodina region it equals 26.8%, and in the Belgrade region 30.9%.

The next age group (35-44) is also faced with difficult inclusion in the labour market.

The unemployment rate of this age group is high in all regions. The lowest unemployment rate is recorded in the age group 55-64, however, this age group is, on the other hand, characterised by long-term unemployment.

The number of the unemployed by regions and age groups is presented in Table 7.

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11 Data on the persons 15+ years taken from the 2019 Labour Force Survey
12 Refers to the completed 3 or 4-year vocational education

Table 7. Number of unemployed by region and age group, 2019

Age group	Region							
	Belgrade region		Region Vojvodina		Šumadija region and Western Serbia		South region and Eastern Serbia	
	,000	%	,000	%	,000	%	,000	%
20-24	8,3	12,9%	10,4	14,5%	15,6	15,3%	10,8	12,9%
25-34	19,9	30,9%	19,2	26,8%	32,3	31,6%	29,0	34,8%
35-44	18,4	28,5%	20,5	28,6%	25,3	24,8%	22,2	26,7%
45-54	10,9	16,9%	12,0	16,8%	18,9	18,5%	12,8	15,4%
55-64	6,9	10,7%	9,4	13,2%	10,1	9,9%	8,6	10,2%

Source: SORS, Author's calculation based on the LFS data

The difficult inclusion of the unemployed, working-age persons in the labour market and participation in economic life is primarily reflected in the duration of active, uninterrupted job search and conditions under which they would agree to start working.

The inability of finding a job over a longer period of time results in demotivation and discouragement and transition to the inactive category of the population.

According to the available 2019 Labour Force Survey, 43.5% of the active population searched for a job for more than two years.

Employment is most difficult to find for persons in age groups 44-54 and 55-64 years, where more than one-half searched for employment more than two years (53.2%, 57.4%, respectively),

while even every fourth unemployed aged 44-54 was continuously searching for a job for more than ten years (24.9%).

Based on the analysis of the survey data on the labour force supply it can be concluded that the level of adaptability of the unemployed population to employers' conditions is rather high.

Namely, the unemployed most often accept the jobs offered (94.8%), with the most frequent reasons for turning down a job offer being inadequate salary (1.9%), inappropriate type of job (1%) or working hours (0.9%).

The reasons like the absence or illness at the moment when the job was offered (0.1%), distance from the place of residence (0.6%), inadequate qualification (0.3%) and other reasons (0.4%) are rare.

Observed by regions, the unemployed population in the Southern and Eastern Serbia region demonstrate the highest level of willingness to adapt to working conditions as even 97% of them did not decline the job offered in the past 12 months, while in the most developed region the job offer was accepted by 5 percentage points fewer persons (92%).

The fact implying that the unemployed do not decline job offers was identified in a high per cent in the Western and Central Serbia region (96.2%), but also the Vojvodina region (92.6%).

The unemployed demonstrate a high adaptability level in terms of the expected pay as well, which is particularly identified in older persons. The presence of long-term discouragement of finding adequate employment results in the readiness of the unemployed to accept less laid and less qualified jobs just to get activated in the labour market. The younger age unemployed (25-34) would accept to start working for a pay of RSD 39,692, while the unemployed aged between 45 and 54 years would agree to work for a salary of RSD 33.913 only[13]. The level of minimum wages the unemployed would agree to is presented in Chart 8.

Chart 8. The minimum wage the unemployed would agree to, in RSD, 2019
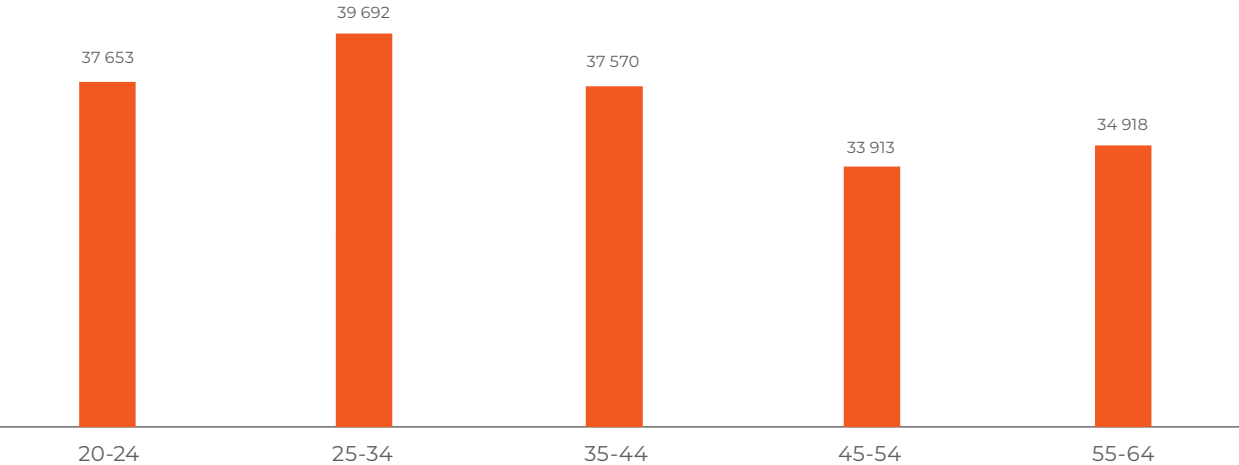
Source: SORS, Author's calculation based on the LFS data

13 The average expected monthly salary based on the respondents' answers on minimum wage

The unemployed women aged 20 to 64 would agree to work for a lower salary compared to jobless men in the same age group (RSD 34,552 vs. RSD 39,925, respectively), which additionally stresses gender inequality and the readiness of women to accept the more unavourable conditions to be included in the labour market.

The educational structure[14] of the unemployed illustrated in the chart below (Chart 9)

shows that the highest percentage of the unemployed in all age groups have completed secondary school, while the percentage of those who have completed higher education is most present in the age group 25 to 34, where every jobless person (35.1%) has a university or college degree. Every fifth unemployed in the age group (35-44) or 20.7% has a university degree.
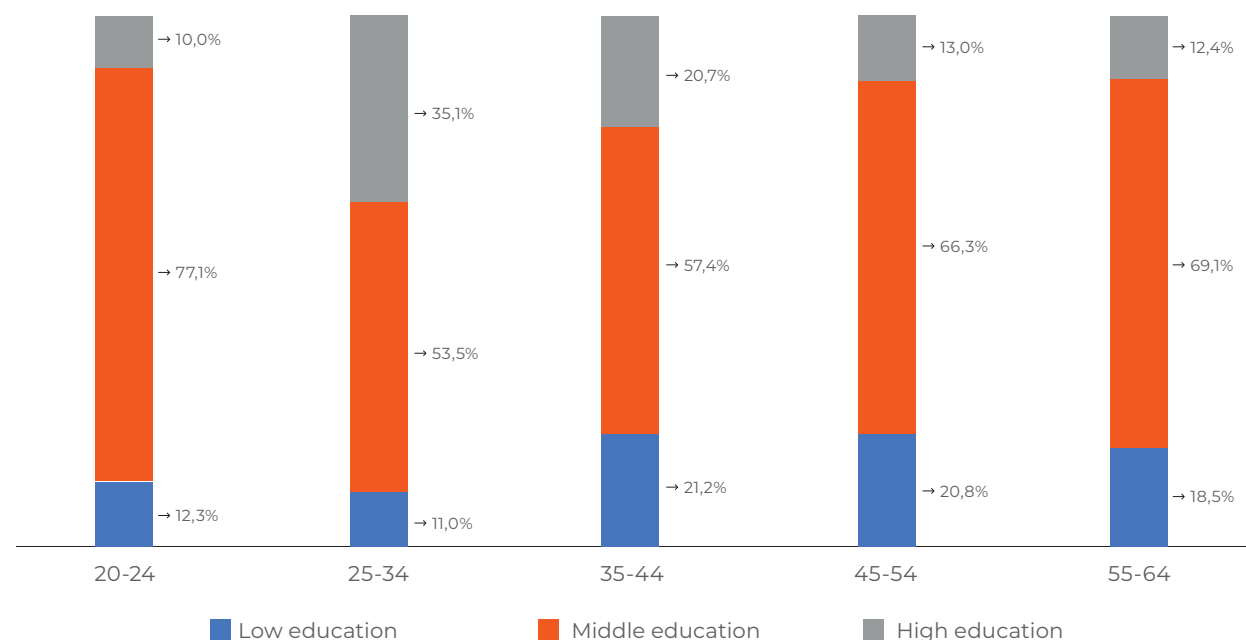
Chart 9. The educational structure of the unemployed, 2019

	Low education	Middle education	High education
20-24	→ 12,3%	→ 77,1%	→ 10,0%
25-34	→ 11,0%	→ 53,5%	→ 35,1%
35-44	→ 21,2%	→ 57,4%	→ 20,7%
45-54	→ 20,8%	→ 66,3%	→ 13,0%
55-64	→ 18,5%	→ 69,1%	→ 12,4%

Source: SORS, Author's calculation based on the LFS data

The subject of further analysis is the position of the senior population (aged 45-54, 55-64) in the labour market, employment opportunities and the ways of avoiding their exclusion from the labour market. In 2019, the total number of unemployed persons aged 20-64 was 321,490, of whom 89,566 were above 45 years of age, meaning that every fourth unemployed person belongs to the two oldest observed age groups (45-54, 55-64).

The share of the unemployed aged 45 to 54 is almost at the same level for both genders (men 49%, women 51%), while in the next age category men register a notably higher share in total unemployment (57%) compared to women (43%).

For every second jobless person in the senior subgroup (55-64), working hours are not relevant when seeking employment (49.6%), whereas only one-third of the unemployed (33.8%) in this group look for full-time employment, thus showing

a particularly high level of flexibility concerning the conditions offered by employers. Similar conclusions are drawn by analysing a younger subgroup (45-54), where 43.9% of unemployed do not consider working hours an important factor in deciding on a job, while 40.1% find job security, i.e. full-time jobs most important.

The low coverage of the unemployed registered with the National Employment Service (hereinafter referred to as: NES) receiving the unemployment benefit, is another important feature of the Serbian labour market. Only 2.7% of the unemployed in the younger subgroup (45-54) are registered with NES and exercise their right to the financial benefit, while at the same time 72.7% of the registered unemployed receive no monetary compensation at all. The share of the unemployed exercising the right to the unemployment benefit is low in the next age group (55-64) as well and amounts to 6.6% only (Chart 10).

Chart 10. Distribution of answers to the question: "Are you registered with the National Employment Service?"

	45-54	55-64
Yes – you receive unemployment benefits	2,70%	6,60%
Yes – but you do not receive unemployment benefits	72,70%	70,50%
No – and you don't receive unemployment benefits	24,60%	22,90%

Source: SORS, Author's calculation based on the LFS data

14 Persons who have not completed school were not included which is why the total is not 100%.
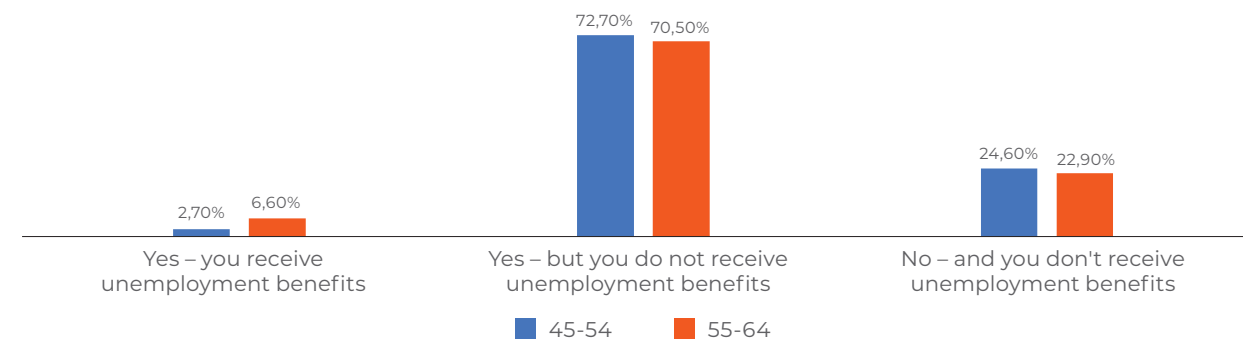
The analysed age groups indicated as their predominant source of income the salary or pension of their spouses, parents or other household members (62.5%), with only 16% of the unemployed aged 45-64 living on temporary jobs or smaller-scale agricultural production. The fewer jobless people indicated social welfare (6.2%) as their source of income, while 5.2% of the unemployed live on the assistance provided by their other relatives or friends.

The problem of unemployment in the senior population and their social inclusion is partially mitigated by subsidies for hard-to-employ persons including workers above 50 years of age[15].

The subsidy is granted as a one-off amount to an employer hiring a person above 50 registered with NES as a beneficiary of financial benefit during the period of unemployment or is registered as unemployed for a year without interruptions. The financial incentive obligates the employer to employ the unemployed person for an indefinite period of time, full-time, in accordance with the Law, for a minimum of 12 months. However, this type of incentive did not significantly affect the age structure of the unemployed. According to the 2019 NES data, the programme targeting employment of the hard-to-employ persons covered 960 people above 50, while the local self-government co-financing programme covered additional 394 persons from this target group[16].

Difficult access of the senior unemployed persons to the labour market is a consequence of lacking qualifications and their inability to meet the more demanding requirements of employers.
The increased level of required competencies in the situation of rising demand for jobs in the information technology domain additionally restricts job prospects for these persons. The readiness of senior persons to accept less-paid jobs or non-standard forms of employment significantly determines the success of their inclusion in the labour market.
The lifelong learning concept, acquiring new skills, training and re-training become particularly relevant in the context of enhanced opportunities for including senior unemployed persons in the labour market.

Youth and NEET rate

The NEET rate (neither in employment, education or training) shows the share of persons aged 15–24 neither in employment, education or training in the total population of this age. This is a group of people that should be of special interest to the migration policy-makers, as due to the lack of opportunities in the country, these people may potentially start thinking about moving abroad.

Observed over time, the NEET rate in Serbia started declining after 2013, so from 20.4% it reached the level of 15.3% in 2019.

The worsening of conditions for doing business during the pandemic crisis contributed to this rate going up in 2020 by 0.6 percentage points.

Irrespective of the high cumulative decline recorded in the second half of the previous decade, the NEET rate in Serbia is still relatively high on an international scale.

For example, in 2020, this indicator in Serbia was ca. 5 percentage points higher than the EU countries' average (Table 8). Likewise, compared to the EU average, the NEET rate in Serbia differs slightly regarding gender.

In the past, there was a rule that younger men in Serbia are most frequently found outside formal or non-formal education and jobless compared to young women. However, the gender structure changed in the 2020 crisis, resulting in a notable increase in the NEET rate in men, and a decline in terms of women.

This concerns the different responses of men and women to the reduced availability of jobs caused by the crisis – the strategy of young women was to resume some form of education (as illustrated in the lower number of NEET persons from 55 to 51 thousand), the number of NEET men was increased from 109 to 112 thousand.

Table 8: NEET rate (%) in 2020

Education	EU 27			Srbija		
	Total	Men	Women	Total	Men	Women
Total	11,1	11	11,1	15,9	17	14,8
Low	10,4	10,4	10,5	9,3	8,3	10,4
Medium	11,9	11,7	12,1	20	22,8	16,8
Higher	10	9,8	10,2	26,1	20,9	29,7

Source: LFS, Eurostat

Unlike the EU average where NEET rates are relatively similar for all educational levels, the share of youth neither in employment nor in education and training (NEET) in Serbia is positively correlated with the education level. The indicated results suggest that youth with the lowest education level in Serbia transit most easily to the labour market, while highly educated youth faces considerable barriers in entering the labour market. One of the potential explanations for the slower transition of the highly educated in Serbia may be found in the fact that recently more youth had acquired degrees in areas where there is no adequate labour

15 Source: National Employment Service
16 2019 Operational Report of National Employment Service

demand. This particular reason was identified as a key problem for a slower transition in specific ETF partner countries (ETF, 2012).

The highly educated young women are found in a particularly difficult position as almost every third is not employed, nor is in education or training. When it comes to youth with secondary education, a major difference ought to be stressed between those with general and vocational education.

In the case of the first group, the NEET rate in 2020 amounted to only 4.2%, while in the case of the latter NEET rate was at the level of 24.8%.

» The mismatch between the supply and demand in the labour market

A certain level of mismatch between the supply and demand in the labour market will always be present. The mismatch is a consequence of the process of matching the job-seekers with the available jobs.

As workers and jobs are heterogeneous, a certain time is needed for workers to find a satisfactory job, and for companies to find workers whose knowledge and skills match the job description. Generally, these discrepancies are short-term and lead to frictional unemployment.

However, in certain circumstances the mismatch between supply and demand may be of a long-term nature and as such deserves the attention of policy-makers.

The consequences of the mismatch between the supply and demand in the labour market are multiple and depend on the volume and intensity of the mismatch.

From the macroeconomic perspective, in countries experiencing problems in matching supply and demand, human resources will be underused, meaning that one portion of human capital will be wasted. These countries will experience low productivity and low social yield rate in education which will finally result in structural unemployment, declining international competitiveness and low GDP growth rates.

Observed from the microeconomic perspective, or from the perspective of an individual whose qualifications do not correspond to the available jobs, the consequences are also not neglectable.

The mismatch in this case may affect the worker who may, due to their inability to find an adequate job, become discouraged and exit the labour market (and potentially the country). The knowledge and skills not used or upgraded (or at least renewed) in the period spent outside the labour force, become outdated over time and thus diminish the human capital level by adversely affecting the future employability of an individual.

The mismatch between the supply and demand in the labour market is a complex phenomenon that can be considered both from qualitative and quantitative aspects. If the demand for particular profiles is higher (deficient bakers, truck drivers, etc.) or lower (too many lawyers and economists registered with NES) than the labour supply, then the result is a quantitative mismatch. However, even when the required number

of workers corresponds to the supplied number for a particular profile, the knowledge and skills of workers do not need necessarily correspond to the job requirements, which results in a qualitative mismatch.

An even greater issue than the multidimensionality of mismatch is how it is being measured. In an ideal case, an input for measurement would be the acquired and required knowledge and skills.

The basic problem of this approach is that there is no comprehensive and reliable data serving as a basis for reliable indicators for the statistically relevant number of workers, about the acquired and required knowledge and skills. This is why the qualifications acquired in practice, or the highest education level completed, are used as an approximation for the knowledge and skills level.

In this report, we follow the practice of the European Training Foundation (ETF) and use the level of education as an approximation for knowledge and skills, with all deficiencies listed (ETF, 2019). This approximation is particularly convenient for two reasons. First, the microdata from the Labour Force Survey contains very detailed and reliable data on the highest completed formal education of workers.

Second, by implementing this methodology, the mismatch between the labour supply and demand in Serbia can be placed in context with other partner ETF countries where similar calculations were done. Since Serbia participated in an earlier survey,

we will have an opportunity to discuss the time dimension of the mismatch.

The number and differences in educational levels of the population of working age made us decide to aggregate the 13 available categories into 6 education levels. The first level includes the persons of the lowest education level involving all those with no education at all, those who have completed 4 grades of primary school, those with incomplete primary school and those who have completed primary school.

We added to them those who have completed a maximum of two years of secondary education as (1) there are relatively few of them and (2) the value assigned to them by the labour market is more similar to those who have completed primary education than those who have completed secondary education.

The second and third levels include the persons who have completed vocational 3-year and 4-year education, respectively.

The fourth group gathers those with general four-year education (completed grammar school).

The fifth level refers to persons with master or specialist education after secondary education, implemented in options 3+2 or 4+1.

Finally, the sixth group is reserved for those with minimum university education. This categorisation

of educational levels was developed taking into consideration the specificities of the Serbian education system design, and it is based on the same outcomes these education levels realise in the labour market.

The standard ETF methodology was applied to education levels established in this way to obtain a broad picture of the mismatch of qualifications in the Serbian labour market. It is important to stress that there is no single superior indicator allowing us to assess the intensity and scope of the mismatch. Instead, the ETF proposes using complementary

indicators where each of them reflects certain parts of the mismatch (ETF, 2012).

We opted for the needs of this study to evaluate the following mismatch indicators for the working-age population (if not indicated otherwise): **(1) unemployment rate; (2) unemployed-employed ratio: (3) variance of relative unemployment rate; (4) coefficient of qualification variation; (5) vertical mismatch and (6) horizontal mismatch.**

The summarised results of the analysis are presented in the box below, followed by a more detailed analysis.

The high unemployment rate (1) in a specific category represents underutilisation in the labour market, and in the case of Serbia it is the highest for general (grammar school) (13.5%) and low education level (13%).

On the other hand, the lowest unemployment rate is registered in workers with specialist education (highly skilled workers) amounting to 5.6%, while a relatively lower rate than the average is recorded in highly educated persons (8.5%).

Expectedly, similar conclusion is identified by observing the **unemployed-employed ratio (2)** equaling in all education levels one to 7 or 7, except specialist (one to twenty) and higher (one to eleven).

The **variance of relative unemployment rate (3)** growth compared to 2016 shows that the intensity of the unemployment rate decline was different in different education levels, same as that differences among them have deepened.

The **qualification variance coefficient (4)** in Serbia holds a value which can be assessed as moderate and similar to the neigbouring countries, however its relative increase in the past few years demonstrates that qualifications play a rising role in determining the status of an individual in the labour market, and that the personnel with in-demand skills in the labour market has already been greatly absorbed.

The **vertical mismatch (5)** illustrating over-education level for the position an individual is hired at is also characterised by a negative trend – in 2013 every fifth highly educated person was working in jobs not requiring higher education, while in 2020 that was the case with every fourth person.

This phenomenon is typical for the sectors of Transport and storage (57.4%) and Wholesale and retail; repair of motor vehicles and motorcycles (52.8%).

The **horizontal mismatch (6)** on the other side, shows how many employees are found in the positions not in the profession they were educated for.

Unlike vertical mismatch where the difference between Serbia and EU average is not drastic, in horizontal mismatch it is much greater – even 42.4% of the employed aged 15-34 with minimum completed secondary education work in the occupations not requiring education in the field in which they compelted their education (compared to 28.6% in the EU). The largest horizontal mismatch was registered in agriculture and veterinary services, science, math and computing, services and humanities, language and art.

The unemployed (1) in Serbia are dominated by those who have completed four-year secondary vocational education.

Out of the total number of unemployed, almost every third has earned this education level. Every fourth person completed a three-year VET, while every fifth has a university degree.

The unemployment structure is quite expected, given that four-year VET is the most frequently found education level in the total population. This is why it is much more important to understand the unemployment rate at different education levels.

The high unemployment rate is a signal of the underutilisation of the labour supply.

Consequently, in educational levels registering higher unemployment rates, the issue of a mismatch between supply and demand will be more visible. Chart 11 shows unemployment rates for pre-determined education levels.

Chart 11. The unemployment rates (left axis, blue bars) and the ratio between the unemployed and employed (rights axis, yellow squares) by education levels in 2019
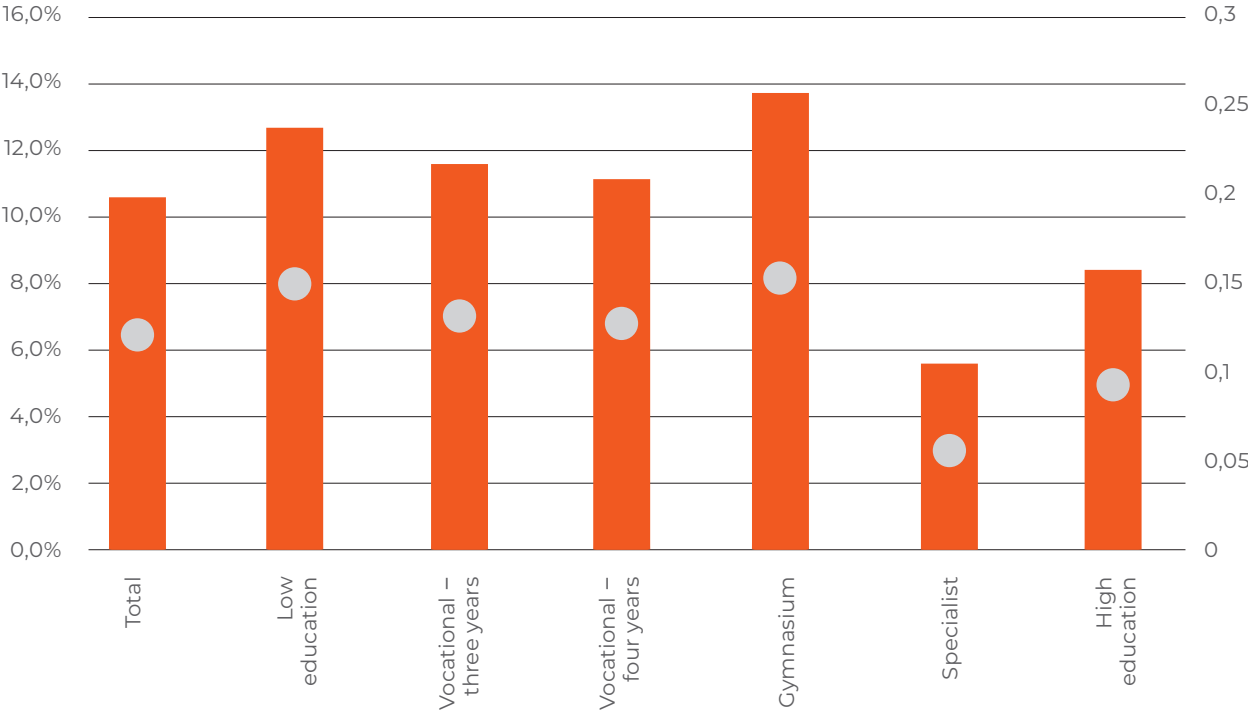
Source: LFS, SORS.

The highest unemployment rate of 13.5% is typical in persons who have completed grammar school. Such results are to be expected, given that grammar school education is an excellent basis for the continued education process, however, at the same time, it provides relatively less vocational knowledge than vocational schools. Therefore it becomes clear that a person not completing higher education after grammar school will encounter more difficulties in finding a job. Besides the persons who completed grammar school, the unemployment rate deviates significantly from the average in persons with low education levels. On the other side, the lowest unemployment rate of only 5.6% is found in those with

specialist education, the so-called highly skilled workers. These are persons believed to have acquired enough knowledge and skills to independently use demanding tools and equipment, and trained to perform jobs of mainly specific, complex and non-standard nature.

The demand for this profile of workers has been on the rise lately, with fewer of them exiting the education system, therefore it comes as no surprise that the lowest mismatch level was recorded in this particular category.

It is important to stress that despite the higher number of those wishing to continue their education, the Serbian labour market relatively well absorbs the highly educated, as their unemployment rate is 8.5%.

The unemployed/employed ratio (2) builds on the previous indicator. It represents a more direct and more intuitive mismatch measure due to directly comparing the unemployed against the employed, instead of against the labour force.

Its results are simple to interpret, so the value of 0.2 implies 1 unemployed to 5 employed, while the value 1 implies that the number of unemployed is equal to the number of employed.

Similarly to the unemployment rate, the higher ratio levels indicate a higher mismatch between supply and demand and vice versa. Although it doesn't have to

be the case, the relative position of education levels remains the same as in the case of the unemployment rate.

Generally, while we see 6 employed with grammar school education to one unemployed, there are almost 20 employed to one unemployed highly skilled worker.

The next indicator considered is the variance of relative unemployment rates (3)[17].

It also observes the mismatch from the aspect of unemployment and indicates the level at which the unemployment rate in specific education levels deviates from the average unemployment rate in the country.

Unlike the previous two indicators, the labour market mismatch measured by the variance of the relative unemployment rate is expressed in a single number.

The higher values of this indicator show that unemployment differently affects different education levels, thus causing a higher mismatch in the country. The 2019 value of this indicator was 0.075 representing a moderate mismatch level. However, it is much more relevant to compare it against earlier results in the period 2014-2016.

The variance of the relative unemployment rate was the highest in 2014 when it equalled 0.09, and then it started declining, initially to 0.03 in 2015 and

then to 0.01 in 2016. Based on the 2019 results it may be concluded that this downward trend was stopped, thus referring to the greater gap between supply and demand.

This is particularly important since the total unemployment rate of the working-age population in 2019 was significantly lower than in 2016, and particularly 2014. Irrespective of the considerable drop in the total unemployment rate meanwhile, it is obvious that the unemployment rate decline intensity was different in different education profiles, thus contributing to the deepening of their mutual differences in this respect.

The coefficient of qualification variation (4) is complementary to the variance of the relative unemployment rate. This indicator compares the distribution of qualifications or education levels, between different cohorts. In this way, using a single number, the distribution of qualifications of the unemployed can be compared against the distribution of the employed, working-age active or inactive[18] population. In our case, we opted to assess the deviation in the unemployed population skills compared to the qualifications of the employed.

The coefficient of variation defined in this way represents the ratio of standard deviation against the mean and can take values between 0 and 1.

If unemployment is independent of qualifications, the coefficient of variation should be zero.

Contrary to that, the coefficient of variation will assume higher values as the distribution of qualifications between the unemployed and employed additionally differs. Applying this methodology to 2019 microdata produces a coefficient of variation of 0.23 assessed as a moderate value. Similar values were registered in some of the ETF partner countries in the region in 2016. So the coefficient of variation was 0.24 in Montenegro and 0.23 in North Macedonia (ETF, 2019). Still, compared to earlier values recorded in Serbia, this indicated a slight increase.

Its highest recorded value was 0.16 in 2014 and 2015, to decline to 0.14 in 2016[19]. The recorded increase three years later suggests that qualifications may more explicitly explain unemployment, namely that the distribution of qualifications in the unemployed registers greater deviations than the deviation of qualification found in the employed.

In other words, the conclusion is that the structure of the unemployed is deteriorating compared to the labour market needs, namely that over time natural selection is taking place in translating the employment status into the unemployment status, where the (long-term) unemployed are those whose qualifications register rising deviation compared to

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18 Population outside labour force as per new categorisation.
19 The limitation in this type of comparison lies in the fact that the previous studies for Serbia compared the qualifications of the unemployed against the qualifications of the working-age population, which is a less accurate approach than the one used in this analysis. Still, this method-ological difference does not fully explain the direction and intensity of the change, therefore the resulting conclusion may be considered valid.

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17 Variance is the average of square deviation from arithmetic mean.

the labour market needs.The match of the workers' knowledge and skills with the job requirements can generally be considered from two aspects – based on the education level and based on the education profile.

A vertical mismatch (5) occurs when there is a discrepancy between the levels of education or skills which a person possesses, and the requirements of the job held by the person. On the other side, a worker may possess an adequate education level and not work in their profession, implying a mismatch between the education profile in which they acquired education and the job requirements (in regard to education profile).

This mismatch dimension is known as a horizontal mismatch. Both mismatch dimensions are very important and, depending on their size, can have serious consequences both at micro and micro levels.

Observed from the perspective of an individual, the mismatch (especially vertical) leads towards lower education yield rates, which de-stimulates investing in education and results in a wrong allocation of resources.

Companies hiring workers characterised by a mismatch (particularly horizontal) achieve lower efficiency and are faced with higher on-the-job training costs threatening their competitive position.

Finally, a high mismatch from the aspect of the state leads to the dissipation of human capital, emigration and lower economic growth rates.

The literature offers three approaches for measuring vertical mismatch (Leuven & Oosterbeek, 2011).

The availability of data has made us opt for the approach where the overqualified workers are those with tertiary education, working in jobs not requiring tertiary education.

Operationally, the overqualified workers are those holding higher education degrees, working in one of the following occupations (from 4 to 9 according to the ISCO categorisation): 4. Administrative workers: 5. Service and trade occupations; 6. Agricultural, forestry and fishery and related workers; 7. Craft and related trades workers; 8. Plant and machinery operators, assemblers and drivers, and 9. Simple occupations[20].

Therefore, the overqualification rate represents a ratio of the highly educated workers engaged in an occupation not requiring higher education and the total number of highly educated workers.

Eurostat calculates this indicator for persons aged 20-64, and the main results for the total economy and different sectors are shown in Chart 12.

Chart 12. The overqualification rate in population 20-64 by sectors in 2020

■ Serbia ■ EU 27
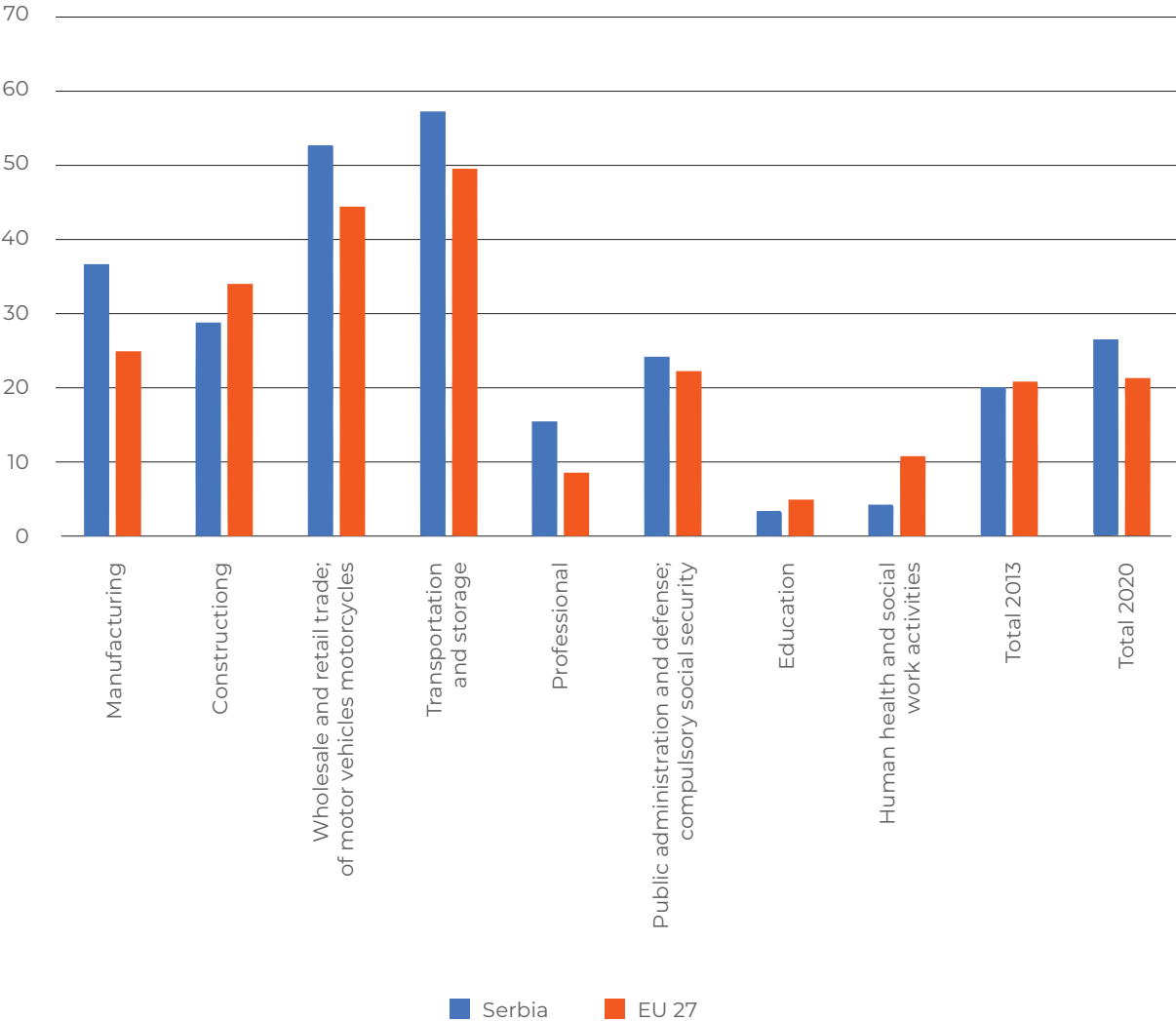
Source: Eurostat

The first issue noticed in the Chart is the negative trend concerning the overqualification rate. While in 2013 as the baseline year for Serbia in terms of the available data, every fifth highly educated person was working in jobs not requiring higher education, this was the case in every fourth person in 2020.

Particularly unfavourable is the worsening of Serbia's relative position against this indicator. Namely, while in 2013 the overqualification rate in Serbia was 0.7 percentage points lower than the EU average, in 2020 it was 5 percentage points higher than in the EU. Observed by years, in the period concerned the overqualification rate rose in Serbia by ca. 1 percentage point annually, while this rate stagnated in the EU.

The continuous rise in Serbia's overqualification rate seems concerning and might represent a signal of the over-supply of highly educated people or too low demand, namely, the insufficient availability of jobs requiring higher education.

Observed by the selected sectors, the highest share of the highly educated working in jobs not requiring university education is recorded in the sector of Transport and storage (57.4%) and Wholesale and retail; repair of motor vehicles and motorcycles where over one-half of the highly educated is overqualified.

Despite these being relatively high rates, overqualification is the most intensive in these two sectors in the EU as well. The greatest gap compared

to the EU average is registered in the Manufacturing industry sector. While in Serbia ca. 37% of highly educated in the Manufacturing sector possess higher qualifications than necessary, this share amounts to only 25% in the EU.

On the other hand, the workers in Serbia compared to the workers in the EU are somewhat less overqualified in the sectors like Construction, Health care and social protection and Education.

The literature offers much less comprehensive options for measuring horizontal mismatch than those developed for the needs of vertical mismatch (6).

The basic approach comes down to identifying the frequency of workers performing jobs outside their profession. In this case, due to time and international comparability, we rely on the experimental Eurostat statistics.

According to this methodology, the mismatch rate between the knowledge and skills by education domain is defined as a ratio of workers in occupations outside their education field (ISCED-F) and all workers.

The reference population horizontal mismatch rate is calculated to include the employed aged 15-34 with minimum secondary education (education levels 3 to 8 under ISCED 2011)[21].

Introducing the upper age limit is fully justified in this case, given that due to the horizontal mismatch, costs are much more burdensome in the initial years of employment in the position the worker was not

educated for. In time, via non-formal training and on-the-job training, the negative consequences of the gap between the acquired education and the occupation performed are mostly neutralised.

Chart 13. The horizontal mismatch in population 15-34 by fields of education in 2020

Serbia EU 27

Source: Eurostat
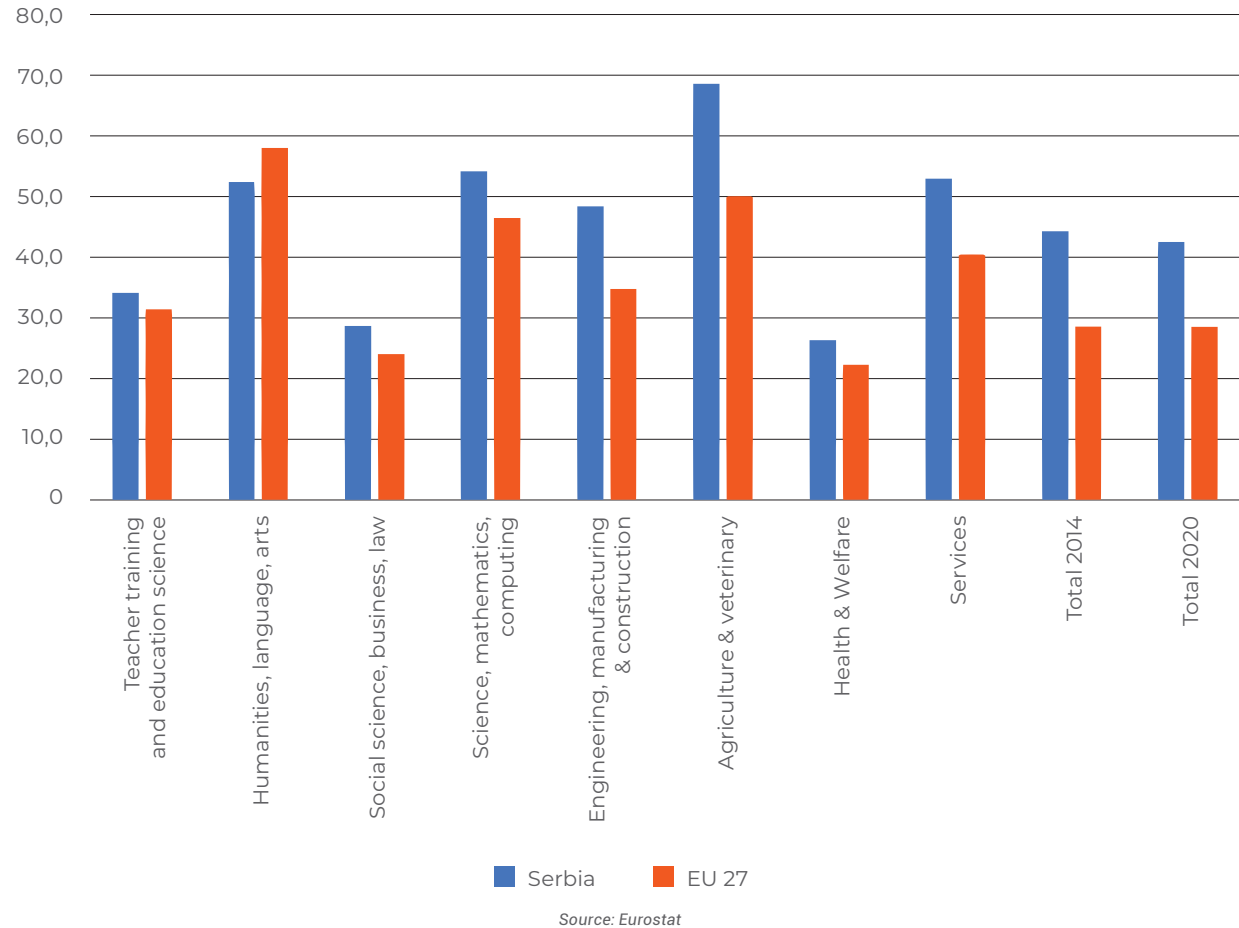
In 2020, 42.4% of the employed aged 15-34 holding at least secondary education are found in occupations not requiring education in their respective area.

This is far above the average EU rate amounting to 28.6%. However, due to vertical mismatch, the relative position of Serbia compared to the EU did not deteriorate over time. Compared to 2014 the vertical mismatch defined in this way was reduced in Serbia by 1.8 percentage points, while the EU average remained almost unchanged.

Regarding different fields, the largest horizontal mismatch was registered in agriculture and veterinary services, science, mathematics and computing, services and humanities, language and arts.

The fact that high horizontal mismatch in Serbia is an important problem is not only corroborated by the presented statistical data but also by the perception of students already discussed (Group of authors, 2018).

Hereby we need to recall that the students' survey findings indicate that out of those who stated they wanted to leave the country, 27% would do that due to the inability to find a job in their profession, and 21% due to the poorly paid job in their profession, while only 4% indicated as the underlying reason "the inability of finding any kind of a job".

Moreover, when asked what would make them change their decision about leaving the country, the students most frequently replied "Secure job in my profession" (52%).

Similarly, as in vertical mismatch, the reasons for such a high level of horizontal mismatch can be connected to the labour supply and labour demand.

In the first case, a worker is forced to accept employment outside their profession due to the deficiency of available jobs in the profession they were educated for. In the second case, in line with their preferences, a worker voluntarily chooses to work in a job outside their profession due to the better conditions offered.

The conditions do not need to be necessarily connected to a higher salary, but could also imply opportunities for promotion, flexible working hours, type of contract, etc.

The realistic assumption is that the first reason is still predominant in Serbia, however, this would call for an additional empirical verification, which is outside of the scope of this analysis.

» The deficient qualifications and skills in the labour market

The lack of adequate labour force supply in the labour market, namely the mismatch between the labour force supply and demand, is one of the key problems and barriers to further improvement of labour market performance and development of the Serbian economy.

In addition, qualifications refer to formal education for the specific occupation, while skills imply additionally acquired knowledge (foreign language skills, communication, work, computer literacy, etc.). It turns out that companies in the labour market are faced with the problem of finding adequate workers often based on both criteria.

Additionally, there is almost no single activity in which companies are not facing difficulties in hiring new workers. The reasons need to be sought in the deficiency of certain professions resulting from the weaker interest of youth in specific educational profiles and occupations, but also due the workers going abroad for higher salaries and living standard, a mismatch between the education system and actual labour market needs, or lack of knowledge and skills and professional experience.

The ageing, but also the more emphasised population migration, especially of youth, towards the EU countries, bring additional complexities to the already unfavourable situation in the labour market.

The labour force deficiency is the main feature of the Serbian labour market, however, not all occupations are equally deficient. According to the 2019/2020 Employers Survey[23] (NES, 2020), out of 1,478 surveyed companies in total, 543, or 36.7% stated they faced problems in locating persons with adequate qualifications.

The major problems were identified in the following business sectors:

- Manufacturing industry (40%)
- Trade and motor vehicle repair (20.1%)
- Construction (9.9%) and
- Transport and storage (7.2%).

By analysing companies having problems regarding employment against the total number of companies in the same sector of activities, the most frequently

identified problems are found in the following business activities:

- Accommodation and food services (58.7%)
- Construction (43.9%)
- Manufacturing industry (42.1%)
- Transport and storage (39.8%)
- Wholesale and retail and motor vehicle repair (32.5%)
- Expert, scientific, innovation and technical activities (27.0%).

The most common reasons for the problem of skilled labour identification are:

- deficient occupations (35.4%)
- lack of knowledge and skills (24.1%);
- lack of professional experience (17.1%).

Regarding specific occupations, the problems were identified in connection with the employment of new workers in the following groups of occupations:

- Service and craft/trade occupations (even 45.7% of the total number) – locksmiths, welders and flame cutters, waiters, chefs, retailers, carpenters, masons, woodworkers, textile tailors, bakes, plumbers, electrical technicians and electrical fitters in buildings, auto-mechanics, rebar workers, metal processing machinery operators (lathe operators, grinding machine operators, etc.), butchers.

The most frequent reasons for the deficiency of these occupations are the lack of knowledge and skills and the lack of professional experience.

- Experts and artists – mechanical engineers, bookkeepers, app developers, electrical engineers, civil engineers, and managers. The most frequent reasons for the deficiency of these occupations are the lack of knowledge and skills and the lack of professional experience.

- Technicians – technicians in mechanical engineering, electrical engineering and civil engineering, commercial technicians, graphical technicians in agriculture, etc. The most frequent reason for the deficiency of these occupations is the lack of knowledge and skills.

- Clerical and administrative workers, agents and related occupations – warehouse keepers due to the deficiency of this occupation in the labour market, and commercial and trade agents, phone operators, and surveyors, due to the lack of knowledge and skill and lacking professional experience.

- Machinery and plant operators, assemblers – product assemblers, unclassified, food and related products machinery operators, metal processing machinery and plant operators, secondary wood processing machinery and plant operators, etc.

- Drivers and moving machinery operators – heavy freight vehicle drivers and truck and bus drivers,

taxi drivers and drivers of delivery vehicles, due to the deficiency of these occupations in the labour market. Moreover, due to the deficiency but also lacking knowledge and skills, problems were identified in the employment of bus drivers.

- Simple occupations – auxilliary metal processing workers (auxilliary locksmiths, welders, etc.) due to the deficiency of occupations, but also due to the lack of knowledge and skills in the manufacturing industry.

According to the survey by the Serbian Association of Employers (2019), the trade sector registered the largest need for the engagement of new workers in the areas of trade, sales, marketing, etc. same as the ICT sector in need of developers, especially smartphone application developers, large database architects, electrical engineers, with a growing need for new occupations like social media specialists, data processing experts, etc.

The most deficient occupations in the service industry are hospitality workers (waiters and chefs, auxilliary kitchen staff, auxilliary hotel staff, etc.), in the construction industry all craft occupations but also civil engineers, in the transport sector – drivers, etc.

Moreover, in the textile and wood processing industry all craft professions are deficient, while in the metal processing industry there is a shortage of

mechanical engineers, and in the automotive industry mechanics, and motor vehicle electrical technicians. In the healthcare sector identified deficit is identified in medical doctors specialising in anesthesiology, cardiology, paediatrics and gynaecology, while the area of sports and recreation lacks professional personal trainers.

According to the data of the Poslovi Infostud website[24], in the period March-June 2022 the most wanted position in the market is salesman/woman, administrative worker and commercialist. There is also considerable interest in the positions of phone operators and drivers, while the least interest was identified in the positions of C developers and sommeliers, milling machine operators, assemblers in mechanical engineering and plant protection officers.

The absence of interest or competition in particular occupations indicates their deficiency, but also that they are not marketed due to employment outside official job advertisements and calls or direct job offers of employers to workers. In addition, the restriction in interpreting this data lies in the fact that the population searching for jobs via this portal differs from the overall population, as it is mainly comprised of younger people more prone to internet use.

For the needs of this analysis, an additional field study was undertaken which included organising four focus groups[25] attended by 38 companies and

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24 https://poslovi.infostud.com/vesti/Trendovi-na-trzistu-U-Srbiji-se-najcesce-pocinje-sa-pozicije-prodavca/56171
25 Focus were organised in Novi Sad, Belgrade, Kruševac and Niš.

semi-structured interviews covering 42 enterprises of different sizes, sectors and territorial distribution.

Even 80% of interviewed companies stress they fully agree with the conclusion that an adequate labour force is hard to find, while the remaining portion of companies agree with this statement partially (15%) or remain neutral (5%).

As a rule, larger companies are faced with this problem more often.

Still, 85% of surveyed companies intend to engage new workers in the coming year. In terms of the specific occupations and sectors, the findings fully coincide with the NES and Serbian Association of Employers' findings.

When it comes to the factors affecting this issue, 70% of companies perceive emigration as a substantial issue, over 60% perceive competition in the local market as a problem, and slightly over 60% consider the problem lies in the mismatch between the educational curricula and needs of businesses (Chart 14).

As for the differences among sectors, the education system is most often the source of dissatisfaction for companies operating in manufacturing and construction industries, particularly concerning craft professions implying completed secondary school, while the highest satisfaction level was recorded in companies active in the IT sector.

Extensive competition in the local market affects all sectors equally, however foreign competition (i.e. emigration) particularly affects hotels and restaurants, transporters, the construction industry, agriculture and the manufacturing industry.

Apart from the manufacturing industry, these sectors are characterised by circular labour force migration, especially in the summertime. The workers involved in circular migration often possess medium and low formal qualification levels, while permanent migration is most often linked to the highly educated.

A curiosity is that companies located in central Serbia, unlike others, very rarely (or never) accept workers back after they have left to temporarily work abroad.

On the other side, due to the convergence of salaries with the rest of Europe and very good extra benefits (shorter working hours, longer annual leave, private health insurance), companies in the IT industrydo not perceive foreign competition as a relevant issue.

However, the pressure on the increase in salaries (and consequently convergence) is a major challenge for the companies (64% of companies, Chart 14), primarily in the manufacturing industry, partially in services and the least in the IT industry.

Chart 14: Key factors making it harder for the companies to find and retain adequate labour force (% of companies assessing a specific factor as important or very important)
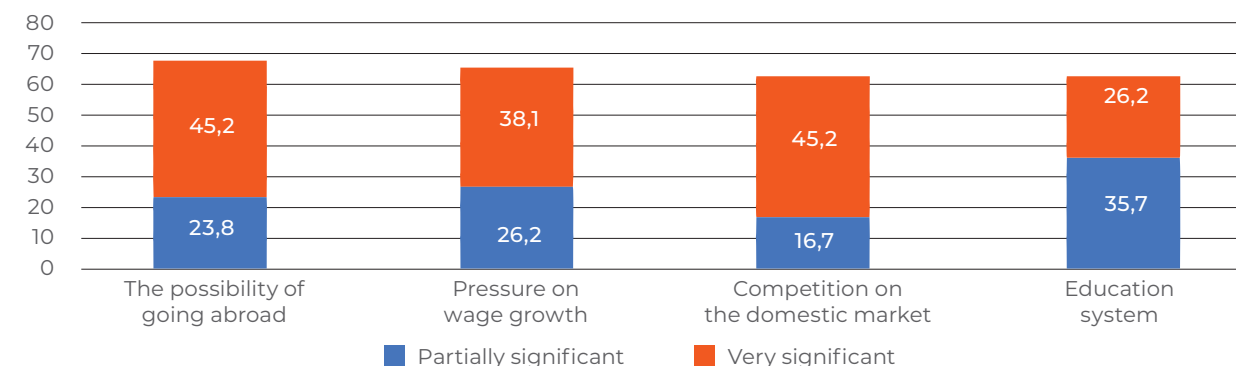
Source: SORS, Author's calculation

The companies address these issues with limited success mostly by announcing standing competitions, lowering the employment criteria followed by in-house training, increase in salaries, whereas the companies employing primarily highly educated workers introduce the above-mentioned extra benefits.

However, due to the uncertainty caused by geopolitical tensions, potential energy crisis, inflation and exhaustion of financial resources in the period after 2020, even $^2/_3$ of companies find it difficult to cope with the pressure regarding the salary increase.

Keeping in mind the need for a labour force on one, and relatively high training costs for the companies on the other, a large number of companies would be interested in participating in programmes that could directly or financially facilitate this process for them.

Being aware of the fact that for a large number of deficient occupations formal qualifications are not crucial, the success of such programmes would almost be guaranteed.

The measures outlined in the Employment Strategy in the Republic of Serbia for the period 2021-2026 include activities aimed at further upgrading the labour market performance in the sense of connecting employers with the labour market needs.

The implementing Action Plan for the period 2021-2023 envisages quantitative improvements in connecting employers with the unemployed, both in terms of the total number of applications (from 119,950 in 2019 to 135,000 in 2023), and in the view of the implementation percentage (from 49% to 65%).

In addition to standard mechanisms in the area of mediation, professional orientation and other similar

measures implemented by NES, the key activity is seen in the additional education and training programmes including allocated a bit under EUR 100 million for three years of the Action Plan implementation.

The purpose of these measures is to ensure and facilitate initial contact with the labour market for youth, resume contact with the labour market for the long-term unemployed, or assist in acquiring practical knowledge boosting the employability of the unemployed population registered by NES as a whole. According to the available data on the implementation of measures in 2020, it could be concluded that there is a high-level demand and need for such measures.

Namely, despite 2020 being marked by the COVID-19 pandemic accompanied by the decline in economic activity and major uncertainty, the majority of programmes recorded a high level of implementation – particularly programmes targeting gaining practical knowledge for unskilled workers, excess employees and long-term unemployed (94.5% or 775 of persons covered) and training at the request of employers (99.4% or 527 persons included).

Additionally, the implementation of IT re-training support programmes has proven rather successful. These results show that the number of places for participation in such programmes could potentially be expanded.

Of course, these extensions would require further NES capacity building as the lead implementer, both in terms of technical assistance and in terms of human resources, although a part of the burden concerning the need for re-training was born by international organisations via their re-training programmes (primarily the program Education to Employment which included 1,678 trainees in the past several years of whom 77% are still employed).

Once again we point out the necessity of addressing deficient skills via training and re-training programmes, since, as already explained in the previous chapters- the Serbian labour market is still characterised by the high number of unemployed and inactive people on one side, and a large number of companies unable to locate labour force with adequate qualifications, on the other.

Addressing and mitigating the challenges of deficient qualifications calls for a systemic approach. However, one of the basic problems for the Serbian labour market policy is that the data on the needed or lacking skills is not collected systemically.

In fact, extensive resources are being spent on the collection of this data, however, the efforts of different implementing institutions remain mutually unlinked, therefore the data collected only partially reflects the situation and disables policy-makers to pass and develop specific programmes based on such data. More precisely, the data on the employers' needs is collected by NES and Chamber of Commerce

and Industry and employers' organisations and associations, in irregular intervals.

The data gathered in such a way cannot reliably be matched and to date was not used as a basis for passing legislative acts regulating important open issues in the labour market like deficient professions inter alia.

The mechanism that could contribute to overcoming the existing problem is the consolidation of efforts in the labour market needs data collection process by introducing Job Vacancy Statistics based on the Eurostat methodology.

Carrying out a quarterly survey in a reliable and representative manner would produce data enabling the compilation of a list of deficient occupations, and thus facilitate more accurate management of the active labour market measures and migration policy. The implementation would generally be delegated to the Statistical Office of the Republic of Serbia.

However, being aware of the SORS limited capacities, an issue remains regarding the opportunities for cooperation among institutions which have implemented similar surveys to date, which would no longer be needed in this case.

The centralisation, standardisation and obtaining data in almost real-time would greatly facilitate the design

of additional training and re-training programmes, given that the needs of the companies concerning the number and personnel in a particular territory would ensure a high level of effectiveness and efficiency of measures.

As regards the engagement of a foreign labour force that could compensate for the deficiencies in the Serbian labour market, an important barrier at this moment is seen in the lack of information on the potential immigrants' qualifications.

One of the potential models to bridge the information gap is the solution applied in Germany.

Namely, the Federal German Employment Agency developed special software to assess the migrants' competencies ("myskills"). To determine the skills translatable into a practical working environment, the tests use videos showing people performing usual tasks in their jobs. The candidates are asked to identify the errors and arrange the tasks in accurate order.

Developed in cooperation with the employers' associations to ensure compatibility with the job requirements, the assessment takes ca. four hours under the supervision of experts from the German Federal Employment Agency.[27]

26 https://znanjemdoposla.rs/

27 The platform is available at: https://www.arbeitsagentur.de/institutionen

❯❯ Education

To bridge the identified gap between the supply and demand in the labour market, the education system needs to be aligned with the actual needs of the economy, but the businesses also need to be more intensively included by strengthening efforts for the development and broader implementation of the dual education concept.

The role of the education system is crucial as it needs to enable acquiring qualifications and developing skills needed in the workplace.

In addition, it is important to stress there is a broad consensus in place that preparing students for the labour market is not the utmost purpose of education, however reasonable adaptations according to the needs are by all means desirable.

According to the OECD Report on the assessment and evaluation of education in Serbia (OECD, 2020), despite substantial efforts to improve access to education, students' achievements are relatively low compared to the OECD countries.

Various challenges are still present in the domain of equity and participation, and attainments. The fact of considerable drop-out from the formal education system without mastering basic competencies reflects chronic underinvestment in education and limited capacity for implementing change in teaching and learning in the entire system.

The differences in the approach and educational achievements are still present among the social and economic groups and regions, the schools are insufficiently flexible in adapting the curricula to students' needs, the duration of compulsory education is shorter than in the majority of the OECD countries, professional development of teachers and other staff is not delivered continuously, investments in education are chronically low, with lowest investments made in secondary education, followed by the unequal access to tertiary education.

The findings presented in the Report have shown that the qualitative targets defined in the Action Plan have made monitoring and measuring the level of the previous Education Development Strategy targets more difficult, same as that the absence of the systemic evaluation had limited the data-driven decision-making, meaning that interventions are focused on the areas in which low or unequal performance is being achieved.

The improvements are necessary for the four key educational system components:

- **Assessment of students' performance**
- **Assessment of teachers' performance**
- **Evaluation of the school's efficiency**
- **Systemic evaluation**

Assessment of students' performance – refers to monitoring and ensuring feedback on the individual progress of students and the level of attainment of learning outcomes.

The still predominantly present practice in Serbia is the practice of summative assessment and evaluation of students' performance. Having in mind the effects grades might have on students' motivation, a better balance between the formative and summative assessments needs to be ensured.

Additionally, improvement is needed in the final exam system (graduation). The final exam system at the end of primary school calls for a considerable upgrade in technical quality, while the entrance exam for enrollment in higher education institutions needs to be standardised. As a consequence of the absence of a standardised process for the entrance examination and high scholarship fees, disparities in access to tertiary education have been identified.

Assessment of teachers – refers to the assessment of teachers' performance in ensuring quality learning to students. The assessment as a basis for improvement and other teacher development policies in Serbia are still underdeveloped. The non--competitive and non-progressive salaries negatively affect professional development and the willingness of teachers to assume new responsibilities.

In line with the above, improvements are needed to incentivise and stimulate the professional development of the teaching staff; develop the quality of the teacher performance assessment system; ensure ongoing professional development aligned with the needs of teaching and other staff; more careful selection and better preparation of future teachers.

Evaluation of institutional efficiency – assesses the efficiency of schools in providing quality education. The inefficiency in implementing these evaluations in Serbia reduced the possibility of using information inputs generated in this way to enhance teaching and learning.

Limited technical and other capacities of managers to, based on the evaluation report, develop and direct their own efforts to improve teaching in institutions results in these reports being perceived more as summative, and less as formative.

In line with this, it is necessary to strengthen the external evaluation and self-evaluation processes and incorporate them into the broader framework for enhancing the work of schools.

Systemic evaluation – refers to the use of information generated via the school efficiency evaluation system

for monitoring and evaluating the educational system against the national education targets.

However, the school system improvement policies are implemented in Serbia by individual agencies with mutually limited coordination and monitoring.

Moreover, despite the schools being flexible in allocating human and financial resources, their opportunities to use this autonomy to enhance their achievements are limited, which is a consequence of the lack of funding and support for internal capacity building and strengthening.

Traditional methods, difficulties in monitoring and adapting the education system and non-standardised approaches to education for different groups are directly reflected in the labour market and opportunities offered to graduates in accessing it.

According to the European Training Foundation Study on the Youth Situation in Serbia (European Training Foundation, 2021), the education system quality in Serbia was assessed as dissatisfactory, given that it either does not refer to available occupations or not adequately preparing students to develop their hard and soft skills needed in the labour market.

Namely, employers often stress that graduates lack "soft" skills like teamwork, decision-making, adaptability, analytical skills and problem-solving skills, while on the other side graduates believe that traditional teaching methods and university

curricula do not enable them to develop skills and competencies needed to find a job.

The related reasons need to be primarily sought in the dominant use of traditional teaching methods not stimulating interactive thinking.

In addition, the formal education system offers limited opportunities for gaining practical experience which significantly makes the starting position in entering the labour market more difficult, taking into account that the lacking professional experience is one of the major barriers to finding first-time employment.

Serbian education system formally does not recognise additional activities of pupils and students like an internship, apprenticeships, participation in projects, etc. thus making a situation in which the lack of working experience considerably impedes the youth's entry into the labour market even more complex.

The average duration of education-to-work transition amounting to two years in Serbia, and only 6.5 months in the EU, is one of the indicators of the gaps between the education system and needs of businesses.

Acquiring a high-level quality of professional education ought to equip the youth with an opportunity to find adequate employment.

Moreover, the positive link between the unemployment rate and education level corroborates the mismatch between

the skills produced by education system and those needed in the labour market, same as the need for establishing more efficient links between the employers and people in search of employment (UNESCO, 2014).

The situation characterised on one side by the deficit of people with skills and knowledge businesses need, and on the other by a large number of persons with knowledge not needed in the market is a clear signal that in-depth systemic change is needed.

The Education Development Strategy in the Republic of Serbia by 2030 envisages measures and activities to eliminate the identified shortcomings, and achieve the targets of improved quality of teaching and learning, equity and accessibility of pre-university education and strengthening the upbringing function of educational institutions, and enhance the quality, relevance and fairness of higher education.

In the period 2011-2020, i.e. during the previous National Employment Strategy validity period, a set of activities was delivered targeting direct or indirect mitigation of issues pertaining to the mismatch between the labour force knowledge, competencies and skills and needs of businesses, primarily in the area of inclusive education; career guidance and

counselling; capacity building for acquiring additional knowledge and skills via training; and recognition of knowledge and skills obtained by non-formal education and informal learning. However, despite the certain progress made, the full expected effect of the achieved results was lacking.

Progress was achieved in the area of formulation and implementation of the National Qualification Framework (NQF) as one of the most important instruments regulating the domain of qualifications and its links with the labour market. Following the adoption of the Law on the National Qualification Framework of the Republic of Serbia in 2018, the NQFS Council, Qualifications Agency and 12 sector councils were established thus creating the assumptions for the development of the needed and

modernisation of the existing qualifications in line with the labour market demand.

In the area of career guidance and counselling, certain progress was made in intensifying activities focused on establishing standards for the career guidance and counselling service delivery, while the implementation of the prior learning recognition concept fully subsided despite the potential importance of verification of the previously obtained knowledge could have on enhanced prospects for finding an adequate and decent job in persons with lower education levels.

The number of accredited training delivered by the publicly recognised organisers of adult educational activities (JPOA) and non-formal education programmes was not aligned with the needs of different occupations identified based on the available data on the labour market supply and demand. Consequently, a major effect that capacity building via this type of training could have had on reducing the mismatch with the labour market demand was not achieved.

As of 2019, a new list of occupations has been in force (Code of Occupations) in line with the ISO-08 standard, and as of 2020, the List of Qualifications aligned with the ISCED 2013f 34 was published. In this significant progress was made in adapting the list of occupations to the actual situation in the labour market. However, these new lists of qualifications have not yet been fully used by institutions, authorities and employers.

As regards the dual VET system, as one of the efficient mechanisms for the involvement of businesses in the education system targeting the development of qualifications and skills students need to be successfully included in the labour market, certain progress has been made in the previous period mainly by relying on the experiences of the developed European countries like Germany and Austria, demonstrating that the dual training systems produce highly specialised staff perfectly matching the demand in specific economic sectors.

In circumstances then VET in Serbia is faced with numerous challenges like underperformance in transitioning from primary to secondary school; considerable regional differences and social exclusion; abandoning VET schools (especially in the case of three-year curricula); an insufficient number of students in craft VET schools; high youth unemployment rate; relatively poor working conditions for teachers; further development of dual education must be approached with special attention (GIZ, MESTD, Chamber of Commerce and Industry, 2015).

Namely, despite the progress made primarily by establishing an institutional framework regulating the dual education content and the delivery method, in the coming period it is needed to implement activities in the following domains: the analysis of demand for future qualifications and competencies: designing flexible curricula; establishing a network of partnerships between the state and relevant stakeholders; ensuring sustainable financing;

implementation of non-cumbersome administrative procedures; quality development; attracting employers; and promoting activities of VET schools to primary school graduates (Ibid.).

In the coming period and in line with the Employment Strategy for the period 2021-2026, the continued VET development was planned by adapting profiles to standard qualifications, modernising teaching and learning curricula, further developing dual education aimed at developing competencies in line with the labour market demand and developing market-relevant dual education curricula and a study on the development of dual education profiles for industry 4.0 in the area of secondary and higher education.

In addition, it is necessary to further the development of the career guidance and counselling concept and Recommendations for the implementation of the standard in the delivery of career guidance and counselling services to ensure the establishment of a uniform quality system in this domain.

To mitigate the skills mismatch in the labour market, the development and promotion of lifelong learning and adult education concepts were planned, namely the development of the non-formal education system by developing a network of public and private organisers of adult education activities, enhancing standards and procedures for accreditation of these training opportunities to ensure their higher number, i.e. to extend their accessibility.

It has been envisaged to establish regional training centres at VET schools where training, professional development, additional training and re-training would be organised in line with the labour market demand, all aiming to support dual education and non-formal education.

The success in addressing/mitigating issues in the labour market will depend on the efficiency in the implementation of the new Education Strategy by 2030 and its implementing Action Plan by 2023, especially having in mind the depth and complexity of problems in all key domains of the system.

In its 2021 Serbia Progress Report (European Commission, 2021), the European Commission recommends establishing a system for monitoring and reporting on the implementation of activities envisaged under the said documents, and provides clear guidelines for further efforts in fostering the area of education, primarily referring to improved access to preschool to vulnerable categories of population, further consolidation of the national qualification framework, focusing on the quality and scope of non-formal education and ensuring full compliance of institutional framework for harmonisation of higher education quality with the ENQA recommendations.

One of the programmes, inter alia, targeting the facilitated school-work transition is the My First Salary programme. Despite not being envisaged in the Employment Action Plan, this programme was launched based on the Decree of the Serbian

Government in August 2020 primarily to mitigate the consequences of the health crisis on youth (Government of the Republic of Serbia, 2020b).

The Government of the Republic of Serbia, NES and the Serbian Chamber of Commerce and Industry participated in the planning and implementation of this programme, with technical support of the Office for Information Technologies and E-Government.

The purpose of the programme was to train young people up to 30 years of age who have completed secondary and higher education for independent work. The programme exclusively included youth without any or with limited professional experience (up to 9 months) registered as unemployed with NES. The requirements for employers were less restrictive as the public sector employers were also able to apply, same as the employers coming from the private sector who were given an advantage.

The programme was envisaged to be much more comprehensive compared to the standard measures implemented by NES (10,000 people were planned), and trainees were entitled to remuneration (RSD 20,000 for those who completed secondary school, and RSD 24,000 for those with higher education) and they were insured against occupational injury and professional illness, and these benefits were calculated and paid by NES.

The programme attracted the large attention of both youth and employers (17,000 applied to 12,559 positions), and through final matching,

8,453 unemployed young people were referred to 5,177 employers.

In the summer of 2021, assisted by the Office for Information Technologies and E-Government, NES conducted a rough evaluation of the first programme cycle indicating a relatively high satisfaction level of all stakeholders.

All stakeholders expressed their relatively high level of satisfaction with the programme. The companies were a bit more positive in their score (4.7 out of 5), however, youth satisfaction was also found quite acceptable (4.4 out of 5).

The high level of satisfaction was re-affirmed by the surveyed companies of which 97% stated they wished to participate in this programme again.

A relatively high satisfaction level in companies was recorded in terms of the quality of candidates (4.45 out of 5), while they were somewhat less satisfied by the candidates' preparedness during the interviewing process (4.3 out of 5).

Choosing from the answers offered, the highest level of satisfaction in companies was registered in the following areas: (1) how the candidate fitted into the working environment, (2) openness to accepting suggestions in the workplace, and (3) readiness to learn on the job. On the other side, companies were least satisfied by the initiative candidates took on the job and how they implemented new ideas.

In terms of the suggestions that could be used to improve the programme, the most frequently encountered answers were (1) a longer duration of the programme, (2) a simplified application process, and (3) greater opportunities for the selection of candidates.

In line with this, a new cycle of the programme was implemented in 2021, and the new round was announced in 2022.

In the context of addressing the mismatch between the supply and demand in the labour market, it is necessary to undertake a comprehensive and in-depth analysis of employers' needs in the coming period, and then align the education financing system with the needs of businesses, which implies that quotas for enrollment to universities need to be aligned with the labour market demand for specific profiles.

Additionally, additional efforts need to be invested to motivate enrollment in secondary vocational and craft educational profiles. Simultaneously, effort needs to be made to enhance the quality and curriculum to allow the knowledge acquired to be practically applied.

The companies participating in the survey expressed their highest dissatisfaction with candidates completing their education for occupations in the area of construction, electrical technicians, machine operators and related craft professions; and when it came to professions requiring higher

education, negatively scored were economists, lawyers and managers.

On the other side, the candidates assessed as those of the highest quality were the ones completing higher education in the areas of information technology and mechanical engineering.

» Taxation and labour market institutions

The discussion on the push and pull factors was mainly based on the labour market indicators as a whole. However, same as the average salary cannot tell the entire story about salaries, the summarised labour market indicators cannot identify the motivation of different groups to leave the country.

It is a well-known fact in literature and practice that there are certain groups of workers found in the considerably worse position in the labour market as they are working in jobs characterised by poorer quality, lower security and lower salaries. This is why it makes much more sense to consider the labour market as a whole comprised of multiple segments, than as an indivisible single unit.

Certain authors point out that the long-term and deeply rooted dualities in the Serbian labour market (public vs. private sector; formal vs. informal sector; paid employment vs. vulnerable employment; paid labour vs. unpaid labour) affected the establishment of the 3 labour market segments (Arandarenko, 2018).

The upper primary sector includes well-paid jobs reserved mainly for public sector employees with open-ended contracts and private sector employees with open-ended contracts (IT, financial services, large international companies, etc.).

This sector is characterised by the rigidity of salaries and relatively high job security. The lower primary sector involves employees with fixed-term contracts in the secondary primary sector (industry, low-paid services, small enterprises, etc.) and self-employed. The quality of jobs is average, characterised by moderate job security and flexibility of salaries. Finally, those working in the secondary market are found in the most unfavourable position.

It is reserved for workers engaged under non-typical contacts (service contracts, contracts on temporary and occasional employment, youth cooperatives, employment agencies, etc.) and non-formally employed.

In this market, workers are faced with low or even non-existent job security and flexibility of salaries which is exclusively limited bottom-up – by the workers' reserved per diems and possibilities for emigration.

The development of these dualities and segmentation of the labour market was contributed by the unfavourable institutional configuration resulting in the barriers preventing the secondary market workers to migrate to the primary labour market.

Certain authors indicate the sub-optimality of labour market institutions and their mutual interaction (Jandrić and Aleksić, 2018). Institutions creating the firmest barriers and therefore hold the highest potential to act as push factors from the aspect of migration are **labour taxation (1), minimum wage (2), employment protection legislation (3), labour market policy (4) and salary calculation in the public sector.** The summarised results of the analysis are presented in the box below, followed by a more detailed analysis.

The Serbian labour taxation system (1) is characterised by very low progressivity, which in practice affects individuals whose salaries are so low that it consequently forces them to turn to non-formal labour to "save" on unpaid taxes and benefits.

One of the consequences of the labour taxation system in Serbia is the fact that the minimum wage level (2) is not satisfactory neither for workers (it does not cover the minimum market basket) nor for companies. Despite the employment protection legislation (3) in Serbia being at the European level, there are significant differences under various types of contracts.

Namely, the employment protection legislation favourises workers with open-ended contracts (protected above the average), while others are found in the considerably less favourable position) whether compared against those with open-ended contracts or those with similar types of contracts in other countries).

The basic deficiency of the labour market policy in Serbia (4) lies in the lack of funding (and capacities) for a broader implementation of programmes – allocations for the labour market policies in the past decade amounted to only ca. 0.1% of GDP. Consequently, many categories of unemployed people with multiple vulnerabilities are mainly left on their own, while the workers in need of assistance in finding a job of better quality are almost completely neglected.

On the other hand, the passive labour market policy comes down to insurance in the case of unemployment characterised by several important deficiencies – it is available only to those who were dismissed as redundant, while its level is determined exclusively by the length of service and salary earned in the previous job. The salary calculation mechanism in the public sector (5) ensures the highest "premium" to those earning the lowest salaries in this sector.

The labour taxation system in Serbia (1) has not significantly changed in the past two decades. Its predominant feature is extremely **low progressivity** which is a product of proportionate income tax rate and fixed social insurance benefits rate.

Slight progressivity is ensured by the non-taxable part of wages, but it disappears after applying the maximum base for the calculation of benefits. Due to these reasons, the tax burden on average salaries in Serbia is similar to other EU countries, however, low salaries are much higher, and high salaries are less burdened by taxes and benefits than in other EU countries (World Bank, 2019).

In other words, the liabilities of employers in Serbia towards the state are almost identical (in percentages against the net salary) irrespective of whether they employ a low-paid or highly-paid worker, but are again much higher than liabilities of companies in other countries also employing low-paid workers.

Due to this reason, companies and workers (primarily those with low-earning potential) turn to non-formal employment to share the savings made via unpaid taxes and benefits. This is stimulating the rise of informal employment and strengthening barriers to transition to a better-quality segment of the labour market.

Besides the rise in informality, there is one more consequence of the so-designed system that negatively affects the relatively poorer population.

Due to its proportionality, the labour taxation system does not have the potential to reduce the pay gap and thus mitigate motivation for emigration in the relatively poorer population. The insufficient redistribution of labour taxes is pointed out by the researchers discussing the value of the Gini coefficient before and after taxes[28].

Their findings show that the reduced value of the Gini coefficient after taxes and benefits in Serbia is considerably lower than in EU countries (Krstić and Žarković-Rakić, 2017).

There is an important paradox tied to the minimum wage (2) in Serbia – from the perspective of workers, it is absolutely low, as it cannot cover the minimum market basket, while on the other side, companies consider it relatively high, given that its share in average salary amounts to over 50%.

This paradox is a direct consequence of the previously described labour taxation system creating an extremely large wedge in the case of minimum wage between the operating costs of the company (the cost of a worker born by the company) and the worker'snet salary (what the worker

brings home). Although being a relatively good instrument of poverty reduction, minimum wage primarily affects the reduced labour poverty, but it makes it harder for those not working to find jobs as it increases the corporate costs.

Employers who are unable to bear the costs of increased minimum wage will be forced to engage workers using non-standard contracts not subject to minimum wage instead of the employment contract, enter into informal contracts with the workers or dismiss them. We have already seen that these forms contribute to the growing secondary labour market, therefore having in mind its current level compared to the average salary, using the minimum wage as an instrument for reducing emigration could be a double-edged blade.

Employment protection legislation (3) favours employees with open-ended contracts. Employment protection legislation in the narrower sense includes legislation regulating the process of workers' employment and dismissal. Its most important features are severance pay and the rights due to the termination of employment.

The composite index of employment protection legislation[1] registered relatively high values up until 2014 when after the amendments to the Labour Law its value was reduced to the global average.

Regardless of the moderate composite index value, employment protection legislation in Serbia creates substantial barriers between different groups of workers – both those holding the employment contract and those without it, but also among the employment contract holders.

So, for instance, the right to severance pay, termination period, etc. is granted only to workers hired under the employment contract, but such rights are considerably more beneficial to those having open-ended contracts than to those with fixed-term contracts.

This is the reason why the values of the Serbian composite index are at the level of the average, but also why the protection of workers with open-ended contracts is significantly above, and of those with fixed-term contracts considerably below the global average.

Due to the relatively high costs connected with lay-offs, companies are using every opportunity to hire workers informally/using non-standard fixed-term contracts, and only then by using open-ended contracts. As in certain groups of workers (dominated by low-income workers) avoiding employment contracts is easier, it becomes clear that these groups will be trapped in the underprivileged position for a long time.

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28 Gini coefficient is one of the most broadly recognised measure of the income inequality distribution. It ranges between 0 and 1 (or from 0 to 100%), where the highest score indicates the higher inequality level. Gini coefficient before taxes measures (in)equality in distribution of gross income, while the Gini coefficient after taxes measures (in)equality in distribution of net income. The ratio between these two measures shows the taxation system progressivity. .

29 Composite index was developed by OECD and it refers to the assessment of the employment protection legislation in dismissal of workers with employment contracts and hiring workers under the contracts of limited duration (fixed-term contracts, contracts on temporary and occasional employment, etc.). https://www.oecd.org/els/emp/oecdindicatorsofemploymentprotection.htm

Additionally, non-standard or informal engagement further makes it difficult or totally denies access to the social protection system thus putting their survival and the survival of their families in danger.

Labour market policy (4) in Serbia is relatively effective, but of limited coverage due to the lack of funding, therefore a large number of individuals from vulnerable groups are left on their own. Its purpose is to help the unemployed to find jobs or to the employed find better jobs, but also to ensure a living for those who were left jobless.

The first component is considered active, and the second is passive labour market policy. The active labour market policy is implemented by the National Employment Service and it is mostly focused on the hard-to-employ persons. Including these people in different active labour market measures and programmes ought to facilitate and accelerate their transition to quality employment. The active labour market policy in Serbia is relatively effective, while the major problem it is faced with is the lack of funding.

Although the Employment Strategy for the period 2011-2020 foresees increased outlays for these purposes, first to 0.4%, and then even to 0.5% of GDP, throughout the decade these outlays varied around 0.1% of GDP, which is among the lowest levels in Europe[30].

The applicable Employment Strategy for the period 2021-2026 envisages an increase in expenditures for active labour market policy to 0.2%. Given that the probability of finding jobs for specific groups of the employed (long-term unemployed, categories with multiple vulnerabilities, persons with outdated qualifications, persons with disabilities, etc.) without their inclusion in the active labour market policy measures and programmes is extremely low, a large number of unemployed people is left on their own due to insufficient funding.

In addition, moderate expenditures are primarily targeting the unemployed, while certain groups of the employed in need of assistance in finding better jobs mainly remain neglected. This is a potential problem as it may lead to a trap of low income for a large number of the employed in low-quality jobs.

Passive labour market policy in Serbia, in a narrower sense, comes down to unemployment benefits. Unlike certain European countries where the unemployment benefit besides being linked to the years of service of an insuree also includes a universal component, **this benefit in Serbia exclusively depends on the years of service and salary in the previous job.**

This places those with lower salaries in the disadvantaged position on two grounds – benefit level and duration of the entitlement to benefit (because the workers need relatively more time to find a job).

A special issue linked to the unemployment benefit in Serbia is that the entitlement to benefit is granted only to those who were dismissed as redundant, and not those who resigned.

In a country where the balance of power between labour and capital leans greatly to the side of the capital, certain workers are unable to influence the stated reason for their dismissal. The combination of the mentioned gaps is reflected in the data on the number of beneficiaries specifying that in 2019 there were ca. 35,000 beneficiaries receiving monthly benefits, which accounts for only 6% of the total number of unemployed registered with NES.

We have shown above that this share measured against the total number of unemployed people as per the Labour Force Survey concept, is multiple times lower than the share in the destination countries.

Moreover, the recent amendments introduced for the unemployment benefit calculation resulted in the systemic reduction in its minimum and maximum levels, while significantly limiting its increase given that now, instead of being linked to minimum wage, it is linked to the increase in the cost of living. Therefore this instrument only deepened the gap between the rich and the poor.

Finally, the mechanism for the calculation of public sector salaries (5) is substantially different to that in

the private sector and ensures the highest premiums to those in the lowest segment of distribution.

The combination of the salary calculation mechanism and considerably improved union coverage contributed to notably higher salaries in the public than in the private sector in the past two decades.

In the first decade of this century, the premium on salaries was rising (Laušev, 2012) and continued this trend until 2015 when due to the fiscal consolidation measures it started declining, however, it is still at a relatively high level (Vladisavljević, 2017).

A particularly interesting finding shows that the premium on salaries in the public sector is the highest in the lowest part of the income distribution (Vladisavljević, 2020). In other words, following the Roy model, the low-skilled workers who did not get employment in the public sector have a double motive to emigrate.

These institutional characteristics of the Serbian labour market indicate the presence of barriers between different labour market segments. The majority remains in the past two decades and thus directly disables certain groups of workers to improve their position.

In certain cases, the transition from the secondary labour market to the labour market of another

30 http://socijalnoukljucivanje.gov.rs/wp-content/uploads/2021/02/Ex_post_analiza_Nacionalne_strategije_zaposljavanja_za_period_2011-2020.pdf

31 https://www.nsz.gov.rs/filemanager/Files/Dokumenta/Izve%C5%A1taj%20i%20program%20rada%20NSZ/14387_izvestaj_o_radu_nsz_-_i_-_xii_2019._godine.cleaned.pdf

country is far easier than the transition to the primary labour market in Serbia. In that respect, this long-term negative institutional configuration has the potential to affect the discouragement of the specific population and thus become an important push factor than could prevail in deciding about emigration.

» Labour demand forecast by 2024

Forecasting labour demand and supply is an extremely complex task. The accuracy of projections mainly depends on two factors – sources of data and validity of assumptions.

Our task is to project labour demand in the coming period and to do that, we have three sources of data at our disposal.

An ideal source is by all means the Employers Survey implemented by NES assisted by the Serbian Chamber of Commerce and Industry.

The main advantages of this survey are reflected in a relatively large, representative sample and information about job creation and termination. The answers provided by the companies enable us to calculate the net job creation rate in the current year, but also the expected net job creation rate in the coming year. Jointly with the expected economic trends, the net job creation rate calculated in this way represents an excellent input for the future labour demand forecast.

However, the Employers Survey provides only the data on the net job creation rate by macro activities, and not by occupations, which is of main interest to us.

Bearing this in mind, relying on the Employers Survey would not produce desired results in our case.

The second potential source of data is the data on registered employment. This is highly reliable data obtained by combining the data of the Central Register of Compulsory Social Insurance and the Statistical Business Register.Unfortunately, the data on registered employment is also not available by occupations, but by activity sectors.

However, unlike the Employers Survey, instead of 8, the data on registered employment is classified under 19 different activities. Another argument for giving preference to this data lies in the fact that the stable link between the change in registered employment and GDP changes is empirically well documented.

Still, to have at least a rough idea about the future demand for specific occupations, we will have to use the data presented in the Labour Force Survey. Unlike the previous two sources, the Labour Force Survey categorises workers into 10 different groups of occupations. However, the forecasts obtained based on the Labour Force Survey need to be taken with a large dose of a reserve for several reasons.

First, methodological changes that took place in 2020 do not allow a direct comparison of data before and after 2021.

The Statistical Office of the Republic of Serbia reviewed the data for the previous decade, but it covers only basic labour market indicators (activity rate, employment rate, unemployment rate, etc.), but the review did not include employment by occupations.

The outcomes of the pilot project which implied the comparison of data in Q4 2020 using both the old and new methodology have shown that the number of the employed was lower by ca. 120,000 due to methodological changes.

The major changes were registered in the sector of activities of households as employers and slightly lesser in the sector of agriculture.

These changes can differently affect employment by occupations, primarily in the category Agricultural, forestry and fishery and related workers.

The second factor dictating the accuracy of forecasts are assumptions. For the needs of this analysis,

we will rely on the methodology already developed in Serbia for the drafting of the National Employment Strategy 2011-2020 (Arandarenko and Vujić, 2010) and its update for the period 2015-2020 (MoLEVSA, 2017).

Naturally, as our main goal is to forecast the labour demand, certain modifications and simplifications will be needed.

The labour demand forecast comes down to forecasting employment. It is a standard to assume there is a strong connection between employment and GDP, however, this is true only long-term and there are significant differences in sector employment elasticities in relation to GDP.

Due to this, our forecasts will be based on the previous year's trend. The summarised basic results of the projections are presented in the box below, while further elaboration of the methodology and overall findings of the analysis are presented in the text below.

In the period between 2021 and 2024, the highest projected employment growth can be expected in the sectors like Information and communication,

Real estates and Construction, and according to the current elasticities it would cumulatively amount to over 30%.

In terms of the highest absolute growth, in Manufacturing industry the expected employment growth amounts to almost 70,000, Information and Communication by more than 32,000, and in Retail; repair of motor vehicles and motorcycles the number could rise by over 25,000.

On the other side, a decline is expected in Agriculture, forestry and fishing and Power, gas and steam supply sectors. In regard to

occupations, the highest both absolute and relative growth are expected in Machinery and plant operators, assemblers and drivers (38% more, or growth by ca. 120,000 workers), while high growth is expected in the groups of Administrative workers and Experts and artists.

In parallel, the decline is expected in the case of Agricultural, forestry and fishery and related workers, Managers, officials and legislators and Military occupations.

Using the registered employment data, in the first step we need to assess how sector employment responds to GDP change.

The assessment of employment elasticity against GDP is based on the sector employment data and real GDP for the period 2017-2021.

The five-year data enables us to calculate growth rates in the past 4 years. As recent trends in the labour market are more relevant than the earlier ones, the indicated rates will be weighted to ensure the relevance of the past year's trend most relevant for future trends[32].

To obtain individual elasticities for each of the sectors, the calculated sector growth rates were compared to the average GDP growth rate amounting to 4% in the period concerned. The most relevant data from the implemented procedure is listed in Table 9.

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32 Growth rates in 2018, 2019, 2020 and 2021 are weighted by 0.1; 0.2; 0.3 and 0.4, respectively, to get an average growth rate for the period under consideration.

Table 9. Corporate employees, self-employed, sole proprietors and their staff and relevant indicators for the employment forecast

Sectors	2017	2021	Average weighted annual change	Elasticities
Agriculture, forestry and fishing	33067	29801	-2.3%	-0.58
Mining	24466	27286	2.2%	0.55
Manufacturing industry	417564	493413	4.2%	1.04
Power, gas and steam supply	28724	25305	-1.9%	-0.47
Water supply; waste water management; waste disposal control and similar activities	34715	35621	0.7%	0.18
Construction	89202	120811	8.6%	2.13
Wholesale and retail; repair of motor vehicles and motorcycles	332725	359505	2.3%	0.56
Transportation and storage	115079	124962	2.2%	0.54
Accommodation and food services	71744	86738	4.0%	0.98
Information and communication	59649	82739	11.1%	2.74
Financial and insurance services	43746	42889	-0.8%	-0.20
Real estates	5743	7810	9.2%	2.29
Expert, scientific, innovation and technical activities	96284	115508	4.8%	1.18
Administrative and support service activities	91557	105944	2.1%	0.51
Public administration and defence; compulsory social insurance	159118	156711	-0.3%	-0.08
Education	139979	155268	3.1%	0.76
Health care and social protection	159688	159353	0.3%	0.08
Arts, entertainment and recreation	33848	39001	3.6%	0.90
Other service activities	40458	43965	1.6%	0.41

Source: Calculated by the authors based on the registered employment data and GDP, SORS.

The most important input for the demand projection in the next three years is the last column in Table 9 illustrates the responsiveness of the specific sector employment in relation to the real GDP change.

This piece of data will be cross-referenced with the projected annual real growth rates until 2024, to forecast the sector labour demand. The information about the future GDP growth rates was based on the combination of projections of credible international institutions like the World Bank and the International Monetary Fund.

In its publication "World Economic Outlook"[33] the International Monetary Fund envisaged a growth rate of 4,5%; 4.5% and 4% in the period 2022-2024.

In its publication "Global Economic Prospects"[34] the World Bank is envisaging growth rates of 4.5%, 4% and 4%. Despite the projections being almost identical, we will use average values, therefore we assume that the real GDP growth in Serbia in 2022 will be increased by 4.5%, by 4.25% in 2023, and by 4% in 2024.

In the last step, each of the specified annual GDP growth rates was multiplied by the corresponding sector elasticity to obtain the annual employment increment by sectors.

The increment was then added to the baseline employment level from the previous year resulting in the projected employment in the coming year.

This procedure was repeated for each year, and the final results are presented in Table 10.

33 https://www.imf.org/en/Publications/WEO
34 https://www.worldbank.org/en/publication/global-economic-prospects

Table 10. Projected registered employment by sectors

Sectors	2022	2023	2024	Index 2024-2021	Absolute change 2024-2021
Agriculture, forestry and fishing	29022	28305	27647	92.8%	-0.58
Mining	27966	28624	29258	2.2%	0.55
Manufacturing industry	516514	539353	561799	4.2%	1.04
Power, gas and steam supply	24770	24274	23818	-1.9%	-0.47
Water supply; waste water management; waste disposal control and similar activities	35910	36185	36445	0.7%	0.18
Construction	132395	144384	156690	8.6%	2.13
Wholesale and retail; repair of motor vehicles and motorcycles	368597	377402	385886	2.3%	0.56
Transportation and storage	128001	130940	133770	2.2%	0.54
Accommodation and food services	90565	94340	98040	4.0%	0.98
Information and communication	92938	103757	115125	11.1%	2.74
Financial and insurance services	42501	42139	41800	-0.8%	-0.20
Real estates	8615	9453	10319	9.2%	2.29
Expert, scientific, innovation and technical activities	121666	127792	133849	4.8%	1.18
Administrative and support service activities	108380	110733	112996	2.1%	0.51
Public administration and defence; compulsory social insurance	156112	155549	155020	-0.3%	-0.08
Education	160560	165729	170750	3.1%	0.76
Health care and social protection	159905	160429	160923	0.3%	0.08
Arts; entertainment and recreation	40583	42138	43658	3.6%	0.90
Other service activities	44769	45543	46283	1.6%	0.41

Source: Calculated by the authors based on the registered employment data, SORS and GDP data, IMF and WB.

According to the model used, the highest relative employment growth could be expected in the Information and communication, Real estate and Construction sectors.

In almost all listed sectors, the cumulative growth of registered employment in 2024 compared to 2021 will amount to over 30%.

It is important to consider absolute numbers as certain sectors employing a large number of employees may realise significant employment growth even without impressive relative growth.

This is the case with the Manufacturing industry where the expected increase in the number of employees amounts to almost 70,000, or Wholesale and retail; repair of motor vehicles and motorcycles where the number of employees could rise by over 25,000.

On the other side, a more considerable decline in employment could be expected in Agriculture, forestry and fishing and Power, gas and steam supply sectors.

A rough approximation of demand for different occupations in the next 3 years could be extracted from the previous table. Generally, the dominant occupations in the Manufacturing industry, Construction, Wholesale and retail and Information and communication will be in demand in the coming period.

The profiles of workers performing activities in industries like Agriculture, forestry and fishing and Power, gas and steam supply will be less in demand than is currently the case.

Still, to have some kind of a picture of the future demand for certain professions, the used methodology will be applied to LFS data, with some reserve due to the shortcomings already defined.

As has already been outlined that the pandemic crisis had more affected the oscillations in the number of the employed in the case of LFS than in the case of employment both in 2020 and 2021, these years will be taken into consideration.

Instead, we will observe employment by occupations in the period 2015-2019 which will enable us to get 4 annual demand growth rates with different occupations in "normal" business conditions.

The obtained growth rates will also be weighted as in the previous case, by assigning the highest weight to the 2019 growth rate.

We apply a standard procedure to get elasticities for each occupation – the weighted growth rates are compared against the average GDP growth rate in the reference period.

The occupation elasticities obtained in this way are then multiplied by the indicated average annual GDP growth rates derived based on the IMF and World Bank projections.

In this way, we arrive at the projected labour demand for different occupations in the next 3 years which is compared against 2021 employment, more accurately against its approximation – average employment for the currently available first three quarters. The results of the final procedure are shown in Table 11.

Table 11. Projected employment (in thous.) by occupations – LFS concept

Occupation	Average weighted annual change	Elasticities	Average Q1-Q3 '21	2024p	Index 2024-2021	Absolute change 2024-2021
Managers, officials and legislators	-1.4%	-0.35	99.1	94.5	92.8%	-4.6
Experts and artists	3.7%	0.91	421.6	476.2	112.9%	54.6
Engineers, technicians and associate professionals	1.4%	0.34	316.2	332.2	105.1%	16.0
Administrative workers	7.7%	1.88	251.8	319.8	127.0%	68.0
Service and trade occupations	1.2%	0.29	424.1	442.3	104.3%	18.2
Agricultural, forestry and fishery and related workers	-1.5%	-0.36	359.0	345.4	96.2%	-13.6
Craft and related trades workers	2.8%	0.67	358.6	393.0	109.6%	34.3
Plant and machinery operators, assemblers and drivers	11.8%	2.87	319.2	441.5	138.3%	122.4
Jednostavna zanimanja	3.7%	0.90	256.7	289.9	112.9%	33.2
Vojna zanimanja	-2.7%	-0.67	19.6	17.9	91.3%	-1.7

Source: Calculated by the authors based on LFS data, SORS: and GDP data, IMF and WB.

The largest absolute, but also relative growth is expected in the group of occupations Machinery operators, assemblers and drivers. Compared to 2021, the demand for these occupations could rise by 38% which would result in increased employment in these profiles of workers over 120,000. Besides this occupation, a more notable increase in demand could be expected in the case of Administrative workers and Experts and artists. On the other side, if the listed assumptions are met, the demand decline will occur in the following occupation groups: Agricultural, forestry and fishery and related workers, Managers, officials and legislators and Military occupations. Of course, these forecasts do not include potential institutional changes which could considerably change the demand for specific occupations.

For example, the introduction of some kind of military service may play an important role in the future demand for military professions, etc.

Once again it should be pointed out that besides the all mentioned limitations and shortcomings caused by methodological changes in the LFS delivery, the projections also greatly depend on the further course of the pandemic.

The health crisis and restrictions on the economy caused by it will have a major impact on future economic trends, which may lead to the projected GDP growth rates taken over from the IMF and World Bank not being achieved. Different growth rates than the assumed ones will lead to a different development of demand both in terms of sectors and in terms of specific professions.

» Key conclusions and recommendations

In regard to the basic indicators in the historical context of high unemployment, the Serbian labour market registers good performance and ongoing improvements. Moreover, it demonstrated a high level of resilience in light of the COVID-19 pandemic crisis. However, in the context of EU countries, and especially of new member states in Central Europe, the labour market in Serbia is significantly lagging.

Translated into figures, even 29.7% of the working-age population in Serbia are inactive (1.3 million people), while 11.4% are unemployed (351.2 thousand people). In addition, women in the labour market are in a considerably disadvantaged position keeping in mind the 1.8 percentage points higher unemployment rate and 14.5 percentage points lower activity rate. Moreover, 50% of all unemployed have been looking for work for longer than one year.

When the significant working population outflow is taken into account due to the exceeding exit cohorts compared to the entry ones (ca. 60 thousand people annually), and the outflow caused by emigration (ca. 10 thousand people annually), the comparison of the

labour force market performance in Serbia is seen as a basic barrier to the future economic development.

From the aspect of mismatch between the skills demand and supply six indicators[35] were analysed pointing to the structural limitations present in the Serbian labour market. Namely, persons with specialist education ("VKV") are in the relatively best position (from the aspect of unemployment/employability) same as persons with higher education levels, with corresponding unemployment rates of 5.6% and 8.5% respectively, while the persons who have completed grammar school and those with low education levels are in the least favourable position (13.5% and 13%).

The improvement in the overall labour market performance in the past period was mostly benefiting the first two groups, therefore based on the analysis it may be concluded that natural selection and absorption of "desirable" profiles occurred in the labour market, while the other categories remain "captured" and are more difficult to be reintegrated in the labour

market. The long-term unemployment status of these people is not desirable from several social and fiscal aspects, however in the context of a comparison of labour market performance we would like to stress the effect on the erosion of human capital and loss of motivation. A longer passage of time implies greater (often specific) needs in regard to active labour market policies for which the space in Serbia is also limited due to the financial and human capacities of NES.

A key factor for mitigating and eliminating the mismatch is education policy which, besides positive progress made in the past few years, is still not at the necessary level to eliminate or mitigate these obstacles. Observed *ex-post*, vertical mismatch suggests that every fourth highly educated person currently works in jobs not requiring this level of education.

From this aspect, horizontal mismatch demonstrating a (mis)match between the completed education and the job, even more illustratively points to the lack of synchronisation between the education policy and needs of businesses given that even 42.4% of the employed aged between 15 and 34 with minimum secondary education work in professions not requiring education in the field in which they obtained it.

Economic inefficiency emerged as a consequence of these mismatches in the form of (unnecessary) cost of education of persons in the case of vertical mismatch, and in the slower transition from education

to employment, taking into account the training companies need to deliver subsequently to undertake necessary re-orientation.

In addition, the insufficient adaptation and poor results of the education system are also indicated by international institutions (OECD, ETF) and employers, both in the domain of soft and hard skills. Slow transition, namely the inability to find employment in the profession one was educated for, directly results in youth emigration – out of the students intending to leave the country, 27% intend to do so due to the inability of finding a job in their profession, while 21% want to leave because of the poorly paid jobs in their profession.

On the other side, when asked what would make them change their decision about leaving the country, the students most frequently replied "Secure job in my profession" (52%).

A minimum of one-third of companies are faced with major problems in locating people who possess adequate qualifications. The situation is the most aggravating for the companies operating in the accommodation and food sectors (58.7% have problems filling up vacancies), construction (43.9%), manufacturing industry (42.1%) and transport and storage (39.8%).

The most frequent causes of the problems related to finding a skilled labour force are deficient professions (35.4%), lack of knowledge and skills (24.1%) and lack of professional experience (17.1%).

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35 Relative unemployment rates in different educational levels, the ratio between the employed and unemployed of different educational levels, variance in the relative unemployment rate, coefficient of qualification variation, vertical mismatch and horizontal mismatch.

The specific deficient professions mainly include the workers engaged in service and craft professions, same as technicians and drivers. Additionally, there is also a shortage of specialist professions, primarily mechanical engineers, electrical engineers, IT engineers, civil engineers and managers.

As the reasons for the lacking qualifications, companies identify emigration (70% of companies consider this factor important), competition in the local market (60%) and a mismatch between the education curriculum and the demand of businesses (60%).

The companies address these issues with limited success mostly by announcing standing competitions, lowering the employment criteria followed by in-house training, increase in salaries, whereas the companies employing primarily highly educated workers introduce the above-mentioned extra benefits (shorter working hours, longer annual leave, private health insurance).

Overcoming these restrictions calls for considerable efforts in several areas. It is evident that re-training and additional training programmes, same as the programmes facilitating youth's transit to employment are necessary and recognised by MoLEVSA and NES as strategically important goals.

However, the planned scope in relation to the needs, primarily limited by financial and human resources, can hardly be assessed as sufficient to reverse the trend.

Likewise, targeted policies and synchronisation of educational curricula would be greatly supported by the centralised and standardised collection of data on the labour market needs which could be implemented by introducing the Job Vacancy Survey.

In addition, the introduction of software solutions and econometric models monitoring the characteristics of the unemployed registered with NES could enhance the efficiency and effectiveness of efforts to return these people to the labour market, i.e. to find adequate jobs for them with the optimum engagement of active policies.

The need for careful and informed planning is important in the context of managing future changes which could be expected in the labour market in the coming years.

Based on the projections by 2024, it may be expected that the Manufacturing industry will need almost 70,000 new workers, the ICT industry more than 32,000, and Wholesale and retail, and repair of motor vehicles over 25,000.

It remains quite evident that in addition to qualifications and changes in the education system (the effects of which could be seen only in the mid or long term), one of the basic directions for meeting the labour market demand could be the "import" of the labour force from third countries.

Recommendations:

☑ Improvement concerning a better insight into the future labour demand could be realised by introducing the Job Vacancy Survey. The current labour market demand monitoring system is insufficiently interconnected, and thereby insufficiently efficient. The introduction of the Job Vacancy Survey would ensure representative and consistent information on the needed/lacking profiles of the labour force which would be useful for economic and education policies as a whole, including the migration governance policy.

Having in mind the limited capacities faced by NES which would be the process implementer in the case of this survey, it would be useful to explore arrangements to alleviate the burden on the organisation in implementing this activity.

☑ In line with the labour market needs analysis findings concerning qualifications or skills that could be mastered via specialised training, the focus of the active labour market policies in the coming period could be shifted towards finding a way to re-activate the long-term unemployed and inactive population.

In that sense, several measures would need to be bundled like the Motivation-Activation training for unskilled and low-skilled persons, Self-efficiency training and Training at the request of an employer and Training for the labour market. Monitoring the gross effect for the cases of

bundled measures would provide information on the efficiency and enable designing "optimum support packages".

☑ To prevent and reduce long-term unemployment, and enhance NES efficiency, it would be preferred to introduce software which would facilitate and accelerate monitoring risks of long-term unemployment, and propose "optimum support packages" based on the related findings.

An example is software recently introduced by the Croatian Employment Agency – StAP, helping advisors to identify the risk of long-term unemployment depending on the petrsonal features of persons registered. The long-term unemployment risk is assessed based on the set of explained variables referring to the human capital level, previous working experience, age, whether or not a person belongs to a vulnerable group and their occupation.

Besides the personal traits of the unemployed, the final long-term unemployment risk assessment also takes into account the circumstances in local labour markets. Based on the results, the software classifies the unemployed into appropriate categories a corresponding package of measures is applied to afterwards.

☑ Given that employment is registering growth, but is at the same time accompanied by a high level of precarious work characterised by lower salaries, the priority in the coming period should be on

shifting the focus from quantitative to qualitative labour market indicators.

Dominant orientation to meeting quantitative indicators in the past negatively affected certain aspects in dimensions relating to security and stability of employment and salary level.

☑ The current labour taxation system is basically proportional, which additionally diminishes the cost-effectiveness of low-paid jobs, namely it generates incentives for the establishment of an informal market.

The introduction of progressive taxation would facilitate the transition from the secondary to the primary labour market and at the same time mitigate factors in this domain pushing workers earning up to the average wage to leave the country.

☑ Those who stay jobless in Serbia (outside the labour market) are faced on average with more serious existential problems than the persons who found themselves in the same situation in the countries regarded as the most frequent destinations for Serbian emigrants.

The key reason is insufficiently stressed re-distribution in the tax system making the transfers for the poorest 50% of the population almost equal to their tax liabilities. To deter these persons from emigrating, it is necessary to undertake a reform of the tax and transfer system

to reduce levies on the poorest and/or increase allocations.

☑ The scope of the labour market policy – both active and passive, needs to be extended. The former is limited by lacking financial and human resources preventing the inclusion of the required number of the unemployed in the ALMP measures by providing them with adequate support mechanisms and training.

The latter is characterised by high restrictiveness in terms of the scope and the lack of a universal component which is why the unemployed in Serbia are found in a more disadvantaged position compared to those in destination countries.

Greater allocations for ALMP and redesign of the unemployment benefits could prevent one part of the unemployed from becoming discouraged and consequently opting to leave the country.

☑ Due to the anticipated labour market demand in the coming period, it could be concluded that part of the labour demand will have to be met by importing labour from third countries.

To overcome the information gap and reduce the transactional costs of engaging this labour force, it would be required to develop a software solution for ex-ante assessment of the potential immigrants' competencies. Such a solution would particularly be useful in jobs not requiring substantial formal competencies, but focusing

on the acquired experience and skills – as is the case in the majority of highly skilled (VKV) occupations in the Manufacturing industry, and professions in Transport and storage, Accommodation and food services.

An example of this solution is software for the assessment of migrants' competencies ("myskills") developed by the Public Employment Service of the Federal Republic of Germany.

Bearing in mind the needs and growing labour migration trend to Serbia, introducing a portal of this kind would be useful for employers, and it could be implemented in consultation and cooperation with agencies currently dealing with the import of labour from third countries.

☑ Due to the shrinking of the labour force affecting the reduced average employability of the registered unemployed population, efforts need to be intensified to increase the visibility of NES to persons who are not registered and take the necessary steps to register these people with NES.

Employment caravans are a measure implemented by NES to address this issue, but the efficiency of this measure is questionable, not only in Serbia (in 2021 out of 1,716 informed persons only 28 registered, or 1.6%) but in other EU countries as well. To improve this measure in the future a detailed process analysis needs to be undertaken to identify weaknesses and then

improve the implementation method and increase the reach.

In addition, the cooperation with local authorities, social partners and civil society organisations needs to be additionally strengthened. If not, the target of 18% of registered out of 1,000 informed envisaged in the 2022 NES Work Programme will hardly be achieved, and the potential of such an important measure will remain unused.

Additional improvement of this measure's efficiency could take the direction of employment and training of mediators to avoid potential barriers found in certain highly marginalised groups.

» II. Economic migration

» Review of the challenges in the statistical monitoring of external migration
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Population migration is an important component of modern civilisation affecting both the countries people emigrate from and those they immigrate to. The migration pattern has entirely changed over time. While in the previous phases of societal development migration was mostly forced, migration nowadays is mainly voluntary and regarded as an integral part of life.

The globalisation process and relaxed conditions for the movement of people between countries have additionally contributed to intensified migration, but also changed migrant routes. The United Nations data shows that the number of people not born in the country of their residence or those who are not citizens of the country they reside in has almost doubled in the past 30 years[36].

This growth is almost entirely the result of the increased inflow of immigrants in high-income countries where the share of international migrants in the total population increased from ca. 7.5% in 1990 to 14% in 2019.

As a small country with an upper-medium income level, Serbia fits into the general pattern according to the World Bank classification. Serbian population predominantly migrates towards wealthier countries like Germany, Austria, France, Switzerland, the United States of America, Canada and Australia.

Emigration to countries of similar or slightly higher development levels compared to Serbia is also present but in a considerably smaller scope. Up to the 1950s, emigration from Serbia was relatively negligible in relation to the overall domestic population. However, the accelerated expansion of Western European countries after World War II contributed to a huge increase in demand for labour, transcending the capacities of the local labour supply.

In parallel, the enforced nationalisation of property and reallocation of agricultural workers into non-agricultural activities was taking place at that time in Serbia (Stanković, 2014), thus an optimum strategy of one part of the population was to emigrate.

36 UN DESA database

An additional economic reason for mass emigration was the worsening of the relative position compared to the countries of similar or slightly higher development levels. In that respect, based on the income per capita, in 1950 Austria and Italy were 2.5 times more developed than Serbia, while Greece was at the same development level.

Thirty years later, the difference between these countries and Serbia doubled, therefore in 1986 Austria, Italy and Greece registered 5, 4 and 2 times, respectively, higher income levels per capita than Serbia (Madžar, 1990).

The debates about emigration in Serbia and discussions about its consequences and solutions have intensified recently. The presence of migration in public discourse was affected by a secular depopulation trend. Observed only based on the data from the last two censuses, the total population in Serbia has shrunk by ca. 311,000 over nine years.

According to official projections, the Serbian population could decline from a. 7.3 million in 2010 to 3.9 or 5.3 million in 2060, depending on the scenario.

Even with an optimistic assumption of a zero--migration balance, the total population in Serbia could come down to 4.9 million in 2060 (Penev, 2013).

Negative demographic trends are corroborated by the Labour Force Survey data according to which working age population (15-64) number declined from 4.82 million in 2010 to 4.45 million in 2020, or by ca. 37,000 annually.

Despite intensified discussion about emigration and its relevance – due to the depopulation, potential "brain drain" and the emergence of deficient occupations – there is no uniform, accurate and reliable data about it. Despite the major technological progress, development of the internet, networking of databases and growing digitalisation coverage, migrant registers were only slightly improved compared to the situation 20 or even 50 years ago.

Consequently, differences in data depending on the source are far from being neglected. So for example, according to the United Nations global database assessing emigrants based on the official statistics of countries about births in other countries/citizens of other states, the total number of emigrants from Serbia in 2019 amounted to ca. 820,000.

Compared to 2015 (807,000) a slight rise in the total population was registered of those who were born in Serbia/hold Serbian citizenship but live in another country[37].

The World Bank's estimations about the number of Serbian emigrants are a bit higher than those of the UN. The latest available data on bilateral migration suggests that

the total number of Serbian emigrants worldwide in 2017 equalled ca. 1 million[38].

On the other side, the Commissariat for Refugees and Migration of the Republic of Serbia listed in the Migration Profile of the Republic of Serbia that there is no official data on the size of the Serbian diaspora, however, based on the earlier estimations, the total number of Serbs living in the region or abroad amounts to ca. 5 million[39].

If we accept the hypothesis that the major portion of Serbian emigration comprises people emigrating to developed countries, OECD data should also be considered. The estimation is that in 2019 ca. 670,000 Serbs (by citizenship or place of birth) were living in 19 OECD countries the data is available for – 17 European, the United States of America and Australia[40].

The OECD represents an important source of data for examining emigration from Serbia due to one more reason. Besides annual estimates, this organisation offers a publicly available quasi-micro database that contains useful information on emigrants, like their education level, age and status in the labour market in the destination country.

The recent study combined the data on the basic labour market contingents from the Serbian Labour Force Survey with the data from the OECD database. It turned out that the employment rate of Serbian citizens/ those born in Serbia but living in a different country was considerably higher than the resident employment rate used in the local Labour Force Survey (Arandarenko & Aleksić, 2020).

The basic advantage of the OECD database is at the same time its major flow. It is a product of national censuses adapted to the statistics of OECD countries, which makes it relatively reliable.

Still, the fact that its fundamental source is the population census shows that the data is relatively outdated as the latest data mainly refer to 2011. This should not be a problem provided that OECD should continue updating the database.

As the data of the new wave of the census could become available soon, this invaluable resource should not be left out when analysing Serbian emigration in the near future.

Finally, the official data on the number of emigrants from Serbia is included in the latest 2011 population census. According to this data, in 2011 311,500 Serbs lived and/or worked abroad. Although the population census represents a most comprehensive source of data generally, its operating value in regard to external migration is not high.

37 UN DESA database

38 https://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data
39 https://kirs.gov.rs/media/uploads/Migracioni%20profil%20Republike%20Srbije%202020%20FINAL%20(1).pdf
40 https://stats.oecd.org/Index.aspx?DataSetCode=MIG

The number of emigrants obtained in this way is usually underestimated as it includes information only about the emigrants whose families are still Serbian residents. In addition to this one, authors point to other, benign problems of using the census data to estimate emigration (Penev and Predojević-Despić, 2012).

The level of underestimation can best be illustrated in comparing the Serbian census data on the number of people working – staying abroad in Germany against the German census data. Unlike the Serbian census registering ca. 56,000 of Serbian emigrants, the German census data indicate that in 2011175,000 Serbs lived in Germany.

Same as the data of the countries of origin, the immigration data of destination countries is not perfect. The quality of registers in destination countries will determine the estimates of the number of immigrants.

Likewise, classifications of immigrants differ by countries, so some register immigrants only based on their country of birth, while others do it based on citizenship. In this respect, the problem of data accuracy is universal to all countries. However, it is additionally stressed in the case of Serbia which changed its sovereignty status several times over the past 20 years. So, for example, in the mentioned OECD database one could still find respondents declaring as Yugoslavs. Moreover, in countries

recognising Kosovo[41] as an independent state, there is an overlap in regard to citizenship/ country of origin. Having in mind all pros and cons of different data sources, in our analysis we opted to favour immigration data of destination countries. For data consistency, we decided to use a single database, and given that the largest number of immigrants from Serbia reside in European countries, it was logical to use the Eurostat database.

This innovative approach was used for the first time in a recent study exploring the nature and structure of migration (Arandarenko, 2021). It is based on using the data on the number of issued residence permits to Serbian citizens. Additionally, until 2014, the annual Migration Profile developed by CRM was exclusively based on the data on the number of Serbian citizens living in EU countries.

As of 2014, the data on annual flows of new immigrants from Serbia in the EU and European countries (those reporting to Eurostat), have become an integral part of the Migration Profile.

Operationally, annual flows of emigrants from Serbia are obtained for the first time based on the number of residence permits issued to immigrants arriving from Serbia.

Applying this practice, we define the two most important pieces of information in the context of migration – stock and flow. Stock is the total number

of persons from Serbia in European countries at the end of the calendar year, and flow implies the annual inflow of new immigrants from Serbia.

The stock approximation is based on the number of residence permits issued to immigrants from Serbia, while the flow approximation includes the number of residence permits issued for the first time in one of the observed countries to Serbian immigrants. According to the international classification, residence permits may be issued based on one of four reasons: paid activities, family reasons, education, or other.[42]

Assuming that the migration balance with the rest of the world outside the "Eurostat-Europe" is neutral, the annual net outflow of Serbian citizens in the past decade would range between 4,000 to 13,000 persons.

If we assume that the "actual" migration balance with Germany is somewhat neutral, this would imply a net outflow in the previous decade of between 50,000 and 70,000 people, or ca. 5,000 and 7,000 annually.

The latest studies show that the highest increase in the number of Serbian emigrants is achieved cumulatively predominantly in the east-wing EU countries. Among the destinations which at least doubled the number of Serbian migrants between 2010 and 2019 or in a bit shorter period are Slovenia, Slovakia, Croatia, Norway, Malta, the Netherlands, The United Kingdom and the Czech Republic (Arandarenko, 2022).

Table 11 (Resident permits of Serbian immigrants – as of 31 December of the given year) shows the total number of Serbian citizens who were residents of one of the European countries at the beginning and at the end of the past decade and were included in Eurostat data. Initially, we need to underline that the total does not include data for Switzerland and Norway as these are the only two countries outside the EU with a considerable number of Serbian citizens. Likewise, the final EU total is not fully comparable over time due to two reasons. First, the data for Croatia was included only after 2013 and second,

41 In accordance with the UN Resolution 1244.

42 The first category of permits could be taken to imply work permits. The requirements for issuance of work permits differ by countries and the related information in this regard is provided by the embassies of destination countries. Family permits are issued for starting a family in case of adoption of children, marriage, etc. based on the relevant evidence. They are also issued for family reunification purposes if any of the members is a holder of a certificate of legal residence in EU countries. Education permits are issued to persons going abroad for education, while other includes persons under international protection, asylum-seekers, diplomats and those not entitled to employment (e.g. pensioners).

after 2018 EU data does not include the number of Serbian citizens in the United Kingdom.

Although this is relatively not a large number of people, the net effect of adding Croatia and excluding the United Kingdom positively affects the number of immigrants from Serbia.

In other words, if this were taken into account, the difference between 2019/2020 and 2010 would be a bit higher than the one shown in the table.

Still, the listed minor methodological differences do not hold the potential to reverse the overall trend, therefore they will be set aside for the time being. The general trend shows that the number of Serbian citizens holding residence permits in EU countries was considerably lower in 2019 than at the beginning of the period observed.

This pattern is present in Switzerland as well, a country with a relatively large Serbian diaspora. In the second non-EU country opposite trend was registered – the number of Serbian citizens with residence permits in Norway is almost five times higher than in 2010. Observed at the EU level, the mentioned ten-year period can be divided into two post-periods.

The first, between 2010 and 2016, is characterised by a sharp drop in the number of Serbian citizens, with a cumulative decline of ca. 175,000. The second period after 2017, registers a rise in the total number of people with residence permits amounting to ca. 118,000. A three-year upward trend was sharply

interrupted in 2020, mainly due to the consequences of the pandemic outbreak imposing movement restrictions and health crisis, however, this is assumed to be a temporary phenomenon. Initial estimates show that the total number of people with active residence permits in 2020 in the EU and Switzerland was ca. 80,000 lower than in 2019.

It is important to emphasise that the declining number of citizens with residence permits does not necessarily imply less intensive emigration or accelerated return to Serbia, especially when the working-age population is concerned.

Theoretically, besides the return to Serbia, the reduced number of Serbian immigrants could be the consequence of death in the destination country, migration to some other country or naturalisation, i.e. citizenship in the country of destination. Proof of the concept that the Serbian diaspora is actually not shrinking is corroborated by the continuous rise in remittances reaching EUR 4.6 billion in 2019. Even besides the considerable decline in the number of Serbian citizens holding residence permits in 2020, the remittances registered only a slight drop to EUR 4.35 billion.

Observed by individual countries, the largest decline occurred in Germany, Italy and Switzerland. The cumulative decline between 2019 and 2010 in the first two countries was 1.5 times higher than the total cumulative decline in the number of Serbian citizens with residence permits in the EU. Simultaneously, the number of Serbian immigrants in Switzerland

was reduced by ca. 35,000 in 6 years only (between 2019 and 2013), or by more than one-third. This trend mainly characterised other old EU member states (OEUMS). This was particularly the case with those OEUMS which have been traditionally chosen as destination countries, hosting a large Serbian

diaspora built gradually since the second half of the 20th century, not registering the largest drop in the total number of Serbian citizens with residence permits. On the other side, the number of Serbian citizens in the countries acceding the EU after 2004 (NEUMS) continuously rose.

Table 12. Resident permits of Serbian immigrants – as of 31 December of the given year

Country	2010	2019	2020	Razlika 20/11	Razlika 19/11	Razlika 20/19
Germany	290,092	231,120	158,762	-131,330	-58,972	-72,358
Austria	111,708	107,369	106,450	-5,258	-4,339	-919
Switzerland	94,979*	60,595	59,863	NA	NA	-732
Italy	61,027	37,123	34,156	-26,871	-23,904	-2,967
France	35,141	27,149	27,291	-7,850	-7,992	142
Slovenia	8,273	20,374	19,867	11,594	12,101	-507
Slovakia	3,826	15,842	15,394	11,568	12,016	-448
Croatia	NA	10,193	11,094	NA	NA	901
Sweden	12,090	9,272	9,237	-2,853	-2,818	-35
Hungary	18,080	9,349	7,886	-10,194	-8,731	-1,463
Czech Republic	1,933	5,592	5,842	3,909	3,659	250
Norway	1,228	5,706	5,564	4,336	4,478	-142
Malta	502	6,481	5,168	4,666	5,979	-1,313
Belgium	3,270	4,433	4,756	1,486	1,163	323

* 2012

Table 12. Resident permits of Serbian immigrants – as of 31 December of the given year (continuation of the table)

Zemlja	2010	2019	2020	Razlika 20/11	Razlika 19/11	Razlika 20/19
Greece	3,771	3,720	3,831	60	-51	111
The Netherlands	454	3,499	3,667	3,213	3,045	168
Spain	2,848	3,274	3,233	385	426	-41
Bulgaria	466	2,243	2,440	1,974	1,777	197
Romania	1,599	2,121	1,972	373	522	-149
Poland	701	1,015	1,100	399	314	85
EU	560,631	504,143	NA	NA	-5,919	NA

Source: Eurostat

A potential explanation of the divergent trend regarding the number of Serbian citizens was given in the Arandarenko study (2021), comprising two components – the change in the immigrant stock and the inflow of new immigrants. The declining number of Serbian citizens in OEUMS was mostly the consequence of the relatively higher naturalisation rate, retirement and return to the country due to other reasons compared to NEUMS. This being an acceptable explanation is substantiated by the data on the structure of naturalised Serbian citizens in 2019 by EU countries. Out of the total 11,000 naturalised, even ca. 95% were granted citizenship in OEUMS[43].

Such a disproportion should not come as a surprise, given that the total diaspora in OEUMS is not only larger in terms of people, but also present for decades. This diaspora is generally more tied to the country of origin which ensures family reunification, but also a more branched out social network of migrants facilitating reaching important information concerning emigration and opportunities for obtaining citizenship.

The diverging trend between the old and new member states could be additionally explained based on the annual inflow of immigrants from Serbia illustrated in Table 12. The data presented in the table not only shows that the increase in the annual inflow of immigrants from Serbia is much more visible in NEUMS than in OEUMS, but also that in specific OEUMS annual inflow of Serbian immigrants is much lower than in 2010.

German exception

Unlike the data on the Serbian immigrant stock, Germany accounts for an important exception among the OEUMS concerning the inflow of immigrants. Compared to 2010, the annual inflow of immigrants from Serbia to Germany went up from 3,300 in 2010 to over 21,600 in 2019.

However, a more drastic increase in the inflow of Serbian immigrants to Germany occurred only after 2015, therefore the annual number of new immigrants in 2019 was tripled compared to 2016 when it amounted to 7,000.

Such a drastic jump could mostly be explained by the adoption of the so-called Western Balkans Regulation (Bither and Ziebarthjanuaru, 2018) in January 2016, which made the German labour market much more accessible to Serbian workers.

This regulation offers immigration to Germany, provided that a person holds evidence of a job offer and approval of the Federal Employment Agency. The inflow accelerated since the adopted regulation allows immigration to Germany without any restrictions regarding qualifications. Since its implementation was extended by 2023[44] (initially planned to be valid until the end of 2020), the reduced inflow in 2020 was probably a short-term consequence of COVID-19, indicating that resuming the old path would be conditioned by the course of the pandemic.

Chart 15: The number of Serbian emigrants in Germany
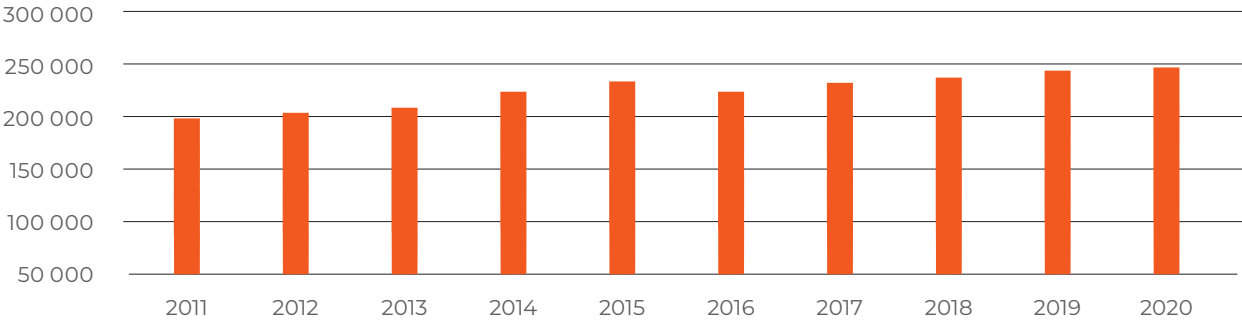
Source: Eurostat, author's calculations

43 https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=migr_acq&lang=en

44 https://i-a-c.de/en/labor-migration-current-western-balkans-regulation/

Certain authors stress that the high number of emigrants from Serbia represents an artefact of old statistical calculation which included citizens of former Yugoslavia in the number of Serbian citizens, same as that German statistics also includes asylum-seekers from Serbian territory, implying that there is a modest increase in the number of those with regulated residence under 4 years (Arandarenko, 2022).

Table 13. How long do Serbian emigrants stay in Germany by years (2011-2020)

Year	Total	Time period											
		up to 1 year	1-3	4-5	6-7	8-9	10-14	15-19	20-25	26-29	30-34	35-39	40+
2020	242 620	10 470	34 510	17 470	15 915	10 755	15 335	14 610	25 125	36 765	13 855	5 540	42 260
2019	237 755	12 490	31 685	17 555	13 580	10 050	12 890	18 330	24 350	37 420	11 165	6 405	41 830
2018	231 230	12 190	29 930	16 390	11 125	8 255	13 270	25 140	20 105	37 815	8 375	7 235	41 400
2017	225 535	11 595	29 045	14 075	10 320	5 495	13 795	28 300	23 610	34 340	6 055	8 355	40 825
2016	230 427	10 990	31 350	11 600	8 420	5 565	14 410	28 620	33 545	23 920	5 545	9 040	40 095
2015	220 908	17 658	32 943	11 456	5 603	5 704	16 559	28 610	51 574	15 433	6 041	9 366	39 480
2014	205 043	19 132	24 784	8 912	5 724	5 601	20 293	27 389	41 809	12 272	6 923	9 357	38 712
2013	205 543	14 154	18 742	5 643	5 929	5 962	27 265	22 349	41 358	9 087	7 761	10 281	36 530
2012	205 521	10 273	14 205	6 205	5 991	6 591	31 463	27 641	38 303	6 481	8 810	14 967	31 591
2011	197 984	7 003	12 138	6 555	6 555	6 983	32 423	41 236	25 845	5 767	9 215	18 370	25 894

Source: Eurostat

However, here we need to notice a rising trend in the stability of stay of Serbian emigrants in Germany, having in mind that the number of those regulating their residence within 1-3 years and 4-5 years is on the rise. Interestingly, during the 2020 pandemic year, the number of those staying in Germany for under 1 year had only slightly declined compared to 2019.

In percentages, the highest increase in the annual number of immigrants was registered in Croatia, which can mostly be explained by geographic position and unmet demand for labour in the tourism and hospitality sectors. In addition to Croatia, a rising annual inflow compared to the onset of the period was recorded in almost all NEUMS. A particularly pronounced growth was registered in Slovenia, Slovakia, the Czech Republic, Malta and Hungary. The rising number of new jobs in the sector of the industry lately makes these countries attractive to Serbian immigrants.

Still, to fully understand migration flows one should keep in mind that a residence permit is considered the first permit even in cases when the time between the expiry of the old permit and the onset of validity of the new one issued for the same reason is longer than 6 months, irrespective of the year of permit issuance.[45] Hence, same as the declining total number of immigrants from Serbia does not mean their full return to Serbia, so the increase in the number of first permits does not imply these are immigrants who have never been working-staying in some other country.

In other words, it is quite possible that a person registered as a new Serbian immigrant in 2010 is included in Eurostat statistics in the coming years as well.

Table 14. Annual influx of immigrants from Serbia

Country	2010	2012	2014	2016	2019	2020
Germany	3,327	7,806	8,337	10,263	21,619	15,385
Austria	3,577	4,205	4,660	5,018	3,764	3,276
Switzerland	NA	1,618	1,332	1,610	1,053	NA
Italy	6,631	3,093	1,785	1,336	1,119	575
France	1,116	1,152	1,209	1,248	1,196	993
Slovenia	1,040	1,376	1,331	2,399	5,105	2,497
Slovakia	483	548	830	2,076	4,290	2,300
Croatia	0	0	456	678	10,644	7,360

45 https://ec.europa.eu/eurostat/cache/metadata/en/migr_res_esms.htm

Table 14. Annual influx of immigrants from Serbia (continuation of the table)

Zemlja	2010	2012	2014	2016	2019	2020
Sweden	1,228	1,643	1,328	1,300	1,436	1,274
Hungary	1,226	747	650	960	3,162	2,104
Czech Republic	199	317	274	847	3,609	1,113
Norway	342	687	740	989	946	673
Malta	86	240	602	1,072	1,840	371
Belgium	861	399	375	406	412	481
Greece	251	196	319	326	254	188
The Netherlands	282	363	314	414	528	418
Spain	240	257	262	351	404	356
Bulgaria	68	115	208	206	548	331
Romania	253	299	378	421	752	297
Poland	114	109	490	544	730	853
EU	21,651	23,490	24,367	30,574	62,190	40,872

Sourcer: Eurostat

» Changed features of emigration flow

Recently we have witnessed new scientific conclusions about statistical trends of Serbian emigration – emigration from Serbia does exist, however, it is not of the assumed volume, dominant emigration is not found in the highly educated, but those with secondary education, possessing special skills in demand in the labour markets of destination countries, thereby, with an exception of Germany, predominant emigration of the labour force from Serbia is found in new EU member states.

The new, already mentioned, methodological approach deviates from the assessed gross emigration therefore, the emigration balance in the countries of destination is determined relying on the EUROSTAT statistics, i.e. data on the emigration population in destination countries.

The latest studies show that persons included in the **youngest age cohorts** also demonstrate the **highest net emigration rate.** In the period 2015-2019, dominantly among cohort 20-24 (ca -18,500 people); strong net immigration (almost 15,000) in cohort 25-29; and again a high emigration rate in oldest cohorts, like in those in the mid-30s and late 40s.

Cumulative net emigration in this period amounts to -37, 400 people. (Leitner 2021).

The analysis of circular migration trends via labour force surveys and the "cohort approach" shows that the outflow of medium-skilled migrants from Serbia is rather high among those with Med-VET qualifications, which is a significant rise compared to other qualifications levels. (Jelačić-Kojić et alia, 2021).

This conclusion is corroborated by the findings presented in this report outlining high internal demand or the lowest unemployment rate among specialised highly skilled workers (VKV). According to the 2020 data of the Chamber of Commerce and Industry, specialised occupations are most frequently found in the group of 20 most in-demand deficient occupations in Serbia: locksmith, C/E category driver, welder, mechanical engineer, trader, electrical engineer, sewer, mechanical technician, electrician, chef, carpenter, CNC operator, manufacturing workers, driver, joiner, waiter, civil engineer, civil technician, tailor, installer, construction machinery operator, technologist, mason, butcher, software engineer.

46 UNDP, Human Development Report (2022), Chapter 4 Migration, qualifications and labour market, Mihail Arandarenko

In the context of qualification structure, the data referring to Germany is particularly interesting. In the structure of all emigrants from Serbia to Germany, both in 2015 and 2019 predominant were occupations with secondary education, with a slight increase in the share of highly skilled emigrants in that period, but the structure remained worse than the one in Serbia. Roughly, while the structure of the labour force in Serbian residents in 2019 included 20% low-skilled, 55% medium-skilled and 25% highly skilled, in Germany, low-skilled workers accounted for 25%, and highly skilled for 20% of the labour force (Arandarenko, 2022).

This somewhat corresponds to findings about the qualifications of the emigrant labour force from Serbia. The study of professor Arandarenko brings another very important piece of data showing that until 2017 there were 1,236 practising doctors in Germany who completed their education in Serbia, while until 2020 the number of medical workers exceeded 1,500.

Currently, there are 30,500 practising doctors in Serbia[47], and if we compare the number of those now working in Germany against the number of doctors in Serbia, it may be concluded that this does not considerably disturb the accessibility of medical services in Serbia. This could be a point for discussion, as numbers must be considered in qualitative terms as well, namely through the lens of lacking specialisations in Serbia, the quality of health services in different parts of the country, etc.

The issue of inequality is one of the most important consequences emerging under a large number of factors including outcomes in the labour market, taxation system, social protection and accessibility of education.

One of the important potential consequences of inequality is the migration of the population.

The more comprehensive studies covering the entire population and addressing the profiles of people leaving the country and reasons for their leaving were not conducted recently.

However, certain authors point to a strong negative correlation between the pay gap level in the country of origin and income in the destination country (Borjas, 1987; Abramitzky et al, 2012).

This primarily implies that if a high pay gap exists in the country of origin, the income of the people leaving to work abroad will be relatively low (compared to the distribution of income in the destination country) and vice versa.

The final implication of this theory is that emigrants from the high pay gap countries are mostly low-skilled workers, located in the left part of the income distribution. Consequently, since the workers with a limited income-generating potential are coming to the destination country, their income in the destination country is relatively low. This is quite expected as high inequality relatively more affects those with low income.

If we accept the applicability of the logical syllogism that high pay inequality primarily motivates the low and middle class to emigrate from the country, we once again re-confirm the thesis that push factors in Serbia are relatively weakest for highly educated people.

Contrary to the usual narrative of brain drain, the latest studies point to the fact that the emigration of the highly educated is not a dominant type of emigration of Serbian citizens.

Observing the age groups in the range 15-39 as a part of the population migrating the most, the researchers state, what could freely be said, counter-intuitive data about this phenomenon, namely that Serbia registers net immigration of the highly educated due to the two predominant reasons – the return of the significant number of the highly educated from abroad, and

attractiveness of Serbia in the Western Balkans region, primarily of Belgrade, for studies. (Leitner 2021, Arandarenko 2021).

Still, according to the data of relevant global organisations and fora, Serbia and the Western Balkans region are still among the top countries by the number of highly educated leaving.

So, according to the World Economic. Forum data, Serbia is at the very top by the emigration of the most educated with a score of 2.31, where a score 1 assumes that the most talented ones are leaving the country.

This is about the two extremes, also based on different methodological approaches. While the first is focused on specific age groups, the second is targeted at gross emigration, often neglecting the immigration capacity of the countries under observation.

At the same time, while the first approach brings positive feelings as it suggests that Serbia has a better human capital structure available comprising returnees from abroad and foreigners, the second warns us that a globalised economy increases competitiveness and that stronger and readier economies are a challenge since they attract the most talented, but also people with lower education levels in possession of special skills.

47 Dr Tijana Radosavljević, president of the Serbian Medical Chamber, PPT, https://www.rlkbg.org.rs/images/docs/demografskitrendovi.pdf

48 https://europeanwesternbalkans.com/2020/02/03/wef-four-balkan-countries-top-global-ranking-with-biggest-brain-drain/

These two different approaches should actually help us avoid the trap of inappropriate narrative which is especially important in the policy-making context. This ranges from the approach portraying Serbia as a country losing its talent and the most educated ones, to the narrative that the most talented are no longer leaving, but instead now only the persons with secondary education and special skills emigrate.

These two extremes actually represent partial observations of the migration phenomenon in Serbia. Of course that the highly educated are leaving – maybe not predominantly, but still it is obvious that Serbia has become more attractive to returnees from the diaspora and foreigners. At the same time, persons with lower education levels holding special skills are leaving Serbia, but Serbia is also becoming a space in which foreign workers increasingly bridge these labour market deficits.

This is all about labour force mobility, where the focus should be placed on the programmes of circular and return migration i.e. attracting a foreign labour force.

» Sources of statistical monitoring of external migration

There is almost no official document or study where the issue of statistical data on emigration or one of the phenomena monitored and studied in relation to emigration is not viewed as problematic.

The improved statistical data monitoring would no doubt considerably contribute to a better understanding of this phenomenon, studying and finally, better planning of targeted public policies.

An additional reason is found in the process of EU accession taking into account that **Chapter 18** monitors progress made in this area.[49] The European Commission 2021 Serbia Report[50], inter alia, states that certain progress has been made, but it is of particular importance for Serbia to adopt in the coming year the Law on Official Statistics and implement Population Census in line with EU acquis and international standards.

The report views problematic the fact that data on external migration is collected by the Ministry of Interior and that such data is only partially harmonised with the relevant EU standards in this domain.

Serbia does not have a uniform statistical database for monitoring external migration and the data is collected from different sources such as the Census of population, households and dwellings, surveys of the Statistical Office of the Republic of Serbia, citizen residence and domicile registries, etc.

Likewise, based on the opinion of certain stakeholders, the quality of available data from national sources is also questionable, given that data is often not reliable and of sufficient quality, as it does not have full coverage.[51]

As previously mentioned, with all limitations regarding comprehensiveness, the results of the 2011 Census represent the most important domestic source of aggregate data on emigration, until the process of implementation of

49 The aim of the reforms is to establish a statistical system resting on several fundamental principles: professional independence, impartiality, reliability, transparency and confidentiality. Methodological framework envisages joint rules for methodology, collection and dissemination of statistical data.
50 The 2021 European Commission report, available at https://ec.europa.eu/neighbourhood-enlargement/serbia-report-2021_en
51 The Multi-Stakeholder Dialogue report, Monitoring and enhancing quality of data on external migration, 16 September 2020, GIZ PMD Programme

the **Census of population, households and dwellings[52] planned in October 2022 is finalised.**

Another potential is the **Central Population Register.** The purpose of the Central Population Register is to have a uniform, centralised and reliable governmental database containing accurate and up-to-date data on the population of the Republic of Serbia in electronic form (data on citizens with residence in the Republic of Serbia and citizens without registered residence in the territory of the Republic of Serbia).[53]

Also relevant is the **data in the domain of home affairs and public administration recording different civic statuses (personal statuses) and maintaining various administrative registries.**

The Law on Temporary and Permanent Residence[54] regulates the registration and de-registration of temporary and permanent residence and registration of temporary residence abroad.

Citizens going abroad to stay abroad for up to 90 days without interruptions and extend their stay are obligated to report their temporary residence abroad exceeding 90 days to the competent authority, via a diplomatic-consular mission.

The established practice and positions of competent authorities show there is a realistic limitation of

these registries, as only a few people de-register their place of residence or change of residence and register staying abroad for more than 90 days.

The reasons include insufficient information held by citizens, inter-dependence with the social protection system and related rights, services in the domain of social protection, population policy measures, tax collection system, etc.

Relevant for the collection of relevant data could be the procedures for the issuance of travel documents as all citizens of the Republic of Serbia are entitled to a travel document.

In addition to police directorates of the Ministries of Interior in whose territory the citizen or the person applying for a passport resides, the request can be filed via a diplomatic and consular mission of the Republic of Serbia.

Based on the same principle, relevant sources of data can be found in the data maintained in citizen registers.

The Law on Registers[55] in several articles provides for the manner of maintaining registers at diplomatic-consular missions and exercising the right of registration in the registers based on the documents issued by foreign authorities.

Furthermore, certain existing data collection instruments could be adapted be serve for the collection of relevant data, as supplementary sources. For example, in the education domain, databases or data maintained by the Fund for Young Talents, Petnica, Tempus Foundation, etc. We should not forget the databases of persons awarded foreign scholarships – Chevening scholarships, Fulbright scholarships, Harvard Club, DAAD, etc.

In addition, there are databases of civic associations abroad like the Serbian City Club, Central Council of Serbs in Germany and the Organisation of Serbian students abroad. In that context, the data of the Office for Cooperation with the Diaspora and Serbs in the Region regularly publishing calls for support to associations could also be used. The Ministry of Labour, Employment, Veteran and Social Affairs can be a relevant source of data about the people working abroad via NES and data of the Migration Service Centers.

In addition, international organisations and civil society organisations independently or in cooperation with the Serbian Chamber of Commerce and Industry implement a large number of projects focused on establishing economic ties between the emigrants and their country of origin.

Hereby we would like to underline the importance of bilateral cooperation regarding the collection and exchange of emigration data. Keeping in mind that EUROSTAT statistics on the first residence permit in EU countries cumulatively indicates the number of

those who applied for residence for the first time and to whom residence was granted, and those changing the residence title, the data on the number of those who were indeed granted residence in one of the EU countries for the first time would be of major relevance.

One of the most frequently asked questions when applying for a visa and regulating residence pertains to whether a person has already had a regulated residence or applied for a visa. If this possibility actually exists, especially in countries that are traditional destinations for Serbian emigrants, we would be able to more accurately determine the annual flow of emigrants from Serbia.

If this piece of data would be available, the reasons for regulating the residence of new emigrants would be known annually thus providing the data about the ratio of new emigrants from Serbia in the destination country and the number of those changing the title/grounds for their stay in the EU.

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52 Law on amending the law on the census of population, households and dwellings in 2022("Official Gazette of RS No. 35/21).
53 Law on the Central Population Register ("Official Gazette of RS", No. 17/2019).
54 Law on Temporary and Permanent Residence of Citizens ("Official Gazette of RS", No. 87/11),
55 Law on Registers ("Official Gazette of RS", No. 20/2009, 145/2014 and 47/2018)

» Fostering return and circular migration

The approach applied so far by different stakeholders in Serbia was based primarily on fostering the return and circulation of the most educated members of the diaspora. This is understandable, having in mind that the dominant narrative in the past two decades was based on the issue of brain drain. The mentioned studies impose the need to launch a debate in Serbian society on the issue of return and circulation of emigrants with lower education status but possessing special skills.There is a wrong prejudice in the public that institutional solutions and programmes fostering return and circular migration do not exist. Contrary to that, this issue has been in the focus of governmental and international actors and civil society for quite some time.

The Economic Migration Strategy of the Republic of Serbia for the period 2021 – 2027[56] and its implementing Action Plan adopted for the period 2021-2023, approach the issue of return and circular migration in a more comprehensive manner – by creating conditions for monitoring, incentives and support to return and circular migration. The measures envisage the establishment and

institutionalisation of the return and circular migration programmes and their increased social promotion, and the development of mechanisms for regular monitoring of return and circular migration.

The Smart Specialisation Strategy in the Republic of Serbia for the period 2020 to 2027[57] foresees two measures that can contribute to establishing closer cooperation with emigrants: establishing a publicly available database/ map of scientific infrastructure and setting up a creative embassy in London as a new hub for the promotion of creativity and technological innovation from the Republic of Serbia, and strengthening the brand of Serbia as a destination with a strong creative industry and source of innovative products, services and companies.

The purpose of this multifunctional space is to enable exhibition and business infrastructure as a business incubator for individuals and start-ups entering the UK market, and to ensure strategic support for interaction with international organisations and individuals in the area of creative industries, science and arts.

The publicly available database/ map of scientific infrastructure ought to provide a publicly available database of available R&D infrastructure and information on the types of research conducted by the industry.

The National Youth Strategy for the period 2015 to 2025[58][59] contains several specific objectives focused on enhanced youth mobility, recognising the importance of raising the level of information, improving economic, cultural and administrative preconditions for mobility, strengthening the system for funding programmes and intensifying the use of Europass as a special instrument for recognition of qualifications acquired in non-formal and formal education via mobility.

As already outlined, the largest number of established programmes and initiatives are focused on stimulating

the return and circulation of the most educated members of emigration. Numerous programmes of academic and youth mobility and professional development could be identified in Serbia, same as the programmes targeting attracting experts, and strengthening ties between the diaspora and the country of origin to deliver various forms of economic activities.

Likewise, there are numerous initiatives in place dedicated to studying this phenomenon and creating databases based on different criteria. The implementers of activities are governmental institutions,educational institutions, international organisations and associations. However, it is questionable how consistent and mutually coordinated such programmes are, how their effects are being monitored and what are the prospects for their sustainability. (Jelačić, Petronijević 2018).

The Republic of Serbia has signed an **Agreement on Youth Mobility with the Government of the Republic of France** which entered into force on 1 June 2013. This Agreement regulates the following areas: further professional development, apprenticeship and posting staff abroad. The agreement is focused on promoting the mobility of undergraduate students, graduate students

and young experts, in addition to the exchange of Serbian and French experts 18 to 35 years of age, to allow them to enhance their professional careers and extend their knowledge on the country of destination, based on the working experience in the area of health care, social services, education, agriculture, crafts, industry, trade, freelance professions or services, etc.

56 The Economic Migration Strategy of the Republic of Serbia for the period 2021 -2027, "Official Gazette of RS", No. 21 of 6 March 2020
57 The Smart Specialisation Strategy in the Republic of Serbia for the period 2020 to 2027 "Official Gazette of RS", No. 21 of 6 March 2020

58 National Youth Strategy for the period 2015 to 2025, "Official Gazette of RS", no. 22 of 27 February 2015
59 The latest adopted Action Plan covers the period 2018-2020

Consequently, the majority of programmes address mobility. *The Fund for Young Talents of the Republic of Serbia* (www.fondzamladetalente.rs) was launched in 2008 to ensure the best undergraduate and graduate students financial support for studying abroad, and assist the best final-year undergraduates in Serbia to complete their studies.

According to the data of the Ministry of Youth and Sports, the Fund awarded over 35,00 scholarships of which 5,000 are for studying abroad. *The Science Fund of the Republic of Serbia* has launched a special programme for cooperation with the scientific diaspora.

Under the Programme targeting cooperation of Serbian science with the diaspora, 92 projects have been approved. The projects will be implemented in cooperation with R&D organisations coming from 22 countries around the world. The project will be implemented in partnership with researchers from the diaspora and their R&D organisations, and the total budget amounts to EUR 797, 591.[60]

At the same time, there are four science and technology parks in Serbia located in Belgrade, Novi Sad, Niš and Čačak. The oldest institution of this kind is the Science and Technology Park in Belgrade set up in 2015 which supported the accelerated development of more than 120 companies many of which were established by emigrants or in cooperation with emigrants.[61]

The Science and Technology Park in Belgrade also hosts the Business and Technology Incubator of Technical Faculties in Belgrade (BITF) and the Innovation Fund of the Republic of Serbia.

The Government of the Republic of Serbia made an additional effort to foster the return and circulation of the highly educated members of the diaspora, and additionally stimulate the employment of foreigners.

The Personal Income Tax Law (Article 15v) and Law on Social Insurance Contributions[62] (Article 15a) set forth a 70% lower tax and fringe benefits base for employment of returnees and foreigners, and the relief refers to new residents who have entered into an employment contract with domestic employer (in a job requiring special vocational education and the need which cannot be easily met in the local labour market).

The following requirements need to be met for this relief to be granted: a person was not predominantly residing in the territory of the Republic of Serbia in the past 24 months and the agreed monthly gross salary is above RSD 217,656.

The condition for the reduced base is for the person to register residence in the territory of the Republic of Serbia at the moment of employment or within a reasonable time after the employment, and meet the condition to be considered its tax resident based on the focus of business and life interests in the territory of the Republic, and its tax resident for the needs of executing the contract on avoidance of double taxation implemented by the Republic of Serbia with other countries.

At this moment there is no publicly available information about the effects of this measure given that it was adopted at the end of 2019. Informally we learn that the number of beneficiaries is currently two-digit. One should also take into account the fact that 2020 and the greater part of 2021 passed in addressing the consequences of the coronavirus pandemic which surely affected the effects of this measure.

This is the reason why the IT industry, as a growing and development-oriented industrial sector in Serbia, recognises in the best possible way the importance of young and talented people staying in the country and offers specific proposals for improving the business climate to motivate experts to stay in Serbia, namely their return and circulation.

In the document Global *Growth of Domestic Economy: how to unlock the next level,* the Digital Serbia Initiative offers several groups of proposals for enhancing the business climate.

"IT sector needs to be strongly supported in the coming period in implementing reforms focused on creating high value-added in the form of new intellectual property which will stay in Serbia, and on the provision of innovative services.[63]

The measures we propose target creating an enabling tax environment fostering the development of an economy based on knowledge and innovation, horizontal incentives for research, development and design of new products. Their goal is to stimulate companies to be competitive in the global market by

60 http://fondzanauku.gov.rs/program-saradnje-srpske-nauke-sa-dijasporom/
61 https://ntpark.rs/o-nama/
62 Law on Mandatory Social Insurance Contributions ("Official Gazette of RS", No. 84/2004, 61/2005, 62/2006, 5/2009, 52/2011, 101/2011, 7/2012 – adjusted RSD amount, 8/2013 -adjusted RSD amount, 47/2013, 108/2013, 6/2014 – adjusted RSD amount, 57/2014, 68/2014 – other law, 5/2015 – adjusted RSD amount, 112/2015, 5/2016 – adjusted RSD amount, 7/2017 – adjusted RSD amount, 113/2017, 7/2018 – adjusted RSD amount, 95/2018, 4/2019 – adjusted RSD amount, 86/2019, 5/2020 – adjusted RSD amount, 153/2020, 6/2021 – adjusted RSD amount., 44/2021, 118/2021 and 10/2022 – adjusted RSD amount)

63 Prime Minister in the Government of the Republic of Serbia, Ana Brnabić, Politika, 21 December 2021
https://www.politika.rs/sr/clanak/494994/Suficit-od-IT-sektora-gotovo-1-5-milijardi-evra

enhancing their business and to include the entire economy. The second important segment for the introduction of the proposed incentives implies that the business model reform can be implemented only by domestic employers, and they are faced with the high pressure of increased costs and **labour force emigration abroad.** We believe that the state should assist its economy to survive in this extremely unfair fight for global competitiveness."[64]

The proposed measures are categorised into 3 groups: assistance to domestic businesses in imposing themselves on the global market through innovation translated into the intellectual property in **domestic ownership** (proposal of the "Digital Serbia" Initiative with the support of "Digital Community"), support to **young and educated people** by offering them extra reasons to stay in the country and realise their talent in the best possible way (proposal of the "Digital Serbia" Initiative with the support of "Digital Community") additional support to **small businesses** to continue their growth and development in global market (proposal of the "Digital Serbia" Initiative with the support of "Digital Community").[65]

» Return and circular migration of low-skilled labour force with special skills

Unlike many programmes primarily focused on the return and circular migration of highly educated representatives of the scientific diaspora and successful individuals from the diaspora, Serbia does not offer programmes targeting circulation and return of the increasingly dominant group of emigrants – persons with lower qualification levels, but with special skills. GIZ programmes are an exception to this rule.

On behalf of the Government of the Federal Republic of Germany (BMZ), GIZ is implementing Global Programmes "Migration for Development" (PME) and "Migration and Diaspora" (PMD). Global PME Programme is a part of the broader initiative entitled "Return to New Opportunities (PPH).

Partners of both programmes in the Republic of Serbia are the Ministry of Labour, Employment, Veteran and Social Affairs (MoLEVSA), National Employment Service (NES) and Commissariat for Refugees and Migration (CRM). Both programmes offer comprehensive counselling at DIMAK Serbia– German Information Center on Migration, Training and Career.

DIMAK offers assistance to returnees from Germany and other countries in their social and economic reintegration in Serbia, and advisory services and information on regular migration.

DIMAK provides advice and support, while the topics covered include return and reintegration, professional orientation and job search in Serbia, a business start-up in Serbia, vocational qualifications and training, psycho-social support, information on the risks of irregular migration and conditions for regular migration, counselling in connection with the German Skilled Immigration Act and other relevant regulatory frameworks.

64 predlog.pdf (digitalnazajednica.org)
65 predlog.pdf (digitalnazajednica.org)

There are numerous reasons why this is the case. One of the reasons is that the expert public and relevant stakeholders are only becoming aware of this fact with new studies and findings indicating this new phenomenon of migration flows.

One part of emigration flows remains uncaptured by the researchers as it occurs in the so-called grey zone, by using the visa-free regime with the EU countries for engaging in income-generating activities requiring lower qualifications and special skills.

Another reason lies in the insufficient understanding of the motives of this segment of the Serbian labour force for emigration, which is important for the design of adequate measures and policies.

It is also a consequence of insufficient institutionalisation and coordination between different stakeholders and systemic response to this phenomenon.

The first of these reasons has already been covered in this report, therefore we will now address other reasons.

Emigration and *de facto* circular migration of low-skilled labour

After the introduction of the visa-free regime between Serbia and the EU at the end of 2009, Serbia soon faced the challenge of a rising number of asylum-seekers in EU countries, especially Germany.

Adequate accommodation, financial assistance and a relatively long process of deciding on applications were the sufficient motivation for the poorest members of our society to opt to embark on such a journey.

Using the visa-free regime to more easily access the asylum system was soon identified by the EU countries, which, in an ongoing dialogue with Serbia, requested a response from Serbian authorities.

Although still relatively high, the number of asylum-seekers from Serbia declined over time, proportionally to the acceleration of procedures upon their applications and reducing the level of the expected financial benefits.

However, applying for asylum in EU countries is not the only way to bypass procedures for free travel. The phenomenon which is increasingly observed in the public concerns the circulation of low-skilled workers staying in EU countries for the allowed 90 days over a period of 180 days, and during that time irregularly generate income by performing various jobs. There is no empirical evidence about this phenomenon, it is more taken as a generally known fact. There is no data about the number of these people, the income they generate, the length of their stay, etc.

They are not included in the official statistics in destination countries and it is almost impossible, apart from implementing qualitative research methods, to determine the characteristics of this phenomenon. At this moment, it can only be assumed that the motivation for this kind of irregular migration is similar to the motives of other workers with lower qualifications regularly leaving for EU countries.

Based on the interviews conducted during this study, the following facts were identified: their main motivation is quick income, but without quitting their job in Serbia (one of the respondents said he took a sick leave, while other used their annual leave).

Typical for all respondents was that they found jobs relying on the diaspora and their social contacts (painting the flats of expatriates or their offices, driving a truck or working on construction sites). In the period of 2 months, they earned between EUR 1500 and 2000, which is, in their words, almost double their regular pay.

During their stay they stayed with the expatriates and as a rule, did not have any extra costs as the food was also provided by the employer. The countries where they worked are Germany, France and Denmark.

According to the respondents, the workers they encountered were of different educational profiles, skilled and unskilled (known as manual workers), who were in Serbia working in occasional jobs, via youth cooperatives, in the construction industry.

The workers also include the formally employed, however, their structure is dominated by those working in Serbia in temporary and occasional jobs.

The main motive for leaving was a quick and relatively high salary compared to their income in Serbia. In proposing measures and designing public policies a focus should be on the motivation of workers with lower and higher qualification levels.

» Foreign workers as a part of the circular migration programme

The presented data undoubtedly shows that Serbia is faced with a declining working-age population due to emigration and an ageing population, which also affects the situation in the labour market and the competitiveness of its economy. One of how companies can overcome the shortage of labour force is by hiring workers from third countries.

This form of employment is becoming increasingly present in Serbia, especially in sectors employing seasonal and low-skilled labour – primarily in the construction industry and agriculture. The employment mechanism in this case involves mediation agencies. In this sense Serbia has a rather developed infrastructure, having in mind the popularity of agency-mediated employment (local labour force) in the past years. Agency employment suffered a considerable blow when the Law on Agency Employment, in force as of 1 January 2020, was passed. This law de jure equalises the status of workers employed via an agency with directly employed workers in companies who

were made less attractive to companies by agency employment. This change should unambiguously be interpreted as a positive one, as it substantially affects the quality and security of employment.

Moreover, this change opened space for the business model change and turning towards the import of a foreign labour force. According to the experiences of companies, this mechanism currently operates without any problems and companies are very satisfied with the workers ensured in this way. In terms of residence and work permits, companies outline their satisfaction with the NES procedures, while in fewer cases they are not satisfied by the work of the Ministry of Interior due to longer waiting times. Workers coming from Kazahstan, Turkey and India are very popular.

There are also some indications about the engagement of workers from Ukraine and Russia.[66] The total cost for companies of hiring workers in this way is only slightly higher than in the case of

hiring a local labour force. The study of IOM and UNDP implemented in 2021 shows that besides the willingness of 59.9% of companies participating in the study to engage migrants, one of the major recognised barriers is the lack of information about their qualifications (even 82.5% of companies are not familiar with them at all).

Likewise, the work of international organisations and civil society indicates that businesses are not sufficiently familiar with the legal procedures for their work engagement. Responding to the identified realistic needs, the Government of the Republic of Serbia and its competent authorities recognise the potential of labour migration of third-country nationals for economic development in the Economic Migration Strategy and its implementing Action Plan,[67] but also in the adopted incentives and announced legislative amendments. Additionally, high importance is attributed to activities focused on signing bilateral employment agreements with third countries mentioned here, the same as the Open Balkan Initiative[68].

In regard to adopted incentives, it is interesting to mention that they were defined to "treat" equally representatives of the Serbian diaspora,

the so-called returnees and foreign citizens whose engagement is needed in the Republic of Serbia.

Besides the measures envisaged in the Law on Personal Income Tax and the Law on Mandatory Social Insurance Contributions, in June 2022 a Decree was passed on the criteria for granting incentives to employers hiring newly settled persons in the Republic of Serbia.[69]

This Decree regulates more closely the criteria for awarding incentives to employers hiring newly settled persons in the Republic of Serbia in positions that are needed but cannot be easily filled in the domestic labour market.

The Decree defines a newly settled person for whom there is a need which cannot easily be met in the domestic labour market as a natural person who, in the period of 24 months prior to concluding an employment contract with the employer, was not residing in the territory of the Republic of Serbia more than 180 days, with whom the employer concluded an open-ended full-time contract and earns the agreed monthly basic salary in line with the labour legislation of minimum RSD 300,000.

66 Out of 42 interviewed companies, two employed workers from these two countries. These include several IT experts, translators and one administrative worker.

67 Action Plan for Implementation of the Economic Migration Strategy 2021-2023 – Activity 5.1.4. Promotion and regular evaluation of measures presented in the Guide to support measures for the development of innovative businesses, Activity 5.1. 6. Concluding bilateral agreements in the employment domain, Activity 5.1. 7. Developing an in-depth analysis on the opportunities of enaging foreign labour force in the Republic of Serbia.
68 More at: Otvoreni Balkan – šansa za regionalno tržište radne snage, Jelačić Kojić i Petronijević, 2022.
69 Decree on the criteria for awarding incentives to employers hiring newly settled persons in the Republic of Serbia ("Official Gazette of RS", No. 67/22)

The incentives are paid at the level of 70% of accounted and paid income tax for the newly settled person, in terms of regulations regulating personal income tax and 100% of accounted and paid fringe benefits for mandatory pension and disability insurance.

It is particularly important to mention that in the last quarter of 2021 Ministry of Interior and the Ministry of Labour, Employment, Veteran and Social Affairs have initiated amendments to strategic laws in the area of migration, Law on Foreigners, Law on Asylum and Temporary Protection and the Law on Employment of Foreigners.

An extremely positive solution was proposed in the text of the Working version of the draft Law amending the law on foreigners and in the text of the Working version of the draft law amending the law on the employment of foreigners liberalising the access to the labour market for a significant number of categories of foreigners, including asylum-seekers and those to whom asylum was granted, same as the fact that it envisages the introduction of a single work and residence permit.

Moreover, especially taking into account the identified trend of employing foreigners in seasonal jobs, due attention needs to be paid to regulating this issue in the announced amendments to the Law on Seasonal Employment.

» The motivation of emigrant workers in the framework of their qualifications

So far we addressed the dynamic of Serbian emigration and its spatial dispersion. The conducted analysis represents the main input for identifying the most wanted countries of destination for Serbian emigrants. By combining the data on the total number and annual inflow of migrants from Serbia, we have selected 15 European destination countries where people from Serbia go to live and work.

These include 13 EU countries (Germany, Austria, Italy, France, Slovenia, Slovakia, Croatia, Sweden, Hungary, the Czech Republic, Malta, Belgium and Poland) and two non-EU member states reporting to Eurostat (Switzerland and Norway). In the next step, specific parameters will be correlated with the relevant parameters of the listed countries.

The result of the comparative analysis will show whether and to what extent it is possible to explain the reasons why people leave Serbia based on economic reasons.

Before we dive into the comparative analysis, we will address the motives why people generally decide to move to a different country.

A more conventional approach to migration theory is rooted in the comparison of the costs and benefits of moving. In this model, there are 4 variables influencing the net result and decision on emigration: (1) circumstances in the country of origin; (2) circumstances in the destination country; (3) barriers between the countries and (4) personal reasons (Lee, 1966).

Given that exploring personal reasons calls for a comprehensive survey of potential emigrants and returnees, and that quantification of barriers between the countries requires individual consideration of each of the destination countries (due to different distances, immigration policy and diaspora development), these variables will not be the subject of the study. At the same time, we believe that the outlined variables play a secondary role, therefore the priority will be given to the first two variables – assessment of the push and pull factors influence.

Probably the most relevant summarised indicator of economic well-being in a country is the real gross domestic product per capita. In brief, income per capita represents a rough measure of the living

standard and as such can be categorised as one of the most important economic factors affecting the decision on emigration. With a real GDP per capita of ca. EUR 5,500 in 2019, the living standard in Serbia is a bit over 5 times lower than the EU 27 average[70].

A far more serious reason for concern than the 2019 value is the fact that the gap between Serbia and EU countries, i.e. top destinations, practically remained unchanged in the past ten years. Depending on the specific indicator, the gap was reduced by 1-2 percentage points only compared to 2019.

This continuous stagnation leads to pressure build-up which may represent a trigger for some people to leave the country.

We will start the analysis of individual factors by analysing **employment rates,** having in mind that the largest number of citizens depends on the outcomes in the labour market.

Although since 2013 Serbia registered a constant growth in employment rate, it is still lagging behind the EU average by 7 percentage points. Keeping in mind that the average employment rate for ages 20-64 in the top 15 countries amounted to 75.4% in 2019, the relative lagging of Serbia is even higher and equals 10 percentage points.

With an exception of Italy, the probability of employment in Serbia is lower than in any of

the destination countries. Although the probability of employment in destination countries is higher than in Serbia, this does not necessarily mean a higher probability for the employability of emigrants.

Still, although the situation is different in each country, generally the employment rates of "newcomers" are not significantly lower than the employment rates of the local population. Moreover, the research based on OECD quasi-micro data has shown that the employment rates of Serbian emigrants are notably higher than the employment rates of residents in Serbia (Arandarenko & Aleksić, 2020).

Besides the employment probability, the quality of jobs is also of major importance. The analysis of the quality of jobs was addressed in the previous chapter, however here we will undertake a short comparison of the precariousness of jobs in Serbia and reference countries. Although the precariousness of jobs is a much broader concept, Eurostat defines it as a share of workers with short-term contracts of up to 3 months in the total number of employees.

Designed in this way, in 2019 precarious employment amounted to 8% which is multiple times above the EU and destination countries' average (2.3%). A particularly low level of job precariousness is typical for old EU members states with a large stock of Serbian immigrants (Germany – 0.3% and Austria – 0.8%), but also all attractive new EU member states

registering a sharp inflow of immigrants from Serbia in the past several years (the Czech Republic – 0.2% and Slovakia – 1.5%).

The other side of the coin in the labour market is represented by **unemployment**. Its nature and dynamics hold more weight in the context of push factors than concerning pull factors.

However, potential emigrants considering leaving for sure take into account the difference in the unemployment risks in the country of origin and destination country.

The unemployment rate in Serbia registers record low values. In fact, in the year of the health crisis, it dropped to a single-digit level. However, this is still way above the EU average (6.6%), meaning that the unemployment rate in Serbia is more than double the 15 top destinations' average (4.9%).

Unemployment *per se* is a multidimensional indicator. Besides the number of unemployed (unemployment probability) high importance is attached to the data on the time needed to find a job. More than half of the unemployed in Serbia searched for work for 12 months or longer. Despite notable progress made compared to 2011 when ¾ of the unemployed were long-term unemployed, people in Serbia on average wait for work longer than in comparable countries (43% in the EU and 36% in top destinations).

The long-term unemployment episodes may lead to discouragement resulting in exit from the labour market. Instead of transitioning to a population outside the labour force (inactive population earlier), it would be realistic to expect that one part of workers leaving the labour market actually leave the country.

Motivation to exit the long-term unemployed – in one of the two mentioned forms – is corroborated by the last column in Table 3. Passive labour market policy in Serbia is not excessively inclusive, hence only 3.7% of the unemployed less than 12 months actually receive unemployment compensation.

On the other side, more than one-third of the reference unemployed[71] receive some kind of support for the unemployed in destination countries and the EU. Particularly interesting are the cases of Germany and Austria, countries with a traditionally large diaspora where almost $^2/_3$ of those who are unemployed for less than 12 months receive some kind of unemployment assistance.

In relation to this, if unemployment cannot be directly considered a pull factor, then such generous assistance to the unemployed surely can. It offers people who are leaving that even in the case of a job loss they can count on some kind of financial assistance.

70 https://ec.europa.eu/eurostat/web/products-datasets/-/sdg_08_10

71 This is not necessarily comparable with the unemployment compensation as exists in Serbia and depends directly on the payment of contributions.

Table 15. Selected unemployment indicators in population 20-64 in 2019 (%) for Serbia and top destinations in 2019

20-64	Unemployment rate	Long-term unemployment rate	Percentage of the unemployed receiving allowance/benefit for the unemployed less than 12 months
EU 27	6.6	43.3	39.1
Belgium	5.2	45.1	52
Czech Republic	2	30.9	43.5
Denmark	4.7	18.7	53.2
Germany	3.1	39.6	67.4
France	8.1	41.3	49.7
Croatia	6.4	37.3	13.7
Italy	9.9	57.9	26.6
Hungary	3.2	33	28.8
Malta	3.3	26.3	16.7
Austria	4.7	26	60.9
Poland	3.2	22	12.8
Slovenia	4.4	43.8	28
Slovakia	5.6	59.3	25.5
Sweden	6	17	25.2
Switzerland	4.3	36.2	43.3
Serbia	10.6	51.7	3.7

Source: Eurostat

The most frequently mentioned factor in expert and public debates on migration is certainly **salary**. There is no doubt that working conditions, labour rights, working hours, type of contract, professional status and many other elements of employment quality are relatively important in selecting a job. However, the most visible and decisive factor in accepting or turning down a job offer is surely salary.[72]

Average gross hourly earnings in the destination countries are even 4.5 times higher than in Serbia. In developed countries, earnings are even between 6 and 11 times higher than is the case in Serbia. The use of international PPP dollars used to reflect the differences in living standards improves the picture just a bit. By controlling these differences, earnings in destination countries are on average 2.5 times higher than in Serbia. Earnings in Serbia are in this case as well the lowest of all observed countries and the pay ratio value ranges from 1.4 in Hungary and Slovakia, to 3 in Germany, Denmark and Switzerland.

Relatively stable differences in earnings which persist even after paying the rent in the destination country and including the cost of living point to the presence of strong incentives for emigration. This is particularly contributed by a drastic price increase in the real estate market in Serbia which led to the situation that although pay in Germany is on average 6 times higher than in Serbia, the flat rent in Germany is only ca. 2 times higher than in Serbia. The deepening of differences due to the increased cost of living was affected by the recent inflation caused by the health crisis which raised the prices of basic foodstuffs and market basket value, thus making staying in Serbia relatively less cost-effective.

In this case, an additional problem is reflected not only in the level of pay but also in its trends in the past decade. The market recovery after the economic crisis was characterised by energetic employment growth not accompanied by the pay rise. This was additionally supported by fiscal consolidation measures due to which salaries in the public sector were reduced, and minimum wage was frozen on multiple occasions.

A combination of these factors influenced the earnings, with modest nominal growth, registering only negligible real growth. Actually, the major portion of this growth was realised after 2017, primarily due to the annual increase of salaries in the public sector and the de-freezing of minimum wage. This was also visible in the 2014 SES data. Over a four-year period, the average wage in Euros was increased by only 0.3, while the average pay expressed in international dollars dropped by even 0.03PPP$.

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72 The relative position of Serbia in terms of pay will be determined relying on an internationally comparable research implemented every four years in all EU countries, EFTA countries and candidate countries. This is Structure of Earnings Survey (SES) in which enterprises in addition to the data on the level of pay also provide data on relevant demographic characteristics of employees and job features. Serbia has been participating in thus survey since 2014, while the last available data is from 2018.

The famous model developed by the economist Roy in the last century shows that the workers most likely to emigrate are those reaping the most benefits from migration measured by the added education/qualification yield rate (Roy, 1951).

So for example, if the yield rate for low-skilled workers in the country of origin is relatively lower than in the destination country, low-skilled workers will leave the country and vice versa. Since exploring the education yield rate calls for a comprehensive microeconomic approach for each destination country, to come to an approximate value we will use the pay ratio based on the education level in top destinations and Serbia.

Observed in this way, the emigration will on average most benefit workers with medium and low education, given that the average gross pay in the top 15 destinations equals 4.7, or is 4.6 times higher than in Serbia. The piece of data showing that the smallest relative benefit of emigration was registered in the highly educated, sheds new light on the brain drain phenomenon and incentives for the emigration of the highly educated.

Of course, one should not overgeneralise as these are average values for the top 15 countries.

The relationship between the pay levels and educational profiles in individual countries differ considerably, therefore the countries with a relatively high premium for the highly skilled will be more attractive to persons holding this education level.

Persons holding university degrees in Serbia will have the strongest incentive to emigrate to Germany, given that the pay ratio for highly educated (6.2) is higher than the average pay ratio for this country (5.8).

Moreover, Germany is the only country where the pay ratio for the highly educated more significantly deviates from the average in a given country.

On the other side, Scandinavian countries are relatively the most cost-effective for low-skilled workers as the pay ratio for them in Denmark and Sweden amounts to 9.3 and 7.0 which is considerably above the average and especially above the ratio for highly educated workers 7.3 and 4.9. Finally, Austria and Malta are the countries which could be most attractive to persons with secondary education, since the relative pay increase due to emigration into these countries is the highest for this education level.

The mentioned orientation of specific groups of workers is based on potential benefits and does not need to necessarily materialise in practice. A good example of this is found in the findings of a study exploring the pay of immigrants who arrived in Germany based on the so-called Western Balkans

Regulation. It turned out that immigrants' pays are on average only 20% higher than the minimum wage in Germany (Brücker et al, 2020).

The potential benefits of emigration could be observed from the perspective of different occupations. The largest gap in gross wages between the average in the top 15 destinations and Serbia is notable in the case of managing staff (directors/managers), officials and legislators, which is to be expected based on the relatively high earnings of these profiles globally.

Particularly important is a relatively high pay gap in service and trade occupations taking up a significant place in the Serbian labour market based on the number of workers.

On the other side, the least potential benefits of emigration are on average attributed to administrative workers and agriculture, forestry and fishery workers and related occupations.

In regard to the groups of occupations, relatively higher potential benefits than non-physical workers are on average enjoyed by physical workers, given that their pay in the top 15 countries is ca. 4.5 times higher compared to Serbia, versus the ratio value of 4.3 applicable in the case of non-physical workers.

Among physical workers, somewhat greater benefits of emigration could be on average realised by qualified physical workers as the observed pay gap in their case is somewhat higher compared to non-skilled physical workers.

The differences in the pay gap by occupations significantly vary among countries, hence the incentives to emigrate differ from country to country. For example, Denmark is especially cost-effective for skilled physical workers, while the greatest incentive for moving to Sweden is offered to those engaged in services and trade. On the other side, Germany is very cost-effective for craftsmen and related occupations.

It is important to mention that besides the high level of international comparability, SES provides extremely accurate information on the primary labour market.

The sample is designed not to include companies with less than 10 employees, the same as companies operating in the shadow market, which extensively overlaps with the secondary labour market. It is quite understandable that earnings in the secondary market are considerably lower than in the primary market.

Given that the secondary labour market is far less present in destination countries than in Serbia, actual differences in earnings are probably greater than shown in the stated numbers.

If we take into account median pay which amounted to RSD 51,782 in January 2022, which implies that exactly 50% of the employed had lower earnings than 75% of average pay, the benefits of emigration become even greater.

Besides the probability of working for low salaries generally, workers employed in specific business activities are found in an especially disadvantaged position. Construction workers are in a relatively most unfavourable position in relation to the average in the top 15 destinations.

Besides the fact that the probability of low salaries in this sector is ca. 30%, construction workers in Serbia have up to 2.1 times higher probability of earning low salaries compared to their peers in selected destinations. The activities belonging to the same

category based on this criterion are the manufacturing industry and transport and storage. Particularly interesting is the low share of workers with low wages in the manufacturing industry registered in the new EU member states.

Having in mind the relative risk of low wages by occupations, it should not come as a surprise that a large number of industrial workers leave to work in Slovakia and the Czech Republic, many construction workers go to Austria and Germany, same as drivers leaving to Scandinavian countries.

A combination of employment rates and earnings allows us to approximate the expected pay in destination countries and based on that, more accurately assess the expected benefits of emigration. Since employment rates and earnings are considerably higher in destination countries than in Serbia, their mutual interaction additionally strengthens the previously assessed benefits of emigration.

Taking into consideration the employment rate increases the average wage ratio from 4.5 to 5.1. Previously it assumes that the expected earnings in destination countries are on average 5.1 times higher compared to earnings in Serbia. Particularly attractive is Switzerland where the expected gross salaries

are up to 13 times higher than in Serbia. Even more, interestingly, there is almost no country among the top 15 destinations where the expected gross salaries are not at least double than that in Serbia.

The expected benefits of migration according to education levels remain unchanged even when large differences in employment rates are considered. Moreover, the relative cost-effectiveness of emigration for those with secondary schools becomes even more pronounced, given that the expected gross salaries in top destinations are ca. 5.5 times higher than in Serbia.

The corresponding value of the ratio for low-skilled workers equals the value for the entire population

(5.1), whereas the relatively lowest benefit of emigration is enjoyed by highly skilled workers, given that the expected salaries in reference occupations for this education level are "only" 4.6 times higher than it is the case in Serbia.

Certain authors point to a strong negative correlation between the pay gap level in the country of origin and income in the destination country (Borjas, 1987; Abramitzky et al, 2012).

This primarily implies that if a high pay gap exists in the country of origin, the income of the people leaving to work abroad will be relatively low (compared to the distribution of income in the destination country) and vice versa. The final implication of this theory is that emigrants from countries with high-income inequality are mostly low-skilled workers, located in the left part of the income distribution.

Consequently, since the workers with a limited income-generating potential are coming to the destination country, their income in the destination country is relatively low.

This is quite expected as high inequality relatively more affects those with low income. If we accept

the applicability of the logical syllogism that high pay inequality primarily motivates the low and middle class to emigrate from the country, we once again re-confirm the thesis that push factors in Serbia are relatively weakest for highly educated people.

Although the pay gap is mostly seen as the most relevant push and pull factor, it does not necessarily have to be the main cause of emigration in all groups of workers. Dominant factors may differ even within the same activity. The best example of this is the case of the emigration of medical workers.

Certain authors outline that the basic motive for specialist doctors leaving Serbia for Germany is not low pay in Serbia or high salary in Germany. In their case, much greater importance is attributed to the difference in working conditions in both countries (Krstić & Ljubičić, 2015).[73]

Actually, due to the indicated reasons, this should not be generalised, but rather when considering the causes of why different groups of workers leave the country one must take into consideration their personal idiosyncrasies.

The findings of a recently conducted comprehensive study based on a sample of over 11,000 students

73 Specialist doctors mainly leave because of inadequate equipment, low medical technician per doctor ratio, excessive patient load per doctor, etc. On the other side, the main cause of medical technicians' leaving, at least prior to the COVID-19 pandemic outbreak was high unemployment, especially in rural environments, and only then low salaries. Of course, in the high-demand professions globally, like IT experts, work conditions and unemployment in Serbia do not play a dominant push effect in the emigration decision. These workers perfectly fit into the traditional pattern based on which several times higher salaries and greater opportunities for acquiring knowledge and promotion represent a lead motive for emigration.

indicated that even one-third of them wants to leave the country (Group of authors, 2018).

After they have completed their studies, the majority of students plan to search for better living conditions in Germany (24.2%), and only then in the United States of America and Switzerland (ca. 10% in both cases).

The percentage of students who wish to leave the country fully agree with the perception of the entire population obtained based on the annual survey of positions of people in the Western Balkans (Group of authors, 2019). The results of the Barometer show that at the level of Serbia, 33% of respondents consider leaving abroad to work.

However, out of those who said they would like to go, even 56% are thinking about it, while the rest had taken serious steps or even know the exact date of departure.

Answers to the questions concerning their motives for leaving the country fully confirm our thesis on the importance of economic factors in deciding on emigration.

So for example, out of all students who stated their desire to leave the country, 27% would do so due to the inability of finding a job in their profession, 21% due to low pay in their profession, and 20% is not satisfied with the living standard.

Non-economic motives for emigration were much less present, like corruption, employment using

connections, party-based employment and getting to know other cultures. It is quite interesting that the fewest students (under 4%) circled the answer "Inability of finding any kind of a job" as their reason for leaving.

This result implies that based on the perception of the students, there is a sufficient supply of jobs in the country, still, in case they would stay in the country, they would be forced to do a job requiring a lower level of qualifications than the one they have and/or take up a job outside their profession.

» The importance of institutional response

Although the motivation of potential emigrants from Serbia towards the developed countries in Europe and globally provides a very clear picture of the importance of economic and social factors stimulating migration flows, it would be wrong to conclude that migration policy interventions and stakeholders in the migration governance system do not have a place and a role to play in addressing this phenomenon.

Same as it is wrong to believe that emigration issues could be addressed exclusively via migration policies, it is equally wrong to believe that the institutional response of stakeholders in the migration governance system could not contribute to understanding, monitoring and altering these trends.

Contrary to that, many comparable experiences to be discussed later, show that the migration governance system stakeholders play a very important role in monitoring migration flows, protecting the rights of emigrants in destination countries, involving diaspora in development projects in the country of origin, fostering circular and return migration, etc.

Strategic and legislative competences of stakeholders in Serbia were the subject of many analyses, hence

here we would like to stress the importance of key operational structures that need to be additionally empowered and supported. At the same time, we will demonstrate the significance of political coordination and institutionalisation.

The Ministry of Labour, Employment, Veteran and Social Affairs is, inter alia, responsible for exercising the right and protection of employment rights of workers temporarily working abroad and posting employees abroad; records in the area of labour and employment; cooperation with international organisations in the area of labour and employment; international conventions in the area of labour and monitoring the situation and trends in the local and international labour markets.

The National Employment Service is the implementer of employment tasks under the Law on employment and insurance in the case of unemployment, which inter alia implies employment mediation in the country and abroad. The legal opportunity for establishing employment agencies as an implementer of employment tasks has also been introduced in Serbia. In that sense, National Employment Service represents the most important operational institution in the context of the emigration of the local labour

force, also hosting Migration Service Centers. The network of migration service centres under the National Employment Service provides **information, individual assistance and advice to migrants and potential migrants, information on the risks of irregular migration and the employment opportunities in the scope of regular migration.** Migration Service Centers are not mediators in employment abroad, but this competence belongs to the NES, line ministry and legal private employment agencies.

The Center also refers interested parties to competent local institutions with a view of enhancing individual knowledge and skills for facilitated navigating and exercising rights and improving employment prospects in the country and abroad. Information refers to the procedures for issuing visas, work and residence permits, access to health protection, education and studies abroad, and all necessary contacts concerning migration.

The Migration Service Centers started operating in mid-2008, and now are present in several towns across Serbia (Belgrade, Bor, Niš, Novi Sad, Novi Pazar, Kraljevo, Kruševac). Still, Migration Service Centers are faced with many challenges in their work.

One of the most important ones is the fact that the centres are not systematised within the NES structure, which practically means that employment advisors, in addition to their regular duties, have an extra duty in exercising the purpose of the centres. Being aware of the importance of migration flows and citizens' interests, there is a need to systematise

the work of the centres in the NES organisational structure. A positive aspect is that the Action Plan for the period 2021-2023 implementing the Economic Migration Strategy envisages an activity focused on extending the scope of work and establishing a new MSC under the National Employment Service.

An even more important role of the centres in the future implies more complex operational work. In addition to their significant role in informing potential migrants, relevant for the emigration flows monitoring system is also a piece of information about whether the interested parties have taken steps and departed for desired destinations.

This piece of data is important for several reasons: establishing a register on the citizens who went abroad to work, including their educational structure, gathering information about the destination country and the type of work the person is hired for, involved employment mediators, preparing comprehensive information for diplomatic-consular missions aimed at protecting the rights emigrants in destination countries, etc. All this data would have to be collected in accordance with the Law on Personal Data Protection.

Further direction of the work reform is an important content of their work, before making a final decision on emigration, but after concluding a contract with a foreign employer.

The second segment of the operational approach to stimulating circular and return migration implies

understanding the needs of the diaspora and potential emigrants. Taking into consideration the history of emigration from Serbia towards the EU and overseas countries, it is not difficult to conclude that the number of our emigrants is increased by the second and third generations of emigrants, which calls for new, modern and innovative approaches to younger members of our diaspora.

Taking into account the overall digitalisation of social and private lives, establishing and promoting circular and return migration programmes are, as a rule, linked with the availability of websites, and active use of social media, namely faster and more efficient exchange of information.

The Economic Migration Strategy under Activity 4.1.1. assumes the formation of a central information online destination for the Serbian diaspora. However, a question arises as to how and in what way to structure such a portal, namely, what kind of content the portal is to offer.

Comparable experiences differ, but a good example is the activity of the Polish Government which has already established the diaspora information portal.

The information portal enables the interested parties to ask questions about all formal and legal aspects of return, such as enrollment of children to schools, issues about tax liabilities, health insurance, recognition of foreign certificates and documents, etc.

Interestingly, the portal offers psychological support to returnees to prepare them best possible for their return to Poland.[74]

The future **online destination** in Serbia must provide these types of practical knowledge to returnees.

This implies daily updates and enough human resources to provide potential returnees and circular migrants with timely information.

Simultaneously, by doing so the state demonstrates a serious intention to address the needs of returnees in a comprehensive manner, which is crucial for building trust. Being aware of the heterogeneity of the diaspora and diversity of emigrants' needs, online destination by all means needs to consolidate key information on the ongoing circular and return migration programmes and activities of key stakeholders in the migration governance system (for example, of the Science Fund or Ministry of Economy), but it also holds the potential to link different portals and websites and offer to users, in a transparent manner, all opportunities for the engagement of emigrants.

74 https://powroty.gov.pl

The efforts of Serbia to improve its migration governance policy both in the context of emigration and immigration, need to be considered in the light of European integration of the country. In that respect, extremely important are the preparations for harmonisation of the National Employment Service work with the European cooperation network of employment services (EURES).

The 2021 Serbia Progress Report states that the National Employment Service has continued with preparations for joining EURES, especially by organising training on the topic of EURES for its staff in migration centres and by upgrading its information system.[75] Since its establishment, EURES has been continuously working on ensuring equal opportunities to European citizens despite language barriers, cultural differences, bureaucratic challenges, labour law differences and insufficient recognition of qualification certificates. According to the latest data, EURES represents a base of 3 million jobs,

archives 900,000 CVs and gathers around 4,000 employers.[76]

This mechanism of linking supply and demand concerning the European labour force could be considered in light of our specificities. According to the UNDP study (2021), domestic employers expect the support of the diaspora concerning the following: placement of goods and services on the international market, including business connections and contacts, recommendation, mediation and networking and mutual promotion, transfer of knowledge, experience, ideas and innovative technology, investments in new jobs, knowledge and technology, local economy, manufacturing facilities and programme, into agriculture programme, sustainable development, environmental protection, the establishment of equity funds, cooperation in manufacturing and extension of production, the establishment of venture capital funds, start-ups, small and medium-sized enterprises, opening new jobs and employment.

The next important mechanism is connected to the **signing and implementation of agreements on employment and social insurance.** Serbia entered into agreements fostering mobility and/or

security of Serbian citizens in access to employment and exercising rights in the area of labour and social insurance in host countries.

75 The 2021 Serbia Progress Report, p.93..
https://www.mei.gov.rs/upload/documents/eu_dokumenta/godisnji_izvestaji_ek_o_napretku/izvestaj_ek_oktobar_21.PDF
76 https://ec.europa.eu/eures/public/index_hr

Serbia entered into agreements fostering mobility and/or security of Serbian citizens in access to employment and exercising rights in the area of labour and social insurance in host countries. In addition, the Republic of Serbia has signed **agreements on the avoidance of double taxation with 63 countries.[77]**

Employers from the Republic of Serbia can post their employees to temporary work in the FR of Germany based on the Agreement between the Federal Executive Council of the SFRY Assembly and the Government of the Federal Republic of Germany on the posting of Yugoslav workers of organisations of associated labour from the SFRY and their employment in FR of Germany, based on the works contract[78] (posting agreement).

Under the inter-governmental agreement, companies registered in the territory of the Republic of Serbia performing activities in the area of construction, manufacturing and metal processing, installation, insulation, agriculture and forestry, mining, restoration and meat industry, are entitled to participate in the re-distribution of employment

contingent (quota) in FR of Germany in the current posting year. In 2019, the Republic of Serbia adopted the Decision on the allocation of the determined maximum number of posted employees from the Republic of Serbia to the Federal Republic of Germany. [79][80]

The Agreement between the Government of the Republic of Serbia and the Council of Ministers of Bosnia and Herzegovina on the fixed-term employment of citizens of the Republic of Serbia in Bosnia and Herzegovina and citizens of Bosnia and Herzegovina in the Republic of Serbia was concluded in 2011 are covers citizens of the Republic of Serbia and citizens of Bosnia and Herzegovina with permanent residence in the territory of one of the parties they are citizens of, resident fixed-term in the territory of the other party and members of their families.

A migrant worker, for the needs of implementation of this Agreement, is a person who is a citizen of one country party to the agreement, who legally resides and temporarily works in the territory of another party, however without permanent residence in the latter.

77 The list and texts of the agreements are available of the website of the Ministry of Finance,
https://www.mfin.gov.rs/propisi/ugovori-o-izbegavanju-dvostrukog-oporezivanja
78 Agreement between the Federal Executive Council of the SFRY Assembly and Government of the Federal Republic of Germany on the posting of Yugoslav workers of organisations of associated labour from the SFRY and their employment in FR of Germany, based on the works contract-"Official Gazette of SFRY – International treaties", no. 11/89
79 The text of the Decision available at: http://demo.paragraf.rs/demo/combined/Old/t/t2019_09/t09_0057.htm
80 According to Article 2 of the Decision, Serbian Chamber of Commerce and Industry allocates the determined maximum number of posted employees in the FR of Germany to companies, sets criteria for approval of the employees' contingent allocation, issues consent for the award of the employees' contingent based on the works contract in the FR of Germany, maintains adequate records on the contingent allocation and oversees its implementation. In addition, the Decision envisages detailed conditions that have to be met for implementing the Agreement and referring posted employees to the FR of Germany.

In 2018, the Republic of Serbia adopted the Law ratifying the Agreement between the Government of the Republic of Serbia and the Government of the Republic of Slovenia on the employment of citizens of the Republic of Serbia in the Republic of Slovenia.[81]

This agreement sets forth the conditions and the volume of employment of citizens of the Republic of Serbia in the Republic of Slovenia, conditions and procedures for issuing permits enabling employment, the rights and obligations of employers and migrant workers; stimulating integration processes for inclusion in the labour market and society in the country of employment, manner of information exchange between the competent implementers of this agreement, conditions for the return to the country of employment, monitoring and supervision of the implementation of this agreement by competent authorities.

Unlike the Agreement signed with Bosnia and Herzegovina, provisions of this agreement do not include members of the migrant worker's family and it defines in more detail the qualification recognition procedure, and conditions for the return to the country of origin and subsequent work in the Republic of Slovenia. In 2021 and 2022 the ministry in charge of labour, employment, veteran and social affairs announced negotiations on the signing of similar employment agreements with Malta and Qatar.[82]

These agreements represent a legal basis for the protection of the rights of Serbian emigrants which is, as a rule, the responsibility of the diplomatic and consular missions of the Republic of Serbia. However, there are several challenges to be outlined.

First, diplomatic-consular missions do not possess adequate records on Serbian emigrants in destination countries. This is certainly connected with the issue of external migration monitoring for the already mentioned comprehensive institutional monitoring of emigration flows.

Still, a key issue is to what extent are these agreements actually being implemented in the context of the role of authorised employment mediators abroad.

Such a mediation role should be played by the NES and licensed agencies, however, a trend was identified that a considerable number of emigrants are getting in contact with a foreign employer at their own discretion and entering into employment contracts. Such a situation increases the risk of human trafficking and labour exploitation.

Third, in destination countries, our diplomatic-consular missions do not have enough human resources but are still expected to provide adequate support and protection to employed workers from Serbia.

The Republic of Serbia has concluded **bilateral agreements with almost all European countries and certain non-European countries on social insurance.**

These agreements cover the transferability of social insurance thus ensuring the capacity of workers to preserve, maintain and transfer acquired social insurance rights.

International treaties on social security or social insurance, as the so-called coordination instruments, ensure coordinated implementation of national legislation of signatory countries in the area of social insurance which: guarantees equal treatment to citizens/ insurees of both parties in line with national legislation, determines applicable legislation (rules based on which it could be precisely determined whether in the specific case legislation of one or the other party is to be applied), ensures the preservation of vested rights and guarantees payments (transfers) in the case of change of the place of residence and moving to another party.

Bilateral agreements on social security/insurance have been signed with 30 countries: Austria, Montenegro, Belgium, the Netherlands, Bosnia and Herzegovina, North Macedonia, Bulgaria, Norway, Cyprus, Canada, Panama, Croatia, Poland, Czech Republic, Romania, Russian Federation, Denmark, Slovakia, France, Slovenia, Germany, Sweden, Hungary, Switzerland, Italy, Turkey, Libya, United Kingdom, Luxembourg.[83]

The implementation of operational priorities simultaneously calls for a high level of **inter-institutional cooperation.**

In February 2019, the Government of the Republic of Serbia formed a Coordination Body monitoring flows in the area of economic migration, and as of November 2021, Working Group was established for the implementation and monitoring of the Economic Migration Strategy of the Republic of Serbia 2021-2027 and Action Plan implementing the strategy for the period 2021-2023.

Both bodies include relevant governmental authorities, represented at political/ operational levels. **The Ministry of Education, Science and Technological Development** is responsible for the national qualification framework, i.e. for the standardisation of qualifications.

The National Qualification Framework is one side relevant for the link between the learning outcomes or education and the labour market.

Inter alia, the Ministry is responsible for the system, development and improvement of research and development serving scientific, technological and economic development; proposing and implementing policies and strategies of scientific and technological development; determining and implementing scientific, technological and development research programmes; professional development of research

81 Law ratifying the Agreement between the Government of the Republic of Serbia and Government of the Republic of Slovenia on the employment of citizens of the Republic of Serbia in the Republic of Slovenia. "Official Gazette of RS – International treaties", No. 9 of 2 July 2018
82 More at: https://www.srbija.gov.rs/vest/579796/sporazum-o-zaposljavanju-sa-maltom-od-velikog-znacaja.php,
https://lawlife.rs/index.php/aktuelno/49-aktuelno-pravo/204-najava-potpisivanja-sporazuma-o-zaposljavanju-sa-drzavom-katar

83 Mora at: https://www.zso.gov.rs/medjunarodni-ugovori.htm

and development staff; proposing and implementing innovation policy.

It should also be stressed the relevance of the **Ministry of Finance** approving the budget for the implementation of migration and key sector policies. An important segment of public administration in the migration governance system is the **Commissariat for Refugees and Migration.**

In accordance with the Law on Migration Management, the Commissariat performs the tasks related to proposing to the Government the goals and priorities of migration policy; proposing to the Government measures to achieve the positive effects of legal migration and combating illegal migration; monitoring the implementation of migration policy; providing the state government, autonomous regions and local government data relevant to the development of strategic documents in the field of migration; proposing projects in the field of migration management within the scope of their work and the preparation of the annual report to the Government on the situation in the field of migration management.

The Action Plan foresees very demanding activities of the Coordination Body, such as coordinating and directing the work of public administration authorities concerning economic migration, continuously informing on the course and effect of the strategy and relevant action plan implementation, including the concept of

economic migration in development policies at all decision-making levels.

Each of these activities, and especially embedding economic migration as a public policy option, calls for considerable human capacities and ongoing knowledge improvement.

» Key conclusions and recommendations

This analysis unveils the complexity of the migration phenomenon: **the complexity of statistical monitoring, the importance of quantitative, but also qualitative migration studies, the necessity of understanding the motives underlying migration trends,** the importance of a comprehensive, coordinated institutional response of the state, however, it primarily underscores the inter-dependence between the migration policies and situation in different sectors of social and economic development.

In that sense, the policy-makers need to understand the paradox of migration flows. Migration, as shown in the example of Serbia, depend less on migration policies, and more on the situation in the overall economic and social sectors.

The analysis undoubtedly confirms the economic theory of migration and the causal link between the desire for higher pay, better working conditions and other economic and social benefits in destination countries and emigration from Serbia.

These are extremely strong pull factors, which realistically affect the emigration of low-skilled labour, with special and needed skills.

Although not dominant anymore, still important for Serbia is the phenomenon of high-educated labour mobility, who in addition to higher wages, also recognise better working conditions and professional development and advancement opportunities abroad.

Serbia, which demonstrates progress in economic development in all segments, needs to continue fostering mobility, and develop circular and return migration programmes, but also to consider immigration as a factor to compensate for the labour force deficit far before circular and return migration.

Unlike the measures stimulating the return and circulation of the highly educated, the programmes targeting the return circulation of low-skilled labour with special skills have not yet been recognised as a priority.

An additional effort needs to be invested to understand and learn about the phenomenon of circular and return migration of persons with lower education to design efficient and timely policies.

In that sense, the Economic Migration Strategy of the Republic of Serbia represents a valid basis for the management of very intensive migration flows.

Taking into account that the adopted Action Plan covering the period 2021-2023 envisages a range of activities to address specific issues discussed in the analysis, it is of immense importance that these activities are efficiently implemented.

At the same time, the implementation of activities and monitoring of effects ought to be used to define future interventions for the next cycle of operationalisation of the Strategy through the adoption of the new implementing action plan.

The recommendations resulting from this analysis should be considered at these two levels: first, focused on deepening the activities defined in the Action Plan, and second, making proposals for interventions to be further considered in the next action plan preparation process.

RECOMMENDATIONS:

☑ Bearing in mind the increasingly dominant approach in using the source of data of destination countries, i.e. EUROSTAT, it is immensely important to enhance bilateral cooperation with destination countries in **gathering as much as possible accurate and comprehensive data on emigration from Serbia** in line with activities 1.4.1 and 5.1.3 in the Action Plan.

☑ It is important to consider the possibility **include activities focused on enhancing cooperation** with representative offices of chambers of commerce, institutes and other institutions in foreign countries **more in the projects supported by international organisations and bilateral donors.** It is particularly important to adopt the **Law on Official Statistics as soon as possible and implement the planned Population Census** in line with the EU legislation and international standards.

☑ Besides improving quantitative data, it is especially important to plan and conduct targeted **studies to collect qualitative data.**

☑ In order for the results of such studies to be used as much as possible for planning, implementation and monitoring implementation of adopted public policies and measures targeting emigration, it would be desirable to **strengthen cooperation**

and coordination between the competent governmental authorities and researchers and representatives of academia.

☑ It would be desirable to start as soon as possible implementing activities laid down in the Action Plan (5.2.2) envisaging **conducting a baseline study and drafting a three-year plan of studies on circular and return migration.**

☑ Due to the identified specificities, it would be important to determine in the baseline study methodology the **key parameters and indicators referring to highly educated profiles, but also people with lower level qualifications possessing special skills.**

☑ It is important to recognise the **potential of the concluded bilateral agreements on employment, mobility, social insurance, etc. which could represent an important source of data on emigration.** Monitoring the effects of these agreements may also contribute to the process of planning interventions of different levels and characters of the country of origin focused on emigration.

☑ In line with Activity 5.1.6 in the Action Plan, the activities need to be continued concerning the **signing of the employment and social insurance agreements** with countries in which emigrants from Serbia reside, but also with countries of origin of the growing number of immigrants to Serbia.

In that sense, it would be important to enter into such agreements with Russia, Guatemala, Indonesia, India, Vietnam, and Bangladesh, but also to conclude an agreement on social insurance with Albania.

☑ Pursuant to Activity 5.1. in the Action Plan, the **drafting of a detailed analysis of opportunities for engagement of the foreign labour force in the Republic of Serbia needs to be initiated as soon as possible.** At the same time, additional analyses need to be undertaken about the countries registering a surplus in occupations needed in the Serbian labour market.

☑ It is also desirable to **continue as soon as possible with the work launched on drafting the proposal for amendments and supplements to key laws** regulating the treatment of different categories of foreigners and opportunities for their work engagement in the Republic of Serbia.

☑ **A comprehensive impact assessment of measures taken to date focused on the return and circulation of highly educated emigrants ought to be published** as soon as possible. The analysis needs to include the outputs and outcomes of projects supported in cooperation with the diaspora by the Science Fund or on the effects of amendments to the Personal Income Tax Law and Law on Social Insurance in line with activities 5.1.4 and 5.1.5 in the Action Plan.

☑ The **activities aimed at the promotion of incentives for the newly settled** need to be intensified, especially in regard to companies, but also diaspora and citizens of third countries by including the Chamber of Commerce and Industry, Regional Development Agencies, diplomatic-consular missions of the Republic of Serbia, diaspora associations, etc.

☑ It is also desirable to **design incentives focused on the return and circulation of persons with lower education profiles and specific skills,** after considering the effects of adopted measures targeting highly educated representatives of the diaspora obtained by an analysis.

☑ It is extremely important to **continuously monitor and analyse the effects of implemented public policy measures** to base and adapt the policy-making process on realistic indicators of identified needs and challenges. It would be good to **include more in this process the entities the measures are to affect** by organising different consultative fora and implementing targeted studies, focus groups, surveys, etc.

☑ The **operation of the Migration Service Centers** within the National Employment Service (Action Plan activity 1.2.1) **ought to be systematised**

in the near future, and the scope of their work extended to include monitoring interested migrants and those who have continued working in a destination country to the extent permissible by positive legislation in domain of collection and protection of personal data. In addition, their work would need to include continuous implementation of **orientation sessions** focused on familiarising beneficiaries with the procedures of safe recruitment of workers, travel and employment, risks of irregular migration and human trafficking,[84] but also with information stimulating return and circular migration – options for sending and effectively using money in Serbia, options for savings and investing in Serbia, presentation of the existing return and circular migration programmes.

☑ The steps need to be taken for the launch of **an online diaspora destination** which ought to be designed to take into account the heterogeneous structure of emigration and offer content corresponding to their different needs, interests and challenges, covering various aspects of societal and economic circumstances in the country of origin (Activity 4.1.1 of the Action Plan).

☑ In that sense, it is particularly **important to identify all existing and planned structures/mechanisms**

and programmes focused on emigration, to most adequately link them under the umbrella of the online destination which will also influence the dispersion of information towards emigrants and their optimum informing.

☑ Taking into account motivational factors affecting emigration, it is especially important to continuously **improve working conditions, business environment and compliance with the legally defined rights of employees in the country of origin.** In that regard, it would be of relevance to monitor the results of research and surveys concerning the status and needs of different economic activities and propose targeted measures that will contribute to eliminating identified gaps.

☑ It is crucial to continue implementing activities **oriented towards the assessment and strengthening of capacities and resources of all stakeholders in the public sector.** It is essential to ensure continuity, but also to make capacity-building efforts more comprehensive and implement them downward in public administration, up to the local level. In this regard, it is highly important to initiate the implementation of activities (activity 1.3.2) in the Action Plan envisaging the establishment of a database or register of civil servants who have completed adequate training.

☑ Additionally, we should consider an **opportunity to establish a national database of experts,**

available education modules, manuals and material. In this domain, particularly important could be partnerships with international organisations which could support the identification of modules, handbooks and material already existing in comparable practice which could be adapted to the context in the Republic of Serbia.

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84 These seminars could be accompanied by appropriate informative material, brochures, leaflets. The topics of such material would cover: workers' rights in line with the standard employment contract and legislation of destination country, destination country profile, including social and cultural opportunities, awareness on the importance of health protection, services offered by host country and other social stakeholders, regulating residence in destination country, etc.

» Bibliography

Abramitzky, R., Boustan,L. & Eriksson, K. (2012). „Europe's Tired, Poor, Huddled Masses: Self-Selection, and Economic Outcomes in the Age of Mass Migration", American Economic Review 102. p.p. 1832-1856.

Aleksić, D. (2018). "Nismo svi jednaki: Doprinos ekonomske krize produbljivanju razlika unutar kontingenta radne snage" u Živković, A. Molnar, D. Janković, I. ed. Ekonomska politika i razvoj, Ekonomski fakultet, Univerzitet u Beogradu. ISBN 978-86-403-1537-1.

Anić, A. i Medić, P. (2020). „Smanjenje nejednakosti – put ka održivom razvoju". Centar za visoke ekonomske studije.

Arandarenko, M. & Aleksić, D. (2020). „There and Back Again: Employment Statistics of the Citizens of the Western Balkans". in Bartlett, W, Monastiriotis, V, and Koutroumpis, P ed. Social Exclusion and Labour Market Challenges in the Western Balkans, p.p. 15-40. Cambridge Scholars Publishing. ISBN: 978-1-5275-4969-2.

Arandarenko, M. (2018). „Izazovi tržišta rada i zaposlenosti u Srbiji u XXI veku". u Kostić, A. ed. Ekonomija: Zaposlenost i rad u Srbiji u XXI veku, zbornik radova sa simpozijuma u organizaciji Srpske akademije nauka i umetnosti, Ekonomskog fakulteta u Beogradu i Komisije za demografiju i populaciona pitanja Vlade Republike Srbije, pp 17-42, ISBN 978-86-7025-786-3.

Arandarenko, M. (2021). „How migration, human capital and the labour market interact in Serbia". European Training Foundation.

Arandarenko, M., Vujić, V. (2010). „Projekcija zaposlenosti i kretanja na tržištu rada Srbije do 2020. godine". Kvartalni monitor, br. 21, apr-jun.

Bither J. and Ziebarth, A. (2018). „Creating legal pathways to reduce irregular migration? What we can learn from Germany's "Western Balkan regulation"". The Migration Strategy Group on International Cooperation and Development.

Blanchet, T., Chancel, L. & Gethin, A. (2021). "Why is Europe More Equal than the United States?". Working Paper N° 2020/19. World Inequality Lab.

Borjas, G. (1993). "Self-Selection and the Earnings of Immigrants"; The American Economic Review 77. p.p. 531-553.

Botrić, V. (2017), „Seminar on Improving measures to implement the Recommendation on integration of the long-term unemployed into the labour market: Host country discussion paper", Brussels.

Brücker, H., Falkenhain, M., Fendel, T., Promberger, M. & Raab, M. (2020). "Labour migration to Germany based on the Western Balkans Regulation: Strong demand and sound labour market integration". IAB-Kurzbericht, 16/2020 (en), Nürnberg, 12 S.

Card, D., Kluve, J., & Weber, A. (2010), „Active labour market policy evaluations: A meta-analysis", The economic journal, 120(548), F452-F477.

Dean, A. (2013), "Tackling Long-Term Unemployment Amongst Vulnerable Groups", OECD Local Economic and Employment Development (LEED) Papers, No. 2013/11, OECD Publishing, Paris.

ETF (2012). „Measuring mismatch in ETF partner countries: A methodological note", European Training Foundation. Turin.

ETF (2019). „Skills mismatch measurement in ETF partner countries". European Training Foundation. Turin.

European Commission (2013), "Performance management in Public Employment Services: toolkit for PES", Brussels

European Commission (2014), "Approaches for Sustainable Integration of Long-Term Unemployed – Toolkit", Brussels.

European Commission (2017), "The Role of PES in Outreach to the Inactive Population Study report", Luxembourg: Publications Office of the European Union.

European Commission (2019), „Evaluation of the Council Recommendation on the integration of the long – term unemployed into the labour market", Brussels.

European Commission (2020), "Integrated services for long-term unemployed", Brussels.

European Commission, (2020b), "Dematerialisation of services in EU PES: Assuring full access to the PES services for people with limited opportunities", Luxembourg: Publications Office of the European Union.

European Commission, Directorate-General for Neighbourhood and Enlargement Negotiations (2021) Commission staff working document Serbia 2021 Report,
https://ec.europa.eu/neighbourhood-enlargement/serbia-report-2021_en

European Training Foundation (2021). YOUTH SITUATION IN SERBIA, Employment, skills and social inclusion

GIZ, MPNTR, PKS (2015). Dualno srednje stručno obrazovanje u Srbiji – Studija izvodljivosti

Group of authors. (2019). „Balkan Barometer 2019". Regional Cooperation Council.

Grupa autora (2018). „Migracije studenata" .Kabinet ministra bez portfelja zaduženog za demografiju i populacionu politiku.

Grupa autora. (2018). „Migracije studenata" .Kabinet ministra bez portfelja zaduženog za demografiju i populacionu politiku.

Jandrić, M. Aleksić, D. (2018). „Institucije i politike tržišta rada". u Kostić, A. ed. Ekonomija: Zaposlenost i rad u Srbiji u XXI veku, zbornik radova sa simpozijuma u organizaciji Srpske akademije nauka i umetnosti, Ekonomskog fakulteta u Beogradu i Komisije za demografiju i populaciona pitanja Vlade Republike Srbije, pp 191-226, ISBN 978-86-7025-786-3.

Krstić G. i Žarković-Rakić J. (2017). "Dohodna nejednakost u Srbiji: uzroci i preporuke za politiku". u Ekonomska politika Srbije u 2017, Zbornik radova sa Naučne konferencije Naučnog društva ekonomista Srbije i Ekonomskog fakulteta u Beogradu.

Krstić M. & Ljubičić M. (2015). „Migration of Health Care Workers from the Western Balkans-Analyzing Causes, Consequences and Policies: Country report Serbia". Skopje. Health Grouper.

Krstić, G. i dr. (2010), „Položaj ranjivih grupa na tržištu rada", Fondacija za razvoj ekonomske nauke.

Laušev, J. (2012), „Public Sector Pay Gap in Serbia During Large-Scale Privatisation, By Educational Qualification", Economic Annals, Volume LVII, No. 192.
Lee, S. (1966). „A theory of migration". Demography, 3(1), pp. 47-57.
Leuven, E. & Oosterbeek, H. (2011). „Overeducation and Mismatch in the Labor Market". IZA DP No. 5523. Bonn.

Lutovac, I. (2017), „Programi i mere aktivne politike zapošljavanja za teže zapošljiva lica – Smernice za izradu, sprovođenje i praćenje programa/mera u okviru LAPZ", Archidata.

Madžar, Lj. (1990). Suton socijalističkih privreda: simptomi, uzroci, institucionalne uslovljenosti sloma socijalističkih privreda. Ekonomika i Institut ekonomskih nauka.

Mijačić, D. & Paunović, B. (2011). „Regional disparities on Serbia". Ekonomika preduzeća. 59(7-8), 379-389.

MRZBS (2017). „Procena uspešnosti Nacionalne strategije zapošljavanja za period 2011-2020. godine za prvih pet godina primene (2011-2015)". Ministarstvo za rad, zapošljavanje, boračka i socijalna pitanja.

NSZ (2020). Rezultati ankete poslodavaca i prognoze potreba za zapošljavanjem u 2019/2020. godini

OECD (2020). OECD Reviews of Evaluation and Assessment in Education: Serbia

Penev, G. (2013). „Projekcije stanovništva Srbije od 2010. do 2060. godine",. Fiskalni savet RS.

Penev, G. i Predojević-Despić, J. (2012). „Prostorni aspekti emigracije iz Srbije: Tri "vruće" emigracione zone". Stanovništvo 2/2012. p. 35-64. ISSN 0038-982X.

Regional Cooperation Council (2021), "Analytical report on the situation in the labour market of Serbia in the context of the economic crisis caused by the COVID-19 pandemic", RCC.

Roy, A. (1951), "Some Thoughts on the Distribution of Earnings", Oxford Economic Papers.

Stanković, V. (2014). „Srbija u procesu spoljnih migracija". RZS.

UNESCO (2014). 2013/4 Education for All Global Monitoring Report: Teaching and learning: Achieving quality for all. Paris: UNESCO.

Unija poslodavaca Srbije (2019). Deficitarna zanimanja u Republici Srbiji

Vlada RS, (2020b), „Uredba o Programu podsticanja zapošljavanja mladih „Moja prva plata", Sl. glasnik RS, br 107/20.

Vlada RS, (2022), „Zakon o socijalnom preduzetništvu", Sl. Glasnik br. 14/2022. Vladisavljević, M. (2017), „The Public Sector Wage Premium and Fiscal Consolidation in Serbia", Economic Annals, Volume LXII, No. 215.

Vladisavljević, M. (2020) "Wage premium in the state sector and state-owned enterprises: Econometric evidence from a transition country in times of austerity", Economics of Transition and Institutional Change, 28(2), pp. 345–378.

Winkler, A. (2012). „Measuring regional inequality: an index of socio-economic pressure for Serbia". Zbornik radova-Geografski fakultet Univerziteta u Beogradu, (60), 81-102.

World Bank. (2019). „Labour market trends – Special topic: Labor costs, labor taxes and low-wage earners in the Western Balkans". World Bank and wiiw.

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