



'USE IT OR LOSE IT!'

How do migration, human capital and the labour market interact in the Western Balkans?

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PREFACE

In 2020, the European Training Foundation (ETF) launched the project 'Migration and human capital in the Western Balkans', with the aim to shed light on the triangular relationship between human capital formation, labour markets and migration, and to determine how the current functioning of the education system and the labour market affects migration in each country in the region.

The research and analysis in the context of this project took place from the beginning of 2020 to the end of 2021, covering six country studies, three regional-level technical analyses as well as a final regional-level analysis. It was led by a team from the Vienna Institute for International Economic Studies (wiiw), (Michael Landesmann, Sandra Leitner, Isilda Mara and Hermine Vidovic), under the coordination of the ETF (Ummuhan Bardak). The country analyses were led by the following experts under the coordination of wiiw: Ilir Gedeshi (Albania), Adnan Efendic (Bosnia and Herzegovina), Ardiana Gashi (Kosovo), Vojin Golubović (Montenegro), Marjan Petreski (North Macedonia), and Mihail Arandarenko (Serbia).

This report represents the last study made with a regional focus in 2021 within the context of the ETF's project. It was drafted by Isilda Mara and Michael Landesmann, with contributions by Sandra Leitner and Hermine Vidovic. It benefitted extensively from the six country studies mentioned above, with additional inputs provided by wiiw statisticians (Beate Muck, Galina Vasaros and Monika Schwarzappel). The draft report was extensively commented by ETF experts, especially Ummuhan Bardak, and it was peer reviewed by Xavier Matheu de Cortada, Cristiana Burzio, Michael Graham, Cristina Mereuta and Mariavittoria Garlappi (ETF). It also benefitted greatly from the suggestions of Will Bartlett (LSE UK), and Ivan Martin (UPF Spain).

We would like to express our gratitude to all the institutions and individuals who have shared information and opinions and who participated in the series of ETF webinars organised in the context of this project. Special thanks also go to the state statistical offices of the six Western Balkan countries for their professional assistance and guidance, and for providing access to the national statistics in accordance with their internal rules.

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EXECUTIVE SUMMARY

The six Western Balkan countries (hereafter ‘the WB6’) are quite well-researched in terms of migration, human capital and labour market issues. However, most studies have focused on one of these three individual topics rather than addressing them together, thus missing the skills-related interactions between these various fields. Aiming to understand the impact of migration on the skills pool and skill utilisation in the WB6, and the implications it may have for their future economic development, the ETF’s project ‘Migration and human capital in the Western Balkans’ brought together the three areas under an integrated analytical framework. This report is the last of a series of country studies (Albania, Bosnia and Herzegovina, Kosovo¹, Montenegro, North Macedonia, Serbia) and technical papers undertaken within the project during 2020–21. It is a regional assessment of the triangular relationships amongst migration, labour market dynamics and human capital development over the past decade, with cross-country comparisons.

What we already know

The region’s population is relatively small with a total of 18 million people in 2020, with low fertility rates and ageing populations in all the WB6². Emigration has long been a reality of WB6 economies; it has continued in the last three decades due to the difficult transition from a socialist to a market economy, combined with regional conflicts. By 2020 the stock of migrants leaving the region exceeded 4.6 million. For comparison, Poland has a similar number of emigrants, but its population is double that of the entire WB6 region. Moreover, the share of emigrant stocks to total population is very high by international standards, ranging from almost half of the population in Bosnia and Herzegovina and Albania to one-fifth in Montenegro, and less in Serbia. Despite some variations in destinations among the six countries, the EU15 countries have traditionally hosted the largest stock of migrants from the region (e.g., Germany, Austria, France, Sweden, Italy, UK, Switzerland, Greece), while the intra-regional mobility has remained low.

The region has a clear accession perspective to the European Union (EU): Albania, Montenegro, North Macedonia and Serbia are official candidates for accession, while Bosnia and Herzegovina and Kosovo are potential candidates. Accession negotiations with Montenegro and Serbia are already advanced, while North Macedonia and Albania continue to fulfil the conditions to open negotiations. As part of this process, the EU has provided visa-free entry into the Schengen area for the citizens of the WB6 (except Kosovo) since the end of 2009³. Furthermore, the WB6 are associated with several EU mechanisms and instruments to support their accession process both financially and technically, including the Instrument for Pre-accession Assistance (IPA III) and the recent Economic and Investment Plan for the Western Balkans to bridge the socio-economic gap between the region and the EU. The WB6 also have preferential access to trade with the EU as well as to EU labour markets.

¹ This designation is without prejudice to positions on status and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence, hereinafter ‘Kosovo’.

² Country populations as of 2020 (in million): Albania (2.8), Bosnia and Herzegovina (3.5), Kosovo (1.8), Montenegro (0.62), North Macedonia (2.1) and Serbia (7). The average number of children per woman has been below the replacement rate of 2.1 in all six countries.

³ Free visa travel applied to Serbia, North Macedonia and Montenegro as of December 2009, while for Albania and Bosnia and Herzegovina as of December 2010.

However, there is a difference between full membership and the uncertain prospects regarding the likelihood of accession, as the latter has implications for domestic political and social developments, as well as the economic decisions of international companies. In comparison with the 11 countries of Central and Eastern Europe (EU-CEE) which joined the EU as full members in 2004 – including Slovenia and Croatia that were part of Yugoslavia – the WB6 do not enjoy the full advantages of EU membership: financial assistance, full participation in all EU programmes and, above all, the full institutional, legal and political anchorage that a definite prospect of EU accession (plus a foreseeable date) provided to the EU-CEE. The most prominent feature of the region from an economic point of view is its relative segmentation, i.e., taking the form of small fragmented political and economic units and entry barriers with regard to cross-border business linkages. This feature is still prominent despite the attempts and the EU support towards regional economic integration.

What is new in this report?

The ETF's research confirms the continuing net emigration from the WB6 during 2010–20, albeit with country variations: it was highest in Bosnia and Herzegovina, followed by Kosovo and Albania, and lowest in Montenegro, North Macedonia and Serbia. The main destinations have also changed to some extent: among the traditional destinations, Germany is continuing to recruit. Additionally, there have recently been increasing outflows towards the EU Member States that joined in 2004, 2007 and 2013 – e.g., Croatia, Slovenia, Slovakia, Czechia, Hungary and Bulgaria. Besides internal dynamics of low-quality/low-paid jobs, policy changes in destination countries have contributed to this trend. Migrants seem to be filling jobs that have been vacated by their own nationals emigrating to the longer-established EU Member States. In these new flows, short-term (circular) labour migration has become more frequent, accessing especially sectors such as hospitality, construction, agriculture and transport.

Better employment and earnings prospects continue to be the main pull factors of emigration, though better education and life prospects have gained importance. Emigration has affected both the low-educated and the highly educated. Potential mobility (measured by intentions and actions to prepare for mobility) is higher among the highly educated in Albania, Kosovo and Bosnia and Herzegovina, while it is higher among the low- and medium-educated in Serbia, Montenegro and North Macedonia. The enrolment ratio of international students from the region is one of the highest in the OECD countries (close to 5%); this is also facilitated by the EU student exchange programmes. While contributing to human capital formation, lower return rate of students seems to be an issue in Albania, Kosovo, and Bosnia and Herzegovina.

ETF estimates of net migration flows by education level in the period 2010–20 indicate evidence of net emigration among the highly educated – and therefore evidence of brain drain – in Albania, Bosnia and Herzegovina and Kosovo. Brain drain is particularly significant in Albania, where the highly educated account for around 40% of the total cumulative outflow. In contrast, the study finds net immigration of the highly educated – and therefore brain gain – in Montenegro, North Macedonia and Serbia, and emigration from these countries is higher among secondary vocational education and training (VET) and general education graduates in the youngest age cohort. Serbia and Montenegro have also started to attract immigrants and students due to their sustained economic growth (e.g., the tourism sector in Montenegro, the ICT sector in Serbia) and the differences in the quality of educational facilities (e.g., in higher education between Serbia and Montenegro).

Migration and human capital

Over the past decade, the region has experienced an overall structural shift with respect to enrolments in the education system, tertiary graduation programmes and the quality of education. The changes have been characterised by slight declines with respect to primary and secondary education (reflecting the demographic decline), and rising tertiary education enrolment rates. Average years of schooling have improved in all six countries among both men and women, though the levels remain below those of other European countries. Tertiary education enrolment has experienced the highest increase in Albania.

Participation in VET programmes has been high (almost three quarters of all students) in the WB6 (except Albania), but most VET graduates continue to higher education. The increased tertiary enrolment has been facilitated by the proliferation of tertiary degree programmes, often offered by newly established institutions; this has, at times, come at the cost of quality. Quality improvement of education programmes at all levels needs to continue further. The structural shifts in tertiary graduation programmes have been towards programmes that adjust to international demand (such as engineering, manufacturing and construction; information and communication technologies; and health professionals), not all of which appropriate for domestic labour market needs.

Structural shifts in the educational structure are also reflected in the employment structure. The educational structure of the working age population reflects a general improvement over the past decade, with a clear shift towards a more highly educated population. Differences across the region are also evident, with Serbia and Montenegro in particular emerging as having a better-educated workforce, while Albania seems to be in the worst position. Education is an important success factor in the labour market, which is evident in all WB6 countries. Employment rates correlate with educational attainment levels and tend to be higher especially for those with tertiary education: employment rates for this group have improved more than for other categories, especially in Albania, North Macedonia and Serbia. A breakdown by gender indicates historically higher educational attainment of men than women in the region, but over the past decade there has been progress in increasing the share of highly educated women. In 2019, across the region, the share of women with tertiary education exceeded the share of men attaining this level.

Migration and labour markets

Labour market performance improved in all WB6 countries in the pre-Covid period, this being visible in declining unemployment and inactivity rates and increasing employment rates over the past decade. Improvements over this period have varied from one country to the other, and migration is partly responsible for this structural improvement in the region's labour force. Job creation has not been equally distributed across countries: most of the new jobs were recorded in Serbia in particular, followed by Montenegro and North Macedonia, while a decrease was recorded in Bosnia and Herzegovina. The Covid-19 pandemic has created a further setback to this situation. Hence, labour underutilisation is still dominant in the region (particularly for younger age cohorts and women) despite the improvements, a sign of structural deficiencies in the interaction between education/training and the labour market, and a low demand for skilled labour in WB6 economies.

This report demonstrates that the structural composition of these economies and underpinning sectors often define the job types and earnings prospects available, which in turn shape the migrant profiles in each country. An important issue is the structure of the private sector, which is predominantly made up of small- and medium-sized enterprises (SMEs), especially family businesses, while informal-sector

activities and self-employment continue to account for an extensive share of employment. Most of the activity is in the distributive trade sector and other services, while high value-added activities are underrepresented among SMEs. The better-educated labour force faces an inefficient deployment of their skills, pointing to mismatches between skills in demand and supply. For most medium- and high-skilled workers, the public sector remains the most attractive due to its wage premium and job security, which in turn negatively affects the growth of the private sector.

Employment in manufacturing plays an important role in three economies only (Serbia, North Macedonia, and Bosnia and Herzegovina), while a large share of employment in Montenegro is in private sector services (tourism) and a very large share of employment in Albania is in agriculture. Part of this development is explained by foreign direct investment (FDI) inflows coming to the WB6. The allocation of FDI across sectors is quite different, with Serbia and North Macedonia (and to some extent Bosnia and Herzegovina) attracting such investments into manufacturing, and Montenegro into the tourism sector. In other countries, investments have mostly taken the form of large infrastructure projects in the energy sector (Albania) or in real estate (Kosovo).

These country variations largely explain the different patterns of employment and migration, i.e., higher unemployment and inactivity generating more migration, and migration undermining further the functioning of labour markets. The mismatch between the skills acquired in the education system and those needed in the private sector has become a pressing issue. While migration has served to ease labour market disequilibria in the region and facilitated the exchange of knowledge and know-how, it has also led to new labour and skills shortages in certain sectors (e.g., tourism, construction, transport, manufacturing and repairs). This shows the importance of regularly monitoring the labour markets in the WB6. The education system has not been sufficiently successful in adapting its curricula to skills demanded in the labour market, as pointed out by both employers and employees.

Understanding triangular interrelationships

The findings of the ETF's regional econometric study show that migration is often the result of a range of internal dynamics vis-à-vis main destinations (e.g., wage differentials, human capital stock, labour underutilisation, poor work conditions, extensive skills mismatch). The three policy domains – education, labour market and migration – are in a permanent interaction, which is dynamic and multidimensional. The results of these triangular relationships can be either detrimental or beneficial and can be influenced and changed over time by policies. A policy action in one domain will have repercussions for the others. If the policy responses from the three areas complement and positively influence each other, this might create a 'virtuous circle'. If the policy areas fail to respond and instead undermine each other, this leads to a 'vicious circle'.

A vicious circle tends to occur when investment in human capital fails to meet the needs of the labour market. When highly skilled individuals leave, it can generate shortages domestically. That can lead to decreased investment and less innovation in technology. It can also create problems with productivity, competitiveness and attracting FDI. The circle can become virtuous with better coordination among sending and destination countries, and by engaging the diaspora. This requires coordination in several areas, notably the supply and demand for skills, and policies for education, the labour market and migration. If managed correctly, emigration can spark several things: cross-border economic initiatives; new trade links; the transfer of knowledge, skills and technology through FDI; and domestic investment, job creation and human capital development. It can also improve employee-employer skill matches and, ultimately, reduce the need for emigration.

This report uses the health and ICT sectors to delve further into these aspects of the triangular relationships and to illustrate different results. Over the past decade, there has been an increasing emigration trend among both health and ICT professionals from the region. In the health sector, several factors – such as low public investment, lack of job openings and large wage differentials – have encouraged health workers to emigrate in search of higher wages and better-quality jobs. Thus, insufficient job creation and poor working conditions in the sector have led to a vicious circle. In contrast, the ICT sector has expanded rapidly (more so in some countries than in others), accompanied by a rising demand for particular skills both at home and abroad. Here the three elements have fed off each other to fuel a virtuous circle of development: despite existing wage gaps, migrants have created links with professionals back home, encouraging more foreign and domestic investment. Some of them have returned home to start their own businesses, helping the integration of these countries into international value chains.

The ICT sector shows how human capital development, migration and employment can work together. If more human resources were to be concentrated in that sector, the region might very well emulate the successful example provided by India, which has, driven partly by the ICT sector, leapfrogged competitor economies. Some people will emigrate. Others will stay home and help build the domestic infrastructure. Policy makers can push things along by adjusting education and training systems to help match the skills of graduates with the needs of employers, and by providing support for foreign and domestic companies willing to establish or expand operations. To avoid pitfalls, sending and destination countries need to improve coordination and invest in joint skills development. They need to think about the labour market demands on both sides. They should also encourage curricular mobility for professionals.

A future projection of labour demand and supply by skill groups under various scenarios has predicted increasing labour and skills shortages in the WB6 by 2030. Even in the case of a baseline scenario i.e., if everything were to continue as now, projections point to emerging labour shortages for all skill groups by 2030 in Albania, North Macedonia and Serbia. Similarly, Bosnia and Herzegovina will experience shortages in low- and medium-educated labour and excess labour among highly skilled workers in the same period, while Montenegro will face shortages in low-educated labour but excess labour among the medium and highly educated. Finally, Kosovo will start to experience labour shortages only after 2030 (mainly among the low and highly educated) but faces substantial and persistent excess labour among the medium-educated. Within this context, the recent inflows of transit immigration into the WB6 could be a potential opportunity in the future in terms of demography and skills provision for the region.

What policy responses?

Against this background, this report reviews the responses from the relevant institutions in the WB6 in the three policy areas of migration, education and training, and the labour market. Because most emigrants from the region are young people, youth employment policies e.g., the implementation of the Youth Guarantee scheme, active labour market programmes to reduce unemployment, sectoral support to increase the creation of high-skilled jobs, and support for entrepreneurship and self-employment have all become very relevant for addressing migration. There have been many attempts and strategy papers to improve migration management and encourage diaspora involvement, but coordination and coherence with other policy fields are missing.

The response from the education side has so far been limited to the issues of recognition and validation of foreign qualifications, and much more could be done in relation to skills of migrant flows.

A number of initiatives tackling migration, human capital formation and employment – and specifically the interaction between these – have been identified, mostly funded by international or EU Member State donors. The most common example is the development of international skills partnerships to facilitate international migration between sending and receiving countries, although these are limited to a few pilot projects (mainly initiated by Germany). In addition, some private (international) educational institutions have already expanded their educational offerings in some professions in the WB6 – e.g., Dekra Academy and Heimerer College, given the high demand for health professionals. This indicates the agility of private providers in taking up opportunities in skills development for mobility in third countries. However, a strong orientation of education curricula towards international markets has its drawbacks and must be monitored carefully.

Given the complexity of the triangular relationships and the many different topics covered in this report, a wide range of policy recommendations and actions could be considered by policy makers as well as by international organisations supporting the development of the region. The key issue is the need for constant coordination and coherence among those policy fields at national, regional and international levels. The main recommendations elaborated in this report take a regional perspective and are grouped under the four policy areas listed below. While the first three recommendations primarily target national and regional policy makers in the WB6, the last one addresses the role of the EU and its Member States. This is because the EU has been, and still is, the main destination of migrants from the region, while its migration and enlargement agenda (with all the mechanisms of pre-accession and exchanges) is largely shaping the mobility patterns and skills pool in the WB6 countries.

Recommendations

1. Narrowing the gap in economies and labour markets between the WB6 countries and the main destinations

- Implementing a sustained development strategy and expansion of economic activities to create more skilled jobs. This would lead to a structural shift in the economies from labour- to skill-intensive activities and would counteract skilled emigration and retain a skilled labour force.
- Addressing the gap in economic prospects between urban and rural areas and improving the attractiveness of peripheral regions (infrastructural connectivity, governance, business support, facilities for health and education/training needs) with sustainable economic activities.
- Continuing to attract FDI to upgrade industrial structures in the region, as it has played an important role in the catching-up processes of the new EU Member States. This requires using comparative advantages (geographical position, cheap labour, cultural proximity, etc.) and going beyond the specialisation in manufacturing that has characterised the new EU members.
- Providing a strong push towards digitalisation and future technologies to increase opportunities for skilled employment. This will require specific sets of skills, further investment in human capital and an increasing supply of ICT professionals, leading to young people working for foreign companies without the need to migrate, and attracting more companies to invest in the region.
- In addition to the above steps, economic leapfrogging through ‘near-shoring’ in the light of recent developments after the Covid-19 pandemic. As some EU companies are transferring parts of their supply chains to geographically closer locations, this would accelerate the

region's integration into European value chains and increase the demand for higher skills in the WB6.

2. Adjusting employment and skills development policies to create a highly productive workforce for functional labour markets

- Regularly monitoring labour markets for their labour and skill shortages and/or surpluses and integrating education and labour policies into an overall industrial strategy. This requires systematic enterprise surveys for their skills needs, systematic analyses of labour force survey (LFS) datasets over time, especially at sector level, checking excess/shortage supply of certain educational groups, and efficient intermediation of jobs with the supply of the right skills.
- Increasing efforts to upgrade labour and skills supply according to current and future demand for skills, both domestically and internationally. This requires strong activation policies (especially for women and low-skilled workers), higher quality and relevance of training, and a systematic offer to allow young people access to employment, apprenticeships and continuing education.
- Increasing nationwide and regionwide investment in digital and green skills, ICT skills and online work platforms. Firms in the region are currently mainly engaged in low value-added functions and higher-skilled labour is necessary to move towards higher value-added functions. This requires a strong push to produce a critical mass of labour with digital and green skills.
- Providing strong support to new business start-ups as a source of employment, with incentives focused on promising economic sectors and easy start-up conditions. The gap in employment conditions between the privileged position of the public sector and the private sectors of the economy should be closed, partly with support policies for dynamic segments of the private sector and partly by dealing with non-meritocratic recruitment practices in the public sector.
- Continuing to work on qualifications and qualifications systems, including recognition processes to facilitate mobility and integration into the labour markets, whether this is towards the EU, or on return to the home country. Improving the level of professional qualifications and allowing adjustments in wage structures to support jobs could help to discourage emigration among young people.

3. Proactively managing migration and tapping the potential of emigrants/diaspora

- Implementing a cross-institutional approach in managing migration, including all stakeholders (public, private and non-governmental) in migration governance at national and local levels.
- Investing in more systematic and structured databases for collecting and analysing the types of labour migration, and for the periodic investigation of labour deployment, vacancies and bottleneck occupations at the sectoral and occupational levels.
- Fostering higher levels of engagement among the diaspora and promoting the return – including 'virtual' – of migrants abroad and the diaspora. This requires a sincere 'welcoming' policy framework for the reintegration of returnees (short-term migrants, permanent migrants and the diaspora), and fostering cooperation with members of the scientific diaspora.
- Ensuring a WB6 proactive role to strengthen cooperation with the main destinations, particularly Germany and the new EU Member States. Possible actions include negotiating bilateral agreements to support migrants abroad, favouring temporary mobility and exchange schemes, and implementing joint skills development programmes for mobility in sectors with higher needs.

4. Securing EU support to the WB6 to extend the skills pool and further human capital accumulation

- Welcoming the integration of WB6 economies in regional and cross-border European production networks, to be accompanied by the transfer of know-how and the skills formation of local people as part of international investment packages in the region.
- Increasing the support for brain circulation and the return of students/researchers and academics, considering the enormous opportunities created for young people by EU exchange programmes. This will require, however, a dramatic increase in such mobility schemes together with some new instruments and mechanisms that motivate and encourage the subsequent return of students/researchers, scientists and academics to promote brain circulation.
- Promoting mobility in both directions and encouraging an inflow (even if temporary) of foreign/European academic and scientific staff into the WB6 to transfer their know-how and experience to the local educational institutions and research infrastructure. This also requires further investment and upgrading of the research infrastructure for innovation (e.g., scientific laboratories, opening of new regional centres of excellence).
- Encouraging EU Member States and WB6 countries to embrace and develop EU Talent Partnerships to coordinate their efforts to combine different labour mobility schemes with skills development and capacity-building schemes, e.g., further training/skills acquisition with the involvement of educational institutions from both sending and receiving countries.

To conclude, there is no reason why the WB6 countries could not, in due course, follow the example of the successful catching-up processes of the newer EU Member States. At a more general level, this requires improving infrastructure and institutional governance, avoiding slipping back into political instability and regional fragmentation, and using all the advantages of geographical location and the accession perspective more proactively (i.e., financial and technical support in pre- and post-accession). The vital conditions for maintaining momentum are anchorage in the EU accession process, political stability at both national and regional levels, regional integration, and investment in the region's human capital.

1 INTRODUCTION

The Western Balkan region is composed of six relatively small countries, whose total population in 2020 was 18 million: Albania (2.8 million), Bosnia and Herzegovina (3.5 million), Kosovo (1.8 million), Montenegro (0.62 million), North Macedonia (2.1 million) and Serbia (7 million). Combined, their populations equate to approximately 4% of the total EU27 population (447 million). The six countries exhibit similar demographic trends to the EU27, namely low fertility rates and ageing populations⁴. In 2019, the average number of children per woman was 1.77 in Montenegro, 1.56 in Kosovo⁵, 1.52 in Serbia, 1.37 in Albania, 1.34 in North Macedonia, and 1.30 in Bosnia and Herzegovina (Eurostat, 2021). The corresponding figure in the EU27 was 1.53 children per woman. Another illustration of this demographic transition is the share of the 0–14 age group in the total population, which was 14% in Serbia, 15% in Bosnia and Herzegovina, 16% in North Macedonia, 17% in Albania, 18% in Montenegro and 24% in Kosovo in 2020 (15% in the EU27) (Eurostat, 2021).

Emigration has been an integral part of the economies in the six Western Balkan countries (hereafter ‘the WB6’)⁶. Given their conflictual history combined with a difficult transition from a socialist (and in the case of the former Yugoslav states, system of ‘self-management’) to a market economy in the past three decades, the WB6 have experienced sizeable emigration from the region, with significant consequences for demographic trends, human capital, and availability of the workforce as well as social development. By 2020 the stock of migrants from the region exceeded 4.6 million (a quarter of the total population); for comparison, Poland has a similar number of emigrants, but its population is double that of the entire WB6 region. The share of emigrant stocks to total population varies largely between countries, ranging from 49% in Bosnia and Herzegovina, 44% in Albania, 34% in North Macedonia and 30% in Kosovo to 21% in Montenegro and 15% in Serbia (UN DESA, 2020). Consequently, emigration is a highly debated topic in the WB6, but a clear-cut understanding of its consequences and possible beneficial and detrimental outcomes is still missing.

It is the younger and more productive age cohorts, both low and high skilled, and the employed and unemployed who emigrate the most. Initially, emigration was a response to an underperforming economy – exacerbated by high unemployment rates, poor employment and earnings prospects – but also conflicts and wars between 1990 and 2000, as well as dissatisfaction with institutional and political developments. While emigration has in part served to ease these labour market disequilibria and socio-political tensions in societies, it has also generated new imbalances after three decades (i.e., skills shortages). The region still suffers from high unemployment rates, labour market imbalances and an inadequate workforce which lacks the proper skills to further spur innovation and growth. Persistent outward mobility might, in turn, be one of the causes that undermines a well-functioning labour market in its role of supporting economic development.

On the other hand, migration with its potential for enabling people to acquire skills and developing essential linkages with important countries of destination (through study schemes, trade, FDI and

⁴ The average number of children per woman needed for each generation to exactly replace is 2.1. A lower value will cause the native population to decline. All Western Balkan countries have values below the replacement rate.

⁵ This is the number given in Eurostat, 2021. In the World Bank database, this number is 1.97 for Kosovo in 2019.

⁶ Yugoslavia had a long tradition – starting from the 1960s – of outward mobility even before the break-up of the country.

business links) can also be an important contributor to economic development. For this to happen, a whole host of policies are needed for supporting the positive role that migration can play. Such policies include efforts in education and training, cooperation agreements between source and host countries, and more generally, recognising the manifold interrelationships between migration, human capital development, labour deployment and economic development.

Hence, the discussion of the role of migration must move beyond a narrow focus on migration per se and integrate a whole host of such interrelationships into the analysis. This is what this study intends to do. It is part of a larger project initiated and funded by the ETF which comprised six country studies covering each of the WB6 (ETF, 2021a–f). These were complemented by three technical studies of econometric analysis: a study on the interrelationships between migration, human capital formation and labour markets at the macro- and cross-regional level (Landesmann and Mara, 2021); a statistical estimation of net migration flows by age and four educational groups through a novel cohort approach for 2010–19 (Leitner, 2021a); and a projection of labour supply and demand trajectories up to 2030 under various scenarios (Leitner, 2021b). This report completes the project by providing a regional synthesis of these findings on various linkages and interactions between the three core elements of the study (migration, human capital and labour markets).

It is important to keep in mind the EU accession perspective of the region: Albania, Montenegro, North Macedonia and Serbia are official candidates for accession, while Bosnia and Herzegovina and Kosovo are potential candidates. Accession negotiations with Montenegro and Serbia are already advanced, while North Macedonia and Albania continue to fulfil the conditions to open negotiations (European Commission, 2021). As part of the process, the EU signed the visa facilitation and readmission agreements with the five countries of the region (except Kosovo) during 2006–08, offering visa-free entry into the Schengen area for citizens of those countries in exchange for stepped up migration cooperation⁷. Since 2007, the Instrument for Pre-accession Assistance (IPA) is used as the main EU funding mechanism to support the accession process of the WB6, including bilateral, regional and cross-border cooperation⁸. The latest IPA III allocated EUR 14.2 billion to support the accession countries in key political, institutional, social and economic reforms⁹. Thus, the WB6 are associated with several EU mechanisms and instruments both financial and technical, including the recently adopted Economic and Investment Plan for the Western Balkans to bridge the socio-economic gap between the region and the EU (European Commission, 2020a)¹⁰.

⁷ To be precise, free visa travel applied to Serbia, North Macedonia and Montenegro as of December 2009, while for Albania and Bosnia and Herzegovina as of December 2010. See https://ec.europa.eu/commission/presscorner/detail/en/IP_09_1852

⁸ Based on the budgeting periods so far, the countries received the first generation of IPA I support (2007–13), the second generation of IPA II (2014–20) and the new generation of IPA III (2021–27). The total IPA budget covers all six Western Balkan countries plus Turkey. The components of IPA funding include assistance for transition and institution building, cross-border cooperation, regional development (transport, environment, regional and economic development), human resources (strengthening human capital and combating exclusion), and rural development.

⁹ See <https://europeanwesternbalkans.com/2021/09/16/european-parliament-gives-green-light-to-ipa-iii-worth-14-2-billion-euro/>

¹⁰ The Economic and Investment Plan for the Western Balkans aims to spur the long-term economic recovery of the region, support green and digital transitions, foster regional integration and convergence with the EU. The six priority areas of investment are sustainable transport, clean energy, digital future, private sector, human capital, and environment and climate. The plan sets out a substantial investment package mobilising up to EUR 9 billion of funding for the region. Support through the new Instrument Guarantee for the Western Balkans means that the region can obtain up to EUR 20 billion over the next 10 years (European Commission, 2020a).

Within this context, the report makes some comparisons between the WB6 and developments in the 11 EU-CEE countries (the new EU Member States from Central and Eastern Europe): comprising the four Visegrad countries (Czechia, Hungary, Poland and Slovakia), Slovenia and Croatia, which were part of Yugoslavia, and five other EU-CEE economies (Bulgaria, Romania, Estonia, Latvia and Lithuania). Of course, such comparisons should always be made with caution, as the historical circumstances of countries and regions differ significantly – most prominently, the break-up of Yugoslavia, which severely affected longer-term economic, social and political trajectories and secondly, the difference made by the successful path of full EU membership in the 11 EU-CEE countries' economic development.

Thus, there is a substantial difference between full membership and the uncertain prospects regarding the likelihood of accession and with regard to the time horizon of such a possible accession. This uncertainty should not be understated in terms of its impact on domestic political and social developments as well as on the perception and actions by external agents. Most importantly, international companies plan their investment and production strategies considering geo-economic and geopolitical circumstances. The most prominent feature of the region from an economic point of view is its relative segmentation. This takes the form of small, fragmented political and economic units and entry barriers regarding cross-border business linkages and also in terms of labour market systems/actors. This feature remains despite the attempts and the EU support to establish a single regional market in WB6 that would transform the region into 'one investment area' – a market of 18 million compared to a handful of small and fragmented units¹¹.

Given the complex institutional and political transition processes over three decades, the WB6 are operating far below their full potential and economic (and institutional) convergence towards the EU has been relatively slow. During last decade all economies in the region have experienced the GDP growth rates above or around 3%, but real growth rates have not exceeded the rates achieved by the Visegrad countries, and their GDP per capita is still half the level of four Visegrad countries (Table 1.1, Figure A1 in Annex). Structural problems are visible in the trade imbalances, with imports by far exceeding exports in all WB6¹². The economies remain highly dependent on remittance flows to cover some of the deficit on the balance-of-payments, while some economies have become successful at attracting FDI inflows over the past decade. However, the allocation across sectors is quite different: Serbia and North Macedonia (and, to some extent, Bosnia and Herzegovina) are managing to attract such investments into manufacturing and Montenegro into the tourism sector (in both cases leading to increased export earnings). However, in Albania and Kosovo such investments mostly took the form of large infrastructure projects in the energy sector or into real estate.

As regards labour markets over the last decade, employment rates have improved, and unemployment decreased in the WB6. The latter remains at two-digit levels, contrary to the Visegrad countries, where unemployment rates were much lower to start with, and have declined further, to the extent that labour market shortages have become an acute issue in those states. The number of jobs

¹¹ In 2017 the leaders of the WB6 decided to develop a Regional Economic Area (REA) where goods, services, investments and skilled workers can move without obstacles. An action plan was adopted to drive the regional economic growth, mainly focusing on digital integration, mobility, trade and investment, and taking advantage of trade relations with the EU. REA is not an alternative to EU integration, as the progressive deepening of the economic integration in the region is based on EU rules and principles. Such an approach secures integration both within the region and with the EU. For more info, see [Western Balkans: Regional Economic Area, Multi-annual Action Plan for a Regional Economic Area in the Western Balkans](#)

¹² The report refers here to figures up to 2019 to avoid comparing the situation during the height of the Covid-19 crisis.

has risen by more than 835,000; however, not all the countries in the region have equally benefitted from the new jobs given that 60% were created in Serbia, while the number of jobs in Bosnia and Herzegovina shrank (see Chapter 5 for further details). Divergent employment prospects among the WB6 affect people's active engagement in the labour market, the possibility to secure regular income, the sustainability of the social security system and the risk of poverty. Better employment and earnings prospects abroad – combined with increasingly consolidated family networks overseas – push people towards emigration as a better option for escaping the poverty trap given the less advantageous spectrum of jobs offered by the national economy.

TABLE 1.1 GDP GROWTH, TRADE, FDI AND REMITTANCES, 2010–19 AND 2020

	GDP per capita (EUR)		Real GDP growth rate (%)	Trade: goods and services % of GDP				FDI net inflows % of GDP	Remittance inflow % of GDP
	Average level	Annual average, change (%)	Annual average	Imports		Exports		Annual average	Annual average
	2010	2010–19	2010–20	2010	2019	2010	2019	2010–19	2010–20
AL	7,290	3.3	2.6	48.6	45.3	28.0	31.6	8.4	10.9
BA	6,820	4.8	2.0	51.3	55.2	29.7	40.1	2.4	11.0
XK	5,890	3.5	3.6	55.5	56.1	19.9	29.1	5.2	15.3
ME	10,320	5.0	2.9	62.7	64.8	37.0	43.7	11.7	11.2
MK	8,600	3.8	2.6	58.1	76.5	39.8	62.3	3.1	3.3
RS	9,690	3.1	1.9	44.5	61.0	32.3	51.0	6.0	8.4
HR	14,980	3.5	1.0	37.8	52.2	36.1	52.0	1.9	5.0
CZ	21,020	3.8	2.4	62.5	68.4	65.5	74.4	3.0	1.2
HU	16,430	4.1	2.8	76.0	79.1	81.3	82.2	2.9	2.6
PL	15,750	4.5	3.6	42.1	50.8	39.9	55.5	2.4	1.4
SK	18,930	2.1	3.0	77.5	92.0	77.2	92.4	1.7	2.1
SI	21,060	3.0	1.9	63.2	75.3	64.3	83.7	1.8	0.8

Note: GDP per capita in EUR (current prices, purchasing power standard (PPS)).

Source: wiiw annual database, wiiw FDI database, World Bank.

While the educational levels of the region's working age populations have improved in the last decade, there are questions regarding the quality of education and the evidence suggests that businesses in the region report deficiencies in the skills of the workforce acquired through the formal education and training systems. Besides, the phenomenon of brain drain is a widely reported issue in the region (RCC, 2020a–c); in parts it also has to do with changing migration and employment policies in the receiving countries and the WB6 economies are in this respect much more affected than the EU-CEE countries. Besides the economic determinants, mistrust in public institutions, dissatisfaction with the situation and uncertain life prospects at home have become important in the last decade, further pushing people to emigrate (RCC, 2020a; FES, 2019).

The repercussions of migration and the brain drain are especially relevant in the long run as they change the structure of the population in terms of age, gender and level of education. This in turn has an impact on the composition of the workforce, and therefore on productivity growth and innovation and attractiveness for foreign investors (who themselves would influence all these factors). Hence examining the triangular relationship between labour market developments, human capital and migration is essential for economic development in the Western Balkan region as a whole.

The structure of this report is as follows:

- This **Introduction** sets the scene and explains the reasons behind the report's special focus.
- **Chapter 2** presents in a compressed manner the Analytical Framework which guided the country studies, and which also underlies the approach taken in this report. Although there are many studies of the distinct topics of migration, human capital and labour market, in general the research literature does not integrate these three, so missing the skills-related interactions between the respective fields.
- **Chapter 3** gives an overview of migration trends. After reviewing the stocks of emigrants from the region based on the country of birth statistics from the UN DESA database, it focuses on changing patterns of new migration flows and their main characteristics in the last decade, changing drivers of migration and future trends.
- **Chapter 4** reviews human capital formation systems and discusses the outcomes of skilled emigration (the issues of brain drain/ brain gain) in the region based on the existing sources. Furthermore, it provides some new estimates of net migration flows by educational attainment levels over the period 2000–19 from the WB6, while touching upon the international student mobility.
- **Chapter 5** presents an overview of labour market developments, with a special focus on job creation, the weaknesses of labour markets as drivers of migration and vice versa (i.e., job types and wages), existing skills demand and skills mismatch, and the impact of labour policy changes in main destinations (the case of Germany).
- **Chapter 6** attempts to connect the three topics above in a regional, macro econometric analysis to understand their triangular interrelationships. Following the results of this analysis, the report analyses two case studies to illustrate such triangular relationships – the mobility of health professionals and ICT professionals from the WB6 to demonstrate beneficial and detrimental aspects of these interrelationships.
- **Chapter 7** revisits the structural differences of the WB6 economies connecting the sectoral distribution of available jobs with the emigration tendency of certain skill groups; discusses the impact of the Covid-19 pandemic on economic growth, employment and migration trends; and presents the results of a projection undertaken on labour demand and supply by skill groups in the WB6 under various scenarios.
- **Chapter 8** reviews the policy responses of actors to document the interactions of different policy domains such as migration/mobility policies (external and domestic), education and training policies, and labour market policies or others that could positively contribute to improve the triangular relationships and thus socio-economic developments in the WB6.
- Finally, **Chapter 9** summarises the key conclusions and develops specific recommendations that are grouped under four policy areas for policy makers from the WB6, regional and international actors.

This study excluded on purpose the inflows of economic migrants and refugees into the WB6 – even on a temporary basis on transit, although this seems to be a new and increasing phenomenon. According to the International Organisation for Migration (IOM, 2018), the most significant arrivals were observed in Bosnia and Herzegovina (40% of all migrants), followed by Serbia (14%) and Montenegro (8%). More than half (62%) of all registered migrants were nationals of Pakistan, Iran, Afghanistan and Syria (ibid.). Frontex calls this new development the 'Western Balkan route' as one of

the main migratory paths into Europe since 2015, and the countries of the region are cooperating with the EU and its agencies on migration issues and home affairs¹³.

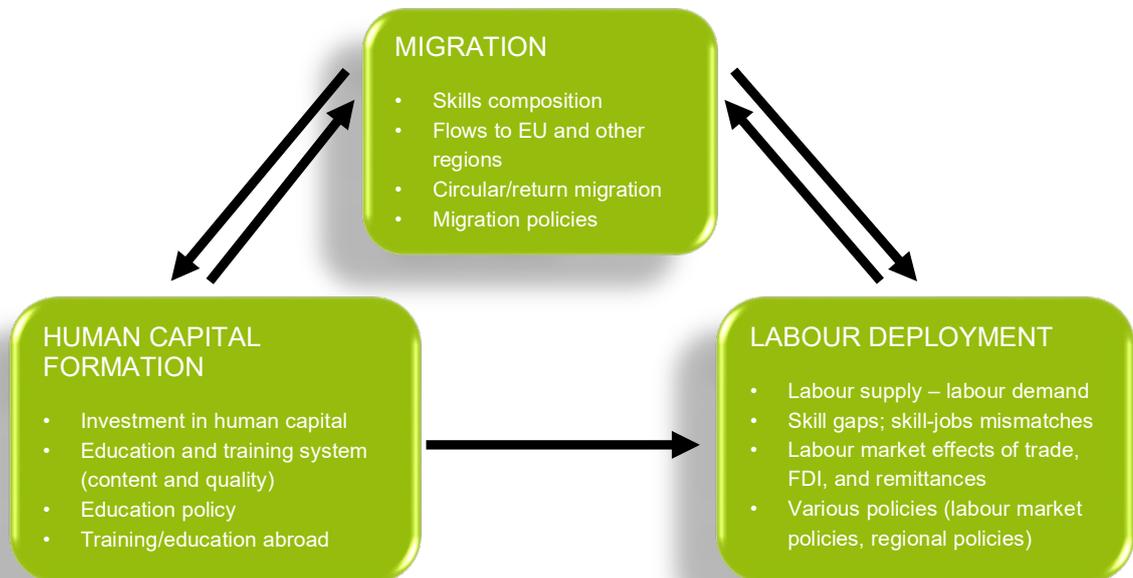
¹³ See Frontex, [Migratory Routes](#). The number of illegal border crossings on the Western Balkan Route has risen to 60,500 in 2021 from around 27,000 in 2020.

2 ANALYTICAL FRAMEWORK

This chapter attempts to summarise the analytical framework used in the study. The six Western Balkans countries (hereafter ‘the WB6’) are quite well-researched in terms of migration, human capital and labour market issues with abundance of literature on different aspects of each topic. However, most of that research has focused on one topic and remained unconnected with others, thus missing the skills-related interactions among the three fields. Aiming to understand the impact of migration on the skills pool and utilisation in the WB6 and the implications it may have for their future economic development (under different scenarios), this study aimed to bring together three areas of study under an integrated analytical framework.

The first step of the study was a comprehensive review of existing literature (e.g., academic papers, thematic studies, evaluation studies, databases, websites and other relevant sources related to the topic of interest) on the three areas (see Mara and Vidovic, 2020). In particular, the literature review focused on emigrant stocks and flows by their education levels and occupations; trends in human capital formation and skills pool by education levels; and the degree of usage/deployment of human capital (and education levels) in the WB6. The next step was developing an analytical framework looking in detail at the various interrelationships in the triangle depicted in Figure 2.1 (see Landesmann and Leitner, 2020).

FIGURE 2.1 RELATIONSHIPS BETWEEN MIGRATION, HUMAN CAPITAL FORMATION AND LABOUR DEPLOYMENT



Source: wiw based on ETF proposal.

These relationships reveal how migration flows affect (and are affected in turn) by the functioning of the labour market, as well as by developments in the educational and training structures in each country and how these, in turn, are impacted by migration possibilities and labour market prospects (Landesmann and Leitner, 2020). Further, how policy settings (both in the WB6 but also in host countries) affect and could affect these interrelationships is a central interest of the overall study.

As we can see from [Figure 2.1](#), arrows of impacts can go in all directions; some of the features of these relationships are set out below in an exemplary way.

The **determinants of migration** are well studied in the literature: push and pull factors relate to the labour market situation and prospects in both home country and migrants' potential destination country. The relative importance of these factors (earnings, career chances, employment situation) and the prospects they face (in home versus destination country) most likely will be different for different groups differentiated by educational attainment levels, by age, by gender etc. 'Network effects' i.e., access to support groups (of earlier migrants from the home country) transferring information and easing the move and integration into the new society matter. Amongst the push and pull factors also other issues feature, such as access and quality of educational and health systems in both home and potential destination countries, and also satisfaction/dissatisfaction with institutions and, more generally, with the social and political situation in the country.

Migration can affect the labour market situation back home in a variety of ways: as a result of migration, particularly skilled migration, labour and skills shortages might emerge or increase further in the home country. The process of 'brain drain' has important consequences for the domestic economy as emerging labour and skills shortages might negatively impact on economic growth and development. However, migration-induced skills shortages can in turn affect migration dynamics since a situation of excess labour demand could result in wage increases in certain industries and even in the economy as a whole. The associated decline in the wage differentials between host countries and the home country might not only lower the incentive for emigration but could also increase the incentive for return migration. However, since wage differentials are high in most instances and wage adjustment tends to be time consuming, such a feedback effect is likely to be felt only in the medium to long term.

Related to this but looking at the impact of migration from the opposite angle, **migration might alleviate excess labour supply** and reduce unemployment on the domestic labour market. In a context where the employment prospects of the pool of unemployed are limited (strongly prevalent in the WB6) this encourages migration without drawing on a much-needed labour force. This might be specifically relevant for certain (skill and age) groups where there is a lack of jobs in the home market appropriate for certain qualification levels and this provides an incentive to migrate.

Migration can affect human capital formation in the home country. The prospects of migration can encourage people in the home country to invest in and acquire human capital which is considered important for successful integration into potential host countries' labour markets. This can have a significant impact on the skill structure of the labour force which, provided that some of the better skilled and more highly educated remain in the home country and that there is sufficient absorptive capacity in the labour market, can translate into an improved labour supply situation. It is one of the 'brain gain' effects of the possibility of migration extensively discussed and analysed in the literature (see e.g., Stark and Fan, 2007; Sorger et al., 2013).

Furthermore, **migration can take different forms**. It can be temporary rather than permanent. In the former case, migrants may return to their home countries after some time spent abroad. While abroad, migrants may accumulate human capital during studies, formal training or informal on-the-job training, acquiring knowledge which they may bring back to their home countries (Agunias, 2006; Lodigiani, 2016; OECD et al., 2017). Hence, a process of 'brain circulation' may take place through which foreign knowledge and know-how may be transferred, often with foreign connections and accumulated savings, which might contribute to further economic development and growth. In this context, the labour market situation could also play an important role as the decision to return may be affected, *inter alia*, by the prevailing job and employment prospects in the home country.

At the institutional level, migration may affect human capital formation through **adjustments in the education and training systems**. To further facilitate migration, education and training institutions may adapt their curricula and content of training to better suit the skill requirements in the main countries of destination. This sometimes takes place in cooperation and coordination with foreign institutions located in the main countries of destination. Furthermore, this institutional adjustment process can go hand in hand with a change in the quality of education offered, which can be to the benefit of the entire population. This, in turn, may also have consequences for the domestic labour market where a skills-mismatch may decline – if the changes to the education and training system provide more of the skills needed on the local labour market. On the other hand, orientation of skill acquisition towards foreign labour markets might also lead to a gap between the types and composition of skills acquired and those required in the domestic labour market if these are different.

Another aspect emphasised in the literature (World Bank, 2016; Mughal et al., 2013; Petreski et al., 2018) is the **importance of remittances** linked to the large outflow of workers from the region. These have complex implications for the countries of origin of those migrants: the literature points to the impact of remittances on poverty alleviation and on investment in children's education. However, there may also be negative implications for labour supply if an inflow of remittances raises the reservation wage, leading to increased levels of inactivity among the workforce. At the macroeconomic level, an increase in remittance flows might alter the real exchange rate, if the available purchasing power were not matched by an increase of domestic production capacity. There can be important structural effects of such an increase in the real exchange rate which can detrimentally affect the longer-term prospects of an economy, such as reducing the competitiveness of tradable sectors with consequent impacts on industrial structures, employment and long-term balance-of-payments problems.

Migration may, on the other hand, also spur cross-border economic activities and improve the long-term development and growth prospects in the home country. A large stock of migrants in the host country may establish trade links and increase **trade and FDI flows between home and host countries**. The trade effect of migration is not only the result of a potential preference among migrants for home-country products, but also of network effects: immigrants' language skills, familiarity with both the host and home country, social links and networking skills may lower information barriers and communication and transaction costs, which may make it easier for domestic firms to export or to source from abroad.

Similarly, the migration might encourage FDI for similar reasons, building on network effects of migrants abroad who support linkages with the original home country and might undertake investments and act as entrepreneurs themselves. The effects of migration on trade and FDI flows may not only increase production and employment in the home country but may also facilitate a transfer of knowledge and know-how embodied in products exported to the home country or transferred from a foreign parent company to its local affiliate. A recent development facilitated by digitalisation and ICT technology is the phenomenon of 'tele-migration' where workers do not physically move to another country but work remotely for foreign companies as if they were part of the firm's internal organisation. The changes induced by the Covid-19 pandemic have further accelerated the potentialities of 'tele-migration'.

The **policy context** may also influence the impact of migration on the domestic labour market. The ease of access to work opportunities abroad is a function of migration policies (at home and abroad, in context of the WB6, especially the EU accession process and visa-free access) and affects the income of qualification groups to different extents. Conversely, the malfunctioning of labour markets, such as lack of jobs, skills-jobs mismatches, etc. which may result from deficiencies in existing labour

market policies, may in turn be a major factor generating (at times massive) migration flows of particular groups, such as young people and medical staff of all ages. Policies and institutional context affect the relation between migration and human capital formation in many ways as the education and training system evolves and various policies react to the impact of migration (such as shortages of particular qualifications). Equally, policies which act as push or pull factors in countries of origin and destination impact the volume and skill composition of migrants. Particularly important in this context are visa arrangements, exchange programmes, and the setting-up of training and educational facilities at the bilateral or multi-lateral level, etc.

These general considerations, based on an exploration of both the existing empirical and theoretical literature, guided the case studies which followed a set of precise questions to be addressed about migration, labour market developments, training and human capital formation in the WB6 economies (specifically over the past decade) in order to explore the relationships between the three areas of analysis (Landesmann and Leitner, 2020). The following studies have been completed within this research:

- **Six country studies** based on a comprehensive literature review and policy documents, as well as new elements added by this common analytical framework to fill knowledge gaps and advance new insights into the triangular relationships depicted in Figure 2.1 (see ETF, 2021a–f).
- **An econometric analysis of interactions between migration, human capital and labour market** for the WB5 using PVAR model: It estimated a system of equations (PVAR model) that accounts for the effects of labour market determinants and human capital on migration and vice versa. The period under analysis is 2005–19 and considers mobility from five WB countries (except Kosovo) to the EU15. The results confirm the importance of wage gaps and their changes as an important pull factor for driving outward mobility from the region. Also, the gaps in human capital emerge as a powerful determinant for explaining mobility into countries where returns on human capital are higher (Landesmann and Mara, 2021) (see Section 6.1 for the results).
- **A statistical analysis to estimate net migration flows by skill groups** from the WB6 within 2010–20: In view of the scarcity of reliable and detailed data on migration by education levels, the analysis developed a novel ‘cohort approach’, to deduce from annual LFS the extent and skill composition of net migration. For skill composition, it differentiated between four educational levels (low, medium-general, medium-vet and high). The results show substantial country differences in terms of brain drain and brain gain (Leitner, 2021a) (see section 4.3 for explanations and the results).
- **A statistical analysis of labour supply and demand estimates** for 2020–30 for the WB6 under different scenarios: This is a scenario analysis to shed light on the potential future labour supply and demand dynamics of different skill groups in the WB6. It differentiated between four educational levels (low, medium-general, medium-VET, and high) and looks at a medium-term projection period until 2030. Simulation results of the baseline scenario show that both labour shortage and excess labour for different skill groups would coexist, but the region is close to labour shortages much earlier than expected (Leitner, 2021b) (see Section 7.3 for the results).
- **This regional report with a synthesis of all results** from the above studies but going one step further as a stand-alone report with cross-country comparisons. It includes a special focus on health and ICT professionals to illustrate the different outcomes of triangular relationships (see Sections 6.2.1 and 6.2.2 for the results of sector reviews).

3 MIGRATION TRENDS: NEW PATTERNS AND DRIVERS

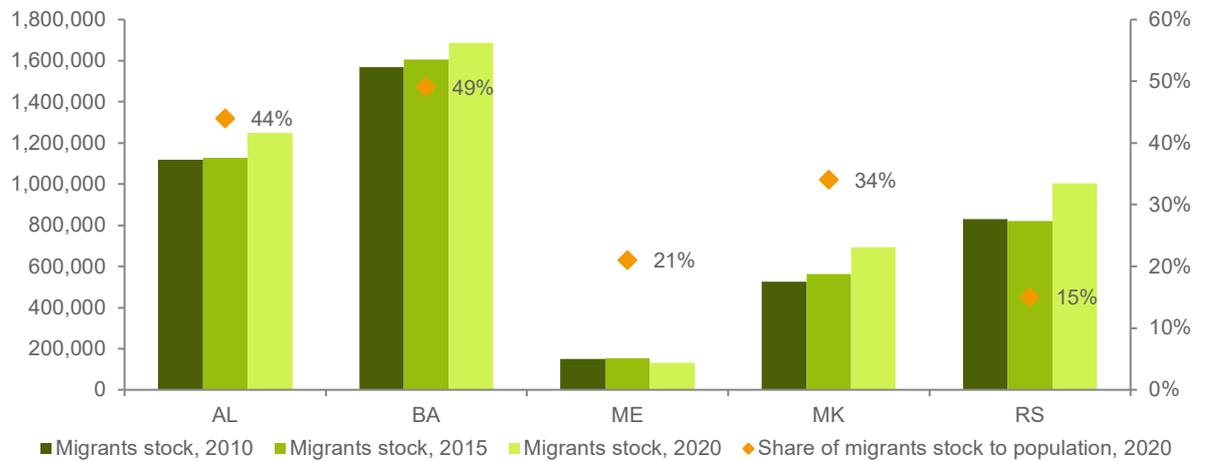
This chapter gives an overview of the migration trends. After reviewing the stocks of emigrants from the region based on the country of birth statistics from the UN DESA database (Section 3.1), Section 3.2 focuses on changing patterns of new migration flows in the last decade, followed by Section 3.3 on the main characteristics of these migrants. The chapter ends with the key drivers of migration (Section 3.4) and the expected trends of future migrants (Section 3.5).

3.1 Stock of migrants abroad

Emigration has been uneven across the WB6. In 2020 more than 4.7 million emigrants – one fourth of the resident population in the region – was living abroad (UN DESA database). As [Figure 3.1](#) shows, Albania and Bosnia Herzegovina are the two countries with the largest stock of migrants abroad – estimated respectively at 1.25 million and 1.69 million (44% and 49% of their current populations). In contrast, Serbia is the one with the lowest stock of migrants abroad (15% of its current population), albeit with a long tradition of migration which started back in the 1960s (see also [Figure A2](#) in Annex). In the 1990s the drivers of emigration stemmed from economic dislocation due to country dissolution and transition processes, the persistent large wage and income gaps with the neighbouring EU and the continuous ethnic conflicts that made the region a less secure place to live and less prosperous for building a future. While the last twenty years have been mostly peaceful and economic development has proceeded, the legacy of intra-regional conflict has left its traces; political, social and institutional developments have suffered from both domestic developments and the continuously delayed perspective of possible EU accession, which has not been reassuring enough for the citizens of the region. Nonetheless, migration flows were facilitated through strongly liberalised visa agreements with the EU (all countries except Kosovo). Consequently, emigration has had a significant impact on the demographic developments of the WB6 countries (see [Box 3.1](#)).

Over the last decade, one and a half million emigrants from the WB6 have moved to the EU and European Free Trade Association (EFTA) countries. According to Eurostat, the bulk of requests for resident permits come from Albanians and Serbs given that respectively 32% and 22% of such permits were issued to emigrants from these countries. Emigration recorded over the last decade suggests rather intensive migration flows with quite large segments of the population moving abroad – e.g., close to 18% of the current resident population in Albania, 14% in Kosovo, 8% in North Macedonia and close to 6% in Serbia and Montenegro ([Figure 3.2](#)).

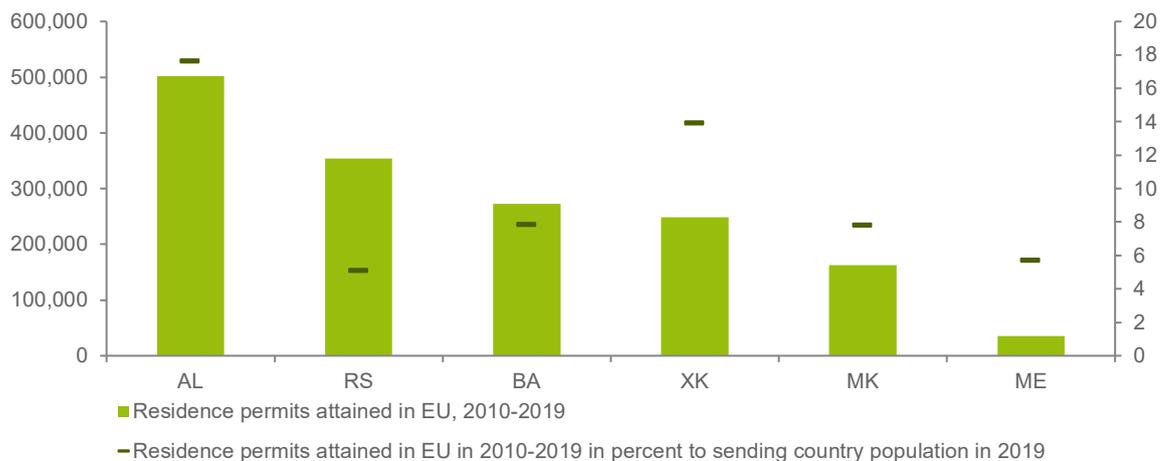
FIGURE 3.1 STOCK OF WESTERN BALKAN MIGRANTS ABROAD, 2010–20



Note: Data for Kosovo are not available. Serbia includes Kosovo. Share of migration to total population as of 2020 on the right axis.

Source: United Nations, Department of Economic and Social Affairs. Population Division (2020). International Migrant Stock 2020 (United Nations database, POP/DB/MIG/Stock/Rev.2020). The stock of migrants by country of birth is reported. UN estimates as of July 2020.

FIGURE 2.2 FIRST RESIDENT PERMITS ATTAINED IN THE EU AND EFTA COUNTRIES, 2010–19



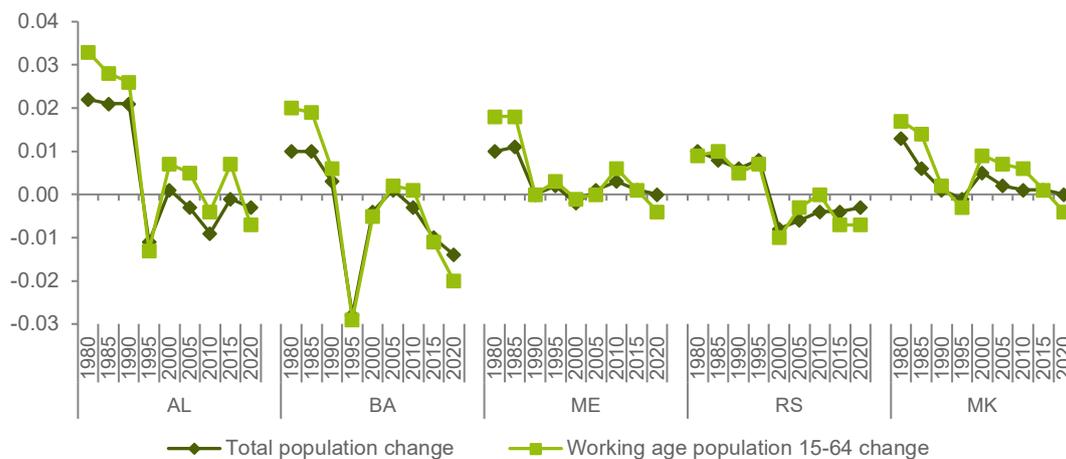
Note: The left axis indicates the number of residence permits in absolute terms. The right axis indicates the share of residence permits – emigration – as a share of origin country population as of 2019.

Source: Eurostat, First residence permits [migr_resfirst].

BOX 3.1 MIGRATION AND THE DEMOGRAPHIC STRUCTURE OF THE WESTERN BALKAN REGION

Demographic trends clearly indicate a declining population since the late 1990s. As shown in Figure 3.3, the region has switched from a growth rate of total and working age population of about 2%, to a negative rate of population change which in 2020 was -1% (see also Figures A3 and A4 in Annex). Besides a strong decline in fertility rates, massive emigration has been another factor responsible for this development¹⁴. Three decades of massive emigration is mirrored in the transformation of the age pyramid – slimmer at the bottom and fatter at the upper part – clear signs of a society which is losing its most vital and productive segment of population (Figure 3.4). Emigration has especially affected younger age cohorts (see Figure 3.9). While in 1990 the ratio between children (0–14) and elderly people (70+) was 5.5:1, in 2019 this ratio had been dramatically reduced to 1.5:1 and in 2030 there will be one child for every elder person. The prospects for the next decade do not look good as the ageing and shrinking of the populations will become more pronounced and sharper than in the EU, given that emigration is expected to continue further and that fertility rates will most likely not be reversed.

FIGURE 3.3 POPULATION CHANGE DYNAMICS: TOTAL AND WORKING AGE POPULATION ANNUAL CHANGE IN WB5, 1980–20 (%)

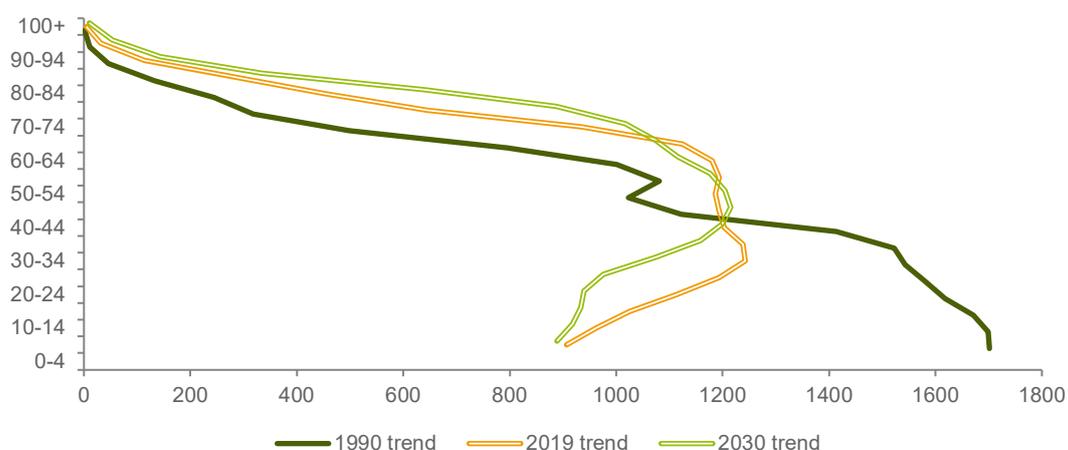


Note: Data for Kosovo are not available.

Source: Own elaboration of data attained from UN statistics (United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision, DVD Edition).

¹⁴ See also Figures A3 and A4 which contain comparisons with the EU15 and the EU-CEE.

FIGURE 3.4 POPULATION AGE STRUCTURE IN WB5, 1990, 2019 AND 2030 TRENDS (THOUSANDS)



Note: Data for Kosovo are not available.

Source: Own elaboration of data attained from UN statistics (United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision, DVD Edition. United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019, custom data acquired via website.

3.2 Changing migration patterns

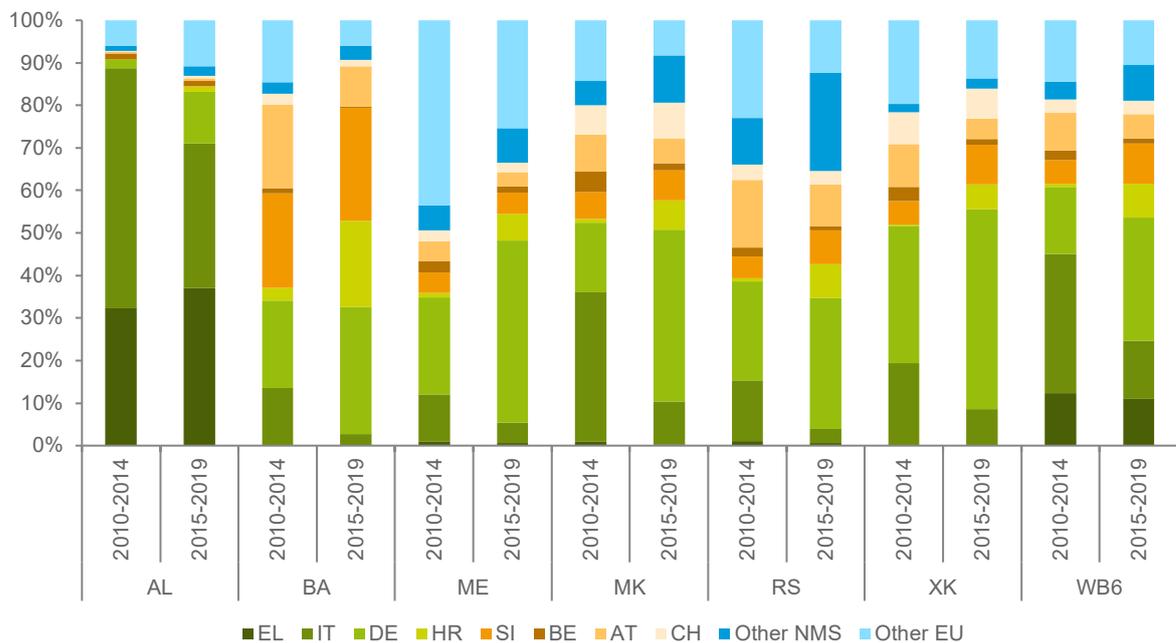
The EU15 countries remain important destinations for migrants from the region, but new EU Member States – EU-CEE countries – have started to attract many migrants too. In the past, the EU15 countries hosted the largest stock of migrants from the region – but with a clear divide in preference among countries in the region. Albanians preferably chose to move to Italy, Greece, and the UK but also overseas to the US and Canada, whereas ex-Yugoslav countries – taking advantage of early migration networks from the late 1960s – have mainly moved to Germany, Austria, France, Sweden but also to Switzerland. Over the last decade the choice of destination countries seems to have changed and new destinations within the EU have gained importance. Between 2015 and 2019, Croatia and Slovenia received more than 171,000 migrants from the WB6 (Figure 3.5). This inflow is five times higher than in 2010–14 and by far above the inflow to Austria, which has traditionally attracted many migrants from the region. As such, Hungary, Czechia, Slovakia, Slovenia, and Croatia – countries which have joined the EU since 2004 – have also become attractive destinations; one fourth of recent mobility has been directed to this group of countries (see Annex, Figures A8 regarding migration from the WB6 to the new EU Member States).

The shooting star among destination countries over the last five years has been Germany.

Between 2015 and 2019 Germany attracted almost one third of all migrants from WB6, an inflow that was three times the inflow received over the 2010–14 period¹⁵.

¹⁵ For further details, see Section 5.5 on recent mobility to Germany.

FIGURE 3.5 FIRST RESIDENCE PERMITS ATTAINED IN EU COUNTRIES BY MAIN DESTINATION, 2010, 2014 AND 2015–19



Note: The Syrian refugee crisis in 2015 and the upsurge of asylum requests to the EU in that year were taken up as an opportunity from countries in the Western Balkans to move to the EU. Thus, in parallel to the influx of Syrian refugees to the EU, emigration from the Western Balkans intensified significantly in 2015. Therefore, we have broken down the statistics into the period before 2015 and the period from 2015 onwards to avoid the impact of that year in analysing mobility patterns.

EL – Greece, IT – Italy, DE – Germany, HR – Croatia, SI – Slovenia, BE – Belgium, AT – Austria, CH – Switzerland, NMS – new EU Member States

Source: Eurostat, First permits by reason [migr_resfirst].

Recent emigration to the EU has benefitted from visa liberalisation and new regulations adopted by the EU Member States towards the WB6 migrants.

A visa liberalisation regime and readmission agreements signed from 2007 between the EU and five countries (except Kosovo) accelerated visa procedures in exchange for increased cooperation on migration. The Syrian refugee crisis generated a record high influx of migrants to the EU. Western Balkan countries happened to be involved not only as one of main routes for Syrian refugees attempting to reach Europe, but the region *per se* generated a large influx of asylum seekers to the EU. Such unprecedented events led to regulation changes targeting migrants from the WB6 and contributed to reshaping emigration from the WB6 to the EU in a more organised and regulated way (Box 3.2).

BOX 3.2 ASYLUM-SEEKING TO ESCAPE SOCIAL AND ECONOMIC DISCOMFORT

Over the last decade the EU28 and EFTA countries recorded an increasing number of asylum applications from the WB6, which reached its peak level in 2015 with more than 200,000 applications (more than 70% applications mainly from Albania and Kosovo) (Figure 3.6). Since then, however, the trend has been declining continuously – down to 43,000 applications as of 2019 (Eurostat, 2020). Despite the high number of asylum applications, the success rate of getting a positive decision for asylum requests is very low, ranging from 1.2% (North Macedonia) to 2.8% (Serbia). Asylum applications from Serbia and North Macedonia are mainly from the Roma community residing in these countries. For other countries such as Kosovo and Bosnia and Herzegovina, the rate of approval is up to 5.8% – with the two countries having been mainly afflicted by conflict on ethnic grounds.

The push factors for this category of humanitarian migrants are social (discrimination or high vulnerabilities such as the ones faced by the Roma community¹⁶ or the return of blood feuds reactivated especially in Albania after the fall of communism (Mece, 2017)) and ethnic conflicts (especially in those areas where ethnic minorities' rights are subject to violations)¹⁷, but also economic (high unemployment and poor economic prospects, both in terms of earnings and employment, or a weak social safety net). For these countries, it is difficult to disentangle the economic motive from the humanitarian one because both motives are relevant, quite often intermingled and operating simultaneously as push factors for leaving the country. On these grounds, citizens from the region try to exploit the humanitarian motive to escape poverty and social discomfort. The Syrian refugee crisis of 2014–15 was used by thousands of asylum seekers, especially from Albania and Kosovo, but also others as an opportunity to move to the EU.

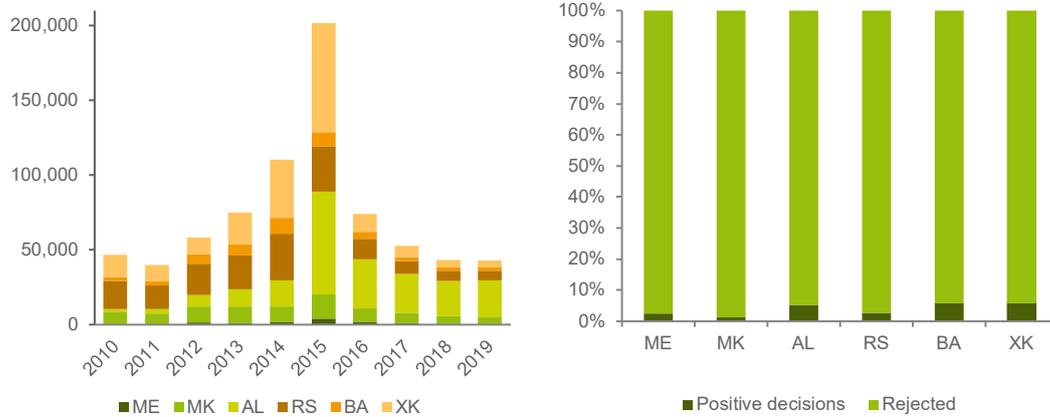
However, the change in EU regulations on asylum status and the declaration of WB6 as 'safe countries'¹⁸ since 2016 explains why the asylum requests have strongly declined after 2015. Return migration, voluntary or not, seems to be relatively low with respect to the number of asylum applications received in 2010–19 given that the approval rate has been very low. Less than 10% leave the EU territory, mainly through enforced return (Figures 3.6 and 3.7). Thus, despite a high rate of rejections, humanitarian migration persists and is a frequently used approach by WB6 citizens to move and remain in the EU, but also to move to further destinations outside the EU.

¹⁶ See [Going nowhere? Western Balkan Roma and EU visa liberalisation](#)

¹⁷ See [Refugee Protection and International Migration in the Western Balkans](#)

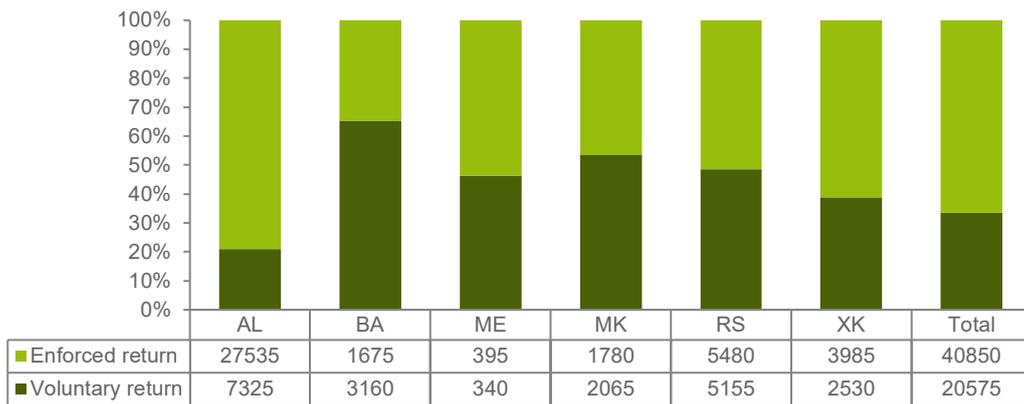
¹⁸ Asylum Procedures Directive (Annex I) states that: 'A country is considered as a safe country of origin where, on the basis of the legal situation, the application of the law within a democratic system and the general political circumstances, it can be shown that there is generally and consistently no persecution as defined in Article 9 of Directive 2011/95/EU, no torture or inhuman or degrading treatment or punishment and no threat by reason of indiscriminate violence in situations of international or internal armed conflict.' In addition, 'account shall be taken, *inter alia*, of the extent to which protection is provided against persecution or mistreatment'.

FIGURE 3.6 FIRST ASYLUM APPLICATIONS AND DECISIONS, 2010–19



Source: Eurostat, First instance decisions on applications by citizenship, age and sex – annual aggregated data (rounded) [migr_asydcfst].

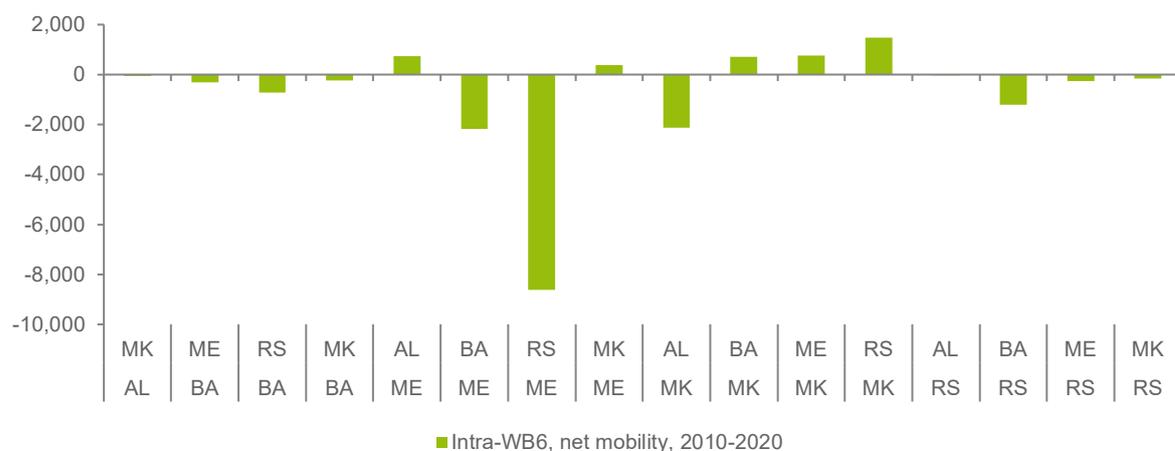
FIGURE 3.7 RETURN/DEPARTURE FROM THE EU, 2011–19 – ABSOLUTE NUMBERS, ACCUMULATIVE



Source: Eurostat. Third-country nationals who have left the territory by type of return and citizenship [migr_eirt_vol]

In sharp contrast to emigration from the region, intra-regional mobility remains low. Almost all countries in the region have been experiencing negative net migration from other countries within the region (except for North Macedonia – though also for this country net migration from Albania is negative), i.e., there seems to be overall net return flows (Figure 3.8). Similarly, the stock of Montenegrins and Serbs in Bosnia and Herzegovina and vice versa – the stock of Bosnians and Montenegrins in Serbia – has fallen. Intra-regional mobility remains low because of the political tensions inherited from the past (i.e., ethnic conflicts), less appealing labour market conditions in neighbouring countries compared to other options, but also poor connectivity within the region. Only Montenegro seems to receive some seasonal labour migration mainly from the region (ETF, 2021d).

FIGURE 3.8 INTRA-REGIONAL MIGRATION: CHANGE IN MIGRANTS' STOCK, 2010–20



Note: Serbia includes Kosovo. Data for Kosovo are not available. The country label in the first row indicates the citizen of the country of origin and the country label in the second row indicates the destination country.

Source: Own elaboration based on UN statistics (2020), United Nations, Department of Economic and Social Affairs. Population Division (2020). UN estimates as of July 2020.

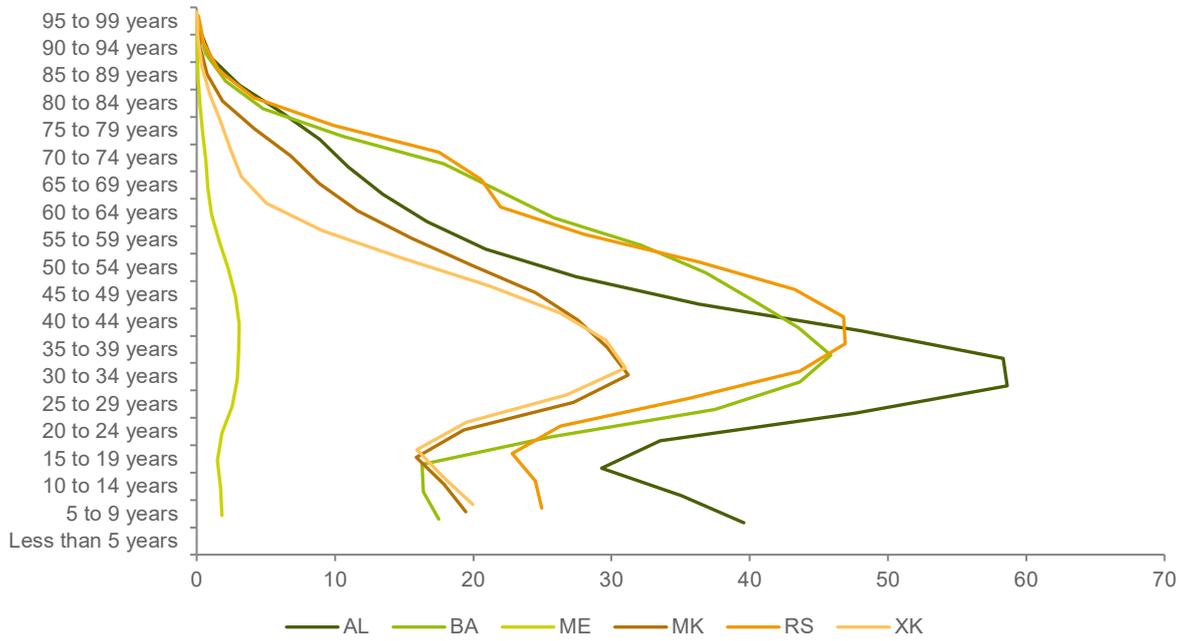
3.3 Characteristics of migrants

Emigration continues to affect especially the younger age cohorts and those of working age.

The stock of migrants below the age of 15 is not negligible – a type of emigration which is the result of family migration and family reunification (Figure 3.9). The share of children or those below the age of 15 who emigrated or who live abroad range from 11% (Bosnia and Herzegovina) up to 22% (Albania and Kosovo) while older age cohorts (e.g., 60+) are found among migrants from Bosnia and Herzegovina and Serbia at 16% and 14% respectively. In between these age groups, almost half of the migrant stock from WB6 in 2020 was accounted for by the age group 20–44, i.e., prime age cohorts of the labour force; in the case of Kosovo this share was close to 55%. In terms of gender, male migration has been relatively higher, but over the last decade the emigration of women has also been rising and the ratio is now almost 50:50 and in some countries the share of women has exceeded that of men (World Bank and wiiw, 2018).

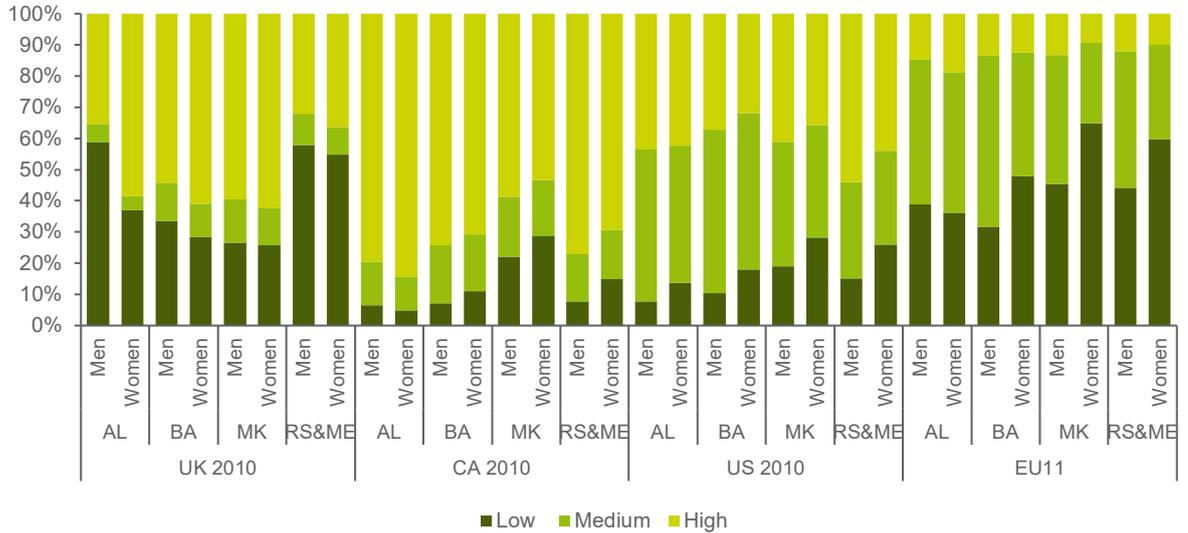
Emigration has affected both the low and the highly educated, but destination countries' policies have played an important role in shaping migration patterns, particularly of the high skilled. The US and Canada – countries that apply selectivity criteria and a points-based system (that includes level of education) for controlling and managing immigration flows – have been more successful in attracting highly skilled migrants from the region. According to the IAB (Institute for Employment Research) brain-drain data which show emigrant stocks until 2010, more than 80% of Albanians who have migrated to Canada fall into the group of highly skilled (Figure 3.10). In Europe, the UK has been the main destination of highly educated migrants from the region especially from Bosnia and Herzegovina and North Macedonia. On the contrary, other European countries have attracted mostly low- and medium-skilled migrants from the region, which hosted the majority of emigrant stocks from WB6.

FIGURE 3.9 AGE STRUCTURE OF EMIGRANTS IN EU28 AND EFTA COUNTRIES, 2020, IN THOUSANDS



Source: Eurostat, Population on 1 January by age group, sex and citizenship [migr_pop1ctz]

FIGURE 3.10 EMIGRATION (AGE 25+) BY EDUCATION, GENDER, AND SELECTED DESTINATIONS, 2010



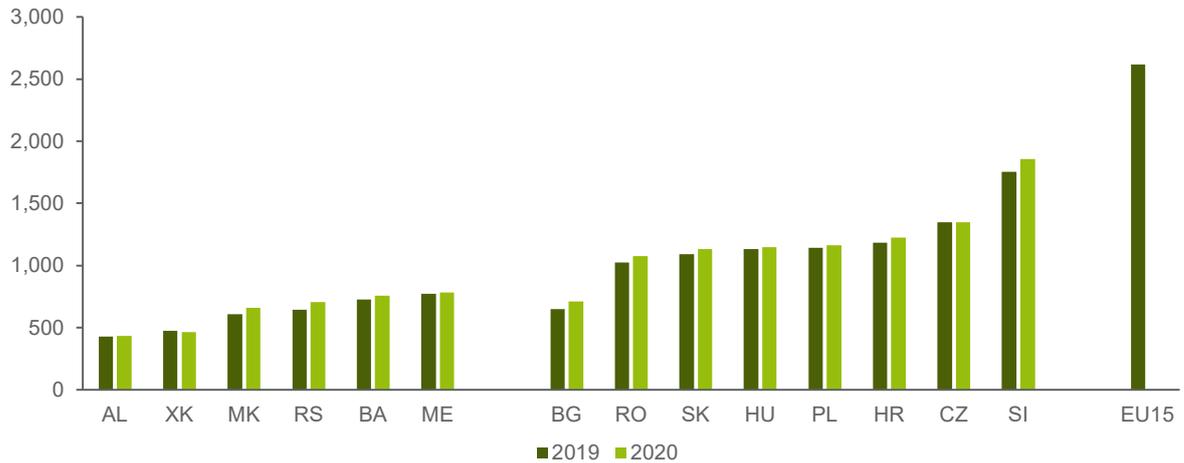
Note: Data for Kosovo are not available. EU11 includes Austria, Denmark, Finland, France, Germany, Greece, Ireland, Luxembourg, the Netherlands, Portugal, and Sweden.

Source: [IAB brain-drain data](#)

3.4 Reasons for leaving the region

Wage and employment gaps continue to be the main push and pull factors. With emerging new destinations, it seems that migrants are still in search for better earnings and employment opportunities. The level of earnings in the region has not been catching up and the wage gap between WB6 and the EU15, but also between the WB6 and the group of EU-CEE countries, remains high, especially because the EU-CEE countries have been catching up with the EU in terms of earnings. This implies that with respect to EU-CEE the wage gap has been widening further and higher migration to this region is mainly associated with that (Figure 3.11). Furthermore, unemployment rates hover at the two-digit level among countries in the region (on average at 13.4%), while in the EU15 and the EU-CEE countries the unemployment rate was one-half to three times lower than in WB6. Residence permits attained by WB6 migrants in one of the EU countries for the purpose of work have gained importance. Among Bosnians and Serbs, residence permits issued for employment reasons rose significantly, thus confirming that employment is a strong motive for moving to the EU, linked to better work and earnings prospects abroad (Figure 3.12).

FIGURE 3.11 AVERAGE MONTHLY GROSS WAGES, 2019–20 (EUR (PPS))

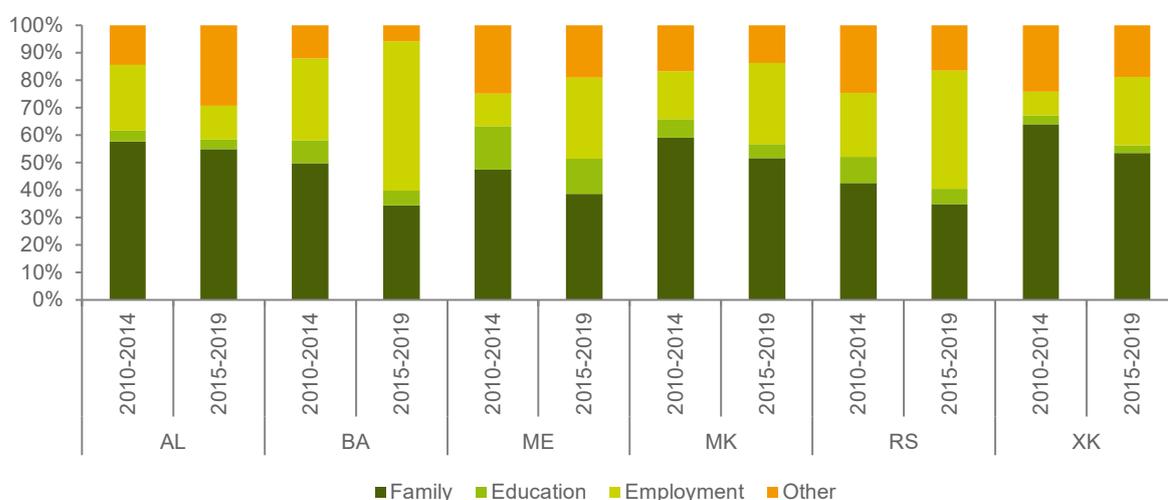


Source: wiiw annual database.

Investing in human capital is also one of the reasons driving recent migration flows. Permits issued for education purposes might represent the least chosen motive for moving to the EU. Still, over time this option has become more popular and more citizens from the region have moved to the EU for the purpose of studying between 2010 and 2019 (Figure 3.12). Furthermore, it is very likely that the numbers in this group could be much higher given that a high share of education-related permits might be embedded within family reunification permits. This has several implications about how migration affects human capital such as how it might exacerbate brain drain (but also 'brain circulation') from the region (see Sections 4.2 and 4.3 on this topic, and Figure A6 in Annex).

Mistrust in public institutions and aspirations for a better life are becoming important push factors for emigrating. Motives grounded in better employment and earnings prospects continue to be the main push factors driving emigration. However, over the last decade, especially among the young, mistrust in public institutions, plus dissatisfaction with the situation especially with the state of the education and health systems have gained in importance as push factors to emigrate (RCC, 2020a; FES, 2019). These conclusions are reinforced from the country studies' findings carried out within the framework of this project (ETF, 2021a-f).

FIGURE 3.12 FIRST RESIDENCE PERMITS ATTAINED IN EU BY PURPOSE, 2010–14 AND 2015–19



Source: Eurostat, First permits by reason [migr_resfirst]

Temporary migration has gained momentum, as new destinations emerge, but permanent migration prevails. Recently the choice of new countries of destination has also reshaped emigration patterns with respect to the length of stay. Temporary migration seems to have become more frequent towards the new EU Member State destinations, but overall, the bulk of migrants choose long term migration. Throughout 2015–19 the latter choice has become stronger for all the WB6 (Figure A8 in Annex). However, an increasing number of migrants has also been moving abroad for shorter time spans – e.g., between three and five months – most likely due to work permits being issued for seasonal work. This suggests that short term migration to the EU – though the least preferable choice among emigrants from the region – has gained momentum and is becoming a more frequent choice.

3.5 Potential migrants in the near future

Another angle to look at emigration from the region is to examine the ‘potential mobility’ or willingness to leave the country and the region. This is important to understand the characteristics of the typical citizen most likely to emigrate or the composition of different social groups, such as the highly educated, the employed, the unemployed, or students among potential migrants. The latest Public Opinion Balkan Barometer 2020¹⁹ raises a number of questions about intentions and concrete actions taken to move abroad or within the region²⁰. The survey enables us to distinguish between those who are simply ‘considering the options for leaving’ and those ‘taking concrete actions for leaving’. We define the first group as those with ‘intentions to leave’ and the second as those who are ‘taking actions to leave’, and compare their basic socio-economic characteristics such as age, gender, region of residence, education and employment status for each of the WB6. The analysis reveals a large discrepancy between emigration ‘intentions’ and ‘actions’ for all WB6. Table 3.1 compares profiles between those with intentions to leave (aspirant migrants) and those taking actions to leave (potential migrants).

¹⁹ www.rcc.int/balkanbarometer/home

²⁰ Further details are provided in Table A1 in Annex.

TABLE 3.1 WHO ARE THE ASPIRANT AND POTENTIAL MIGRANTS IN THE WESTERN BALKANS?

Key social characteristics (%)		People with intentions to leave (aspirant migrants)	People taking actions to leave (potential migrants)
Total	AL	49.2	9.2
	BA	47.7	5.5
	XK	44.1	10.4
	MK	37.8	7.5
	ME	49.4	4.6
	RS	35.4	2.2
Male	AL	53.5	50
	BA	47.4	63.6
	XK	55.8	61.5
	MK	56.1	65.3
	ME	45.4	44.7
	RS	54.8	72.7
Aged 18–34	AL	52.1	57.6
	BA	59.1	71.1
	XK	64.2	66.4
	MK	49.5	53.3
	ME	44.6	46.8
	RS	47.2	63.7
High educated	AL	30.3	29.3
	BA	26.3	25.4
	XK	43.8	47.1
	MK	34.1	48
	ME	21.2	27.6
	RS	35.3	27.3
Employed	AL	37.4	34.8
	BA	45.3	40
	XK	30.6	26
	MK	52.4	52
	ME	50.8	40.4
	RS	57.1	40.9
Unemployed	AL	24.8	35.8
	BA	27.4	41.8
	XK	29.1	45.2
	MK	28.8	34.7
	ME	25.8	29.8
	RS	20.1	45.5
Urban area	AL	61.0	56.5
	BA	47.6	43.6
	XK	43.8	37.5
	MK	57.7	53.3
	ME	67.0	51.1
	RS	62.4	63.6

Source: Own elaboration using Public Opinion Balkan Barometer 2020.

Emigration from the region is expected to persist, though there is a big divide between wishful thinkers (people with intentions to leave) and pragmatists (people taking actions to leave). Close to half of all citizens in the WB6 would like to move out of the region, but only 7% are actually

pursuing specific actions for emigrating in the short or medium term (Table 3.1). The 2020 Public Opinion Balkan Barometer Survey²¹ also points out that there is a large divide in potential mobility across the countries of the region: Albanians and Kosovars both aspire and plan to take real action to leave their country, to a much greater extent than citizens of Serbia or Montenegro.

Aspirations, and potential emigration are expected to continue to affect the most vital and productive parts of the working age population. Younger age cohorts are the ones that will continue to leave the region. In Albania, every second person with the ‘intention’ to leave is in the age group 18–34. In Bosnia and Herzegovina, and Kosovo this applies to a much larger share of young age cohorts. In terms of gender, Albania shows less differentiation, and both men and women are aspirant and potential migrants, almost to equal extents. In contrast, in Montenegro, women seem much more determined to leave. For the rest of the region, potential migrants are predominantly men (Table 3.1 and Table A1 in Annex). The division by **rural/urban area** indicates that for some countries the vast majority of those with intentions to leave and those taking actions to leave come from urban areas, as is the case for Albania, North Macedonia, Montenegro and Serbia, while the opposite is true for Bosnia and Herzegovina and Kosovo. These tendencies are driven by intra-country migration across regions, processes of concentration of the population in urban areas, especially capital cities, given the tendency towards large internal mobility (from rural to urban areas), rural transformation, and the urbanisation experienced in recent decades.

The breakdown of willingness to migrate by level of **education** suggests that those taking actions to leave include more of the better educated than those with intentions to leave. Being **unemployed** counts as a strong push factor to leave the country (also given the high rate of youth unemployment), but those who are employed also show a high potential for migrating abroad. Overall, while those taking actions to leave are predominantly unemployed (in Albania, Bosnia and Herzegovina, Kosovo, Serbia), in North Macedonia and Montenegro both those with high intentions to leave and those taking high actions to leave are mainly employed. The main message here is that while ‘intentions’ to leave might be widespread among the employed, ‘actions’ to leave engage more of the unemployed (except in Montenegro and North Macedonia where the share of employed taking actions for leaving predominate). Such results suggest that in the coming years emigration will continue to affect the most vital part of the population, particularly the age cohorts 18–34, men, the better educated, and those employed in urban areas.

²¹ The survey does not define a time horizon for outward mobility, but it addresses a few questions (e.g., At what phase of planning are you?) in order to better understand whether emigration is simply an aspiration or the interviewee is taking actual steps to pursue such aspirations.

4 MIGRATION AND HUMAN CAPITAL

This chapter focuses on human capital formation and migration and how they can and do influence each other. First, an overview of human capital formation systems and returns to education in the labour markets are briefly discussed in the light of recent trends (Section 4.1). Then, based on the existing sources, the outcomes of skilled emigration (the issues of brain drain/ brain gain) in the region are discussed and some estimates regarding the implicit opportunity costs of migration are reported (Section 4.2). Section 4.3 provides some new estimates of net migration flows by educational attainment levels over the period 2000–19 from the WB6, based on the statistical analysis made within this project. Finally, Section 4.4 covers the specific case of international student mobility.

4.1 Human capital formation and recent changes

Demographic transformations in the region have started to leave their footprint on enrolment rates in the education systems. Recently, shares of enrolment in primary and lower secondary education have been declining in some of the WB6 such as Albania and Serbia (Figure 4.1). Such structural shifts reflect in most part the population decline for early age groups because of the strong decline in fertility rates especially over the last decades, but also emigration of children with their families – still predominant among the countries in the region (see earlier discussion in Section 3.3). These factors are also reflected in a lower share of enrolment in upper secondary education (age group 15 to 20) with repercussions for the future workforce²².

FIGURE 4.1 ENROLMENT BY EDUCATION LEVEL, 2010 AND 2019 (SHARES IN %)



Note: Data for Kosovo are not available.

Source: UNESCO Institute for Statistics, data extracted from UIS.Stat on 7 November 2020.

²² There have been positive changes for countries in the region as concerns early school leavers aged 15–24. This category has been dropping quite significantly and this applies to both males and females. In Albania the share of early school leavers in 2019 was 16%, half the rate in 2010. For other countries in the region such shares are much lower, hovering between 4% and 8%, and have been also strongly declining (ETF, 2020a).

Enrolment shares in tertiary education have been increasing in all countries in the region, though to different extents. In contrast to primary and secondary education, the share of enrolment in tertiary education programmes has significantly increased in Albania – to 25%, 7 percentage points higher than in 2010 – while for other countries such as Serbia and Montenegro the improvement was by 1 to 2 percentage points. While in Albania enrolment in tertiary education programmes is one of the highest in the region, Bosnia and Herzegovina reports the lowest share of enrolment in tertiary education programmes at only 15%. Improvements in tertiary education enrolment might be encouraging; yet declines in the shares of primary and secondary enrolment are a clear sign that demographic developments – including migration – might be jeopardising the potential future workforce.

Years spent on education have been increasing, an achievement in quantitative terms. The highest average overall length of education is in Montenegro and Serbia – close to the levels of Slovenia and Croatia, at 12 years in 2019. The lowest average length of education is in North Macedonia, at 9.4 years in 2018, a level below that of Germany in 2000. In terms of gender, the gap in years of schooling between men and women has been narrowing, especially in Albania where it has narrowed to 1 year. In contrast, the gap is highest in Bosnia and Herzegovina at 2.3 years (Figure 4.2). The educational structure of the working age population reflects those shifts in educational attainment, with increasing education levels and shift towards more highly educated. Differences across the countries are still evident as Serbia and Montenegro have a better-educated labour force, while Albania seems to have the least-educated labour force²³.

FIGURE 4.2 MEAN YEARS OF SCHOOLING, 2010 AND 2018



Note: Data for Kosovo are not available. 2018 is the latest year available. Mean years of schooling report the average number of completed years of education (including tertiary education) of the country’s population (age 25+).

Source: UNDP, <http://hdr.undp.org/en/data#>

Participation in VET programmes is high and has been stable over time for most of the WB6.

Participation in VET programmes as percentage of upper secondary education is quite pronounced in the region: around 77% in Bosnia and Herzegovina, 74% in Serbia, 68% in Montenegro, 60% in North Macedonia (ETF, 2020b, 2019a). Only Albania shows a low VET participation of 18% in 2019 (Figure 4.3), though the choice to participate in VET programmes has become more popular also in

²³ See [SEE Jobs Gateway](#)

Albania, compared to 14% share in 2010. VET programmes offer professional qualifications and help attendees in getting early access to the labour market. Those who enrol in secondary general programmes are more likely to subsequently enrol in tertiary education programmes, although completion of 4-year VET programmes also provides a route to tertiary education. This might also explain why there is a higher share of enrolment in tertiary programmes in Albania following secondary education general programmes as previously pointed out.

FIGURE 4.3 ENROLMENT IN UPPER SECONDARY EDUCATION: GENERAL VERSUS VOCATIONAL EDUCATION (VET) PROGRAMMES, 2010 AND 2019



Note: Programmes at ISCED (International Standard Classification of Education) level 3, or upper secondary education, are typically designed to complete secondary education in preparation for tertiary education or provide skills relevant to employment, or both. Pupils enter this level typically between the ages of 14 and 16. Exit from upper secondary education may range across education systems from usually 11 to 13 years of education since the beginning of ISCED level 1. Data for Kosovo are not available.

Source: UNESCO Institute for Statistics, data extracted from UIS.Stat on 7 November 2020.

Amongst recent graduates, who do not continue further with tertiary education, employment chances seem to be higher for VET graduates than for secondary general graduates and this has been improving over time (Figure 4.4). VET programmes seem to work better for those who do not progress to tertiary education as they are designed to orient young adults towards certain skills and specific occupational groups (ETF, 2019a). Over recent years, countries in the region have improved the accessibility and training opportunities via VET programmes as well as expanded further the cooperation with private businesses, in part backed by EU financial support, such as IPA funding. However, there are several bottlenecks stemming from the poor quality of VET programmes rooted in the past such as insufficient didactic infrastructure, deficient upgrading of skills to recent labour market needs and a weak engagement towards work-based training. Further actions must therefore be taken to raise the education quality of VET programmes and thus improve employment chances of graduates.

FIGURE 4.4 EMPLOYMENT RATES OF RECENT GRADUATES (20–34 YEARS), ISCED 3–4 (%)

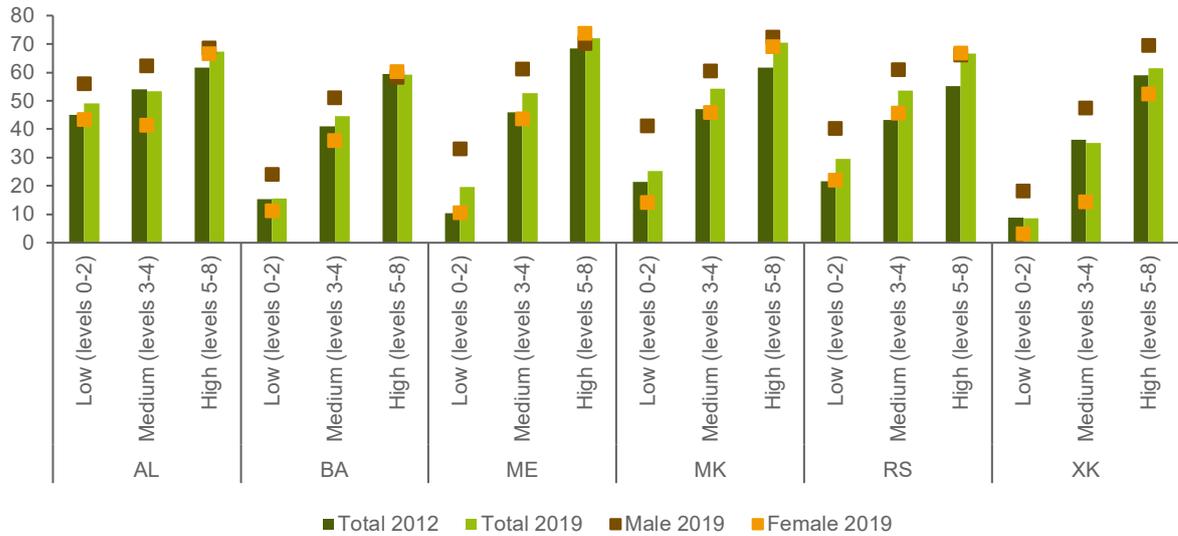


Notes: Data for Kosovo are not available. KIESE (ETF, 2018, p. 6, indicator 13). Data for Bosnia and Herzegovina refer to 2016 and 2019. The employment rate of recent graduates is estimated for persons aged 15–34 who fulfil the following conditions: (i) being employed, according to the ILO definition; (ii) having attained at least upper secondary education (ISCED levels 3–8) as the highest level of education; (iii) not having received any education or training in the four weeks preceding the survey; and (iv) having successfully completed their highest educational attainment one, two or three years before the survey. The indicator provides a measure of employability and transition from school to work of recent graduates, see ETF (2019), *Key indicators on education, skills and employment 2019*

Source: Own elaboration based on KIESE, ETF database 2020.

Employment rates of tertiary graduates are higher than for those with primary and secondary levels of education. Across the WB6 employment rates of tertiary graduates range between 60% (Bosnia and Herzegovina) and 70% (Serbia), while employment rates of those with a secondary education range between 45% (Bosnia and Herzegovina) and 54% (Serbia) (Figure 4.5). Gender gaps in employment are especially high for those with primary and secondary levels of education. Men with primary and secondary level of education seem to have better employment rates than women with a similar level of education for all the WB6. The employment gaps among women and men with secondary education seem to be quite high in Kosovo. As concerns those with tertiary education the gaps are quite evident in Kosovo – up to 17 percentage points – while for other countries such as Bosnia and Herzegovina and Montenegro the employment rates of women with tertiary level of education seem to be higher than for men. Such patterns indicate that tertiary education clearly improves employment opportunities for women in the region and it contributes to further close the gender employment gap.

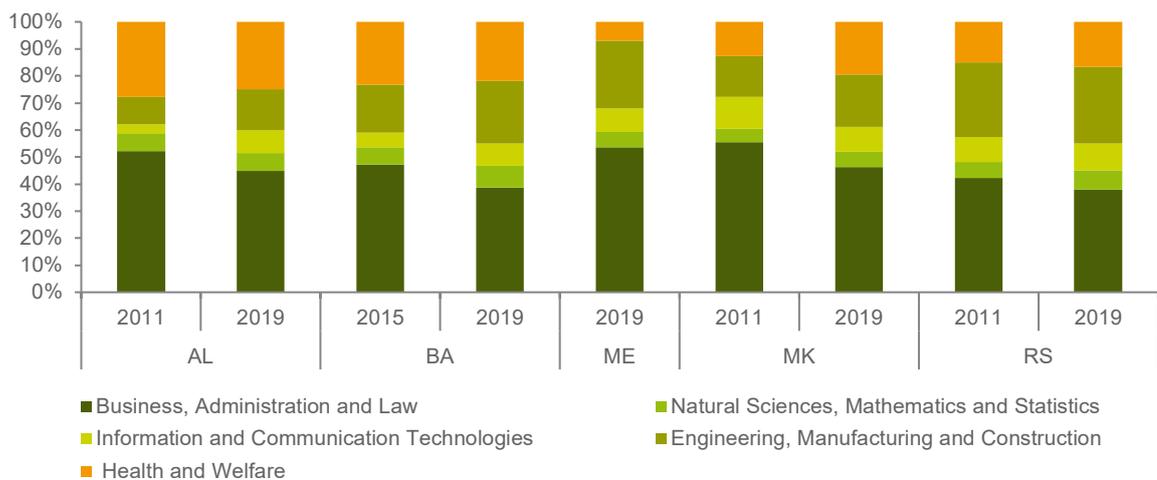
FIGURE 4.5 EMPLOYMENT RATES BY EDUCATION LEVEL (%)



Source: SEE Jobs Gateway Database.

Graduates are adjusting their choices towards those programmes where demand is rising quickly both domestically and globally. Over the last decade there has been a structural shift with respect to tertiary graduation programmes. For young people in all the WB6, ‘business administration’ was the preferred programme and continues to dominate the choice of tertiary graduates (Figure 4.6). However, over time other programmes such as ‘engineering, manufacturing and construction’ and ‘information and communication technologies’ are becoming more popular. Also, enrolment in ‘health and welfare’ has increased in Serbia and North Macedonia, while in Albania and Bosnia and Herzegovina it already amounts to above 20% though slightly decreasing over time. These dynamics suggest that graduates are more frequently choosing those programmes that would make them competitive on the international market and possibly have better employment prospects also abroad.

FIGURE 4.6 TERTIARY EDUCATION GRADUATES BY PROGRAMME

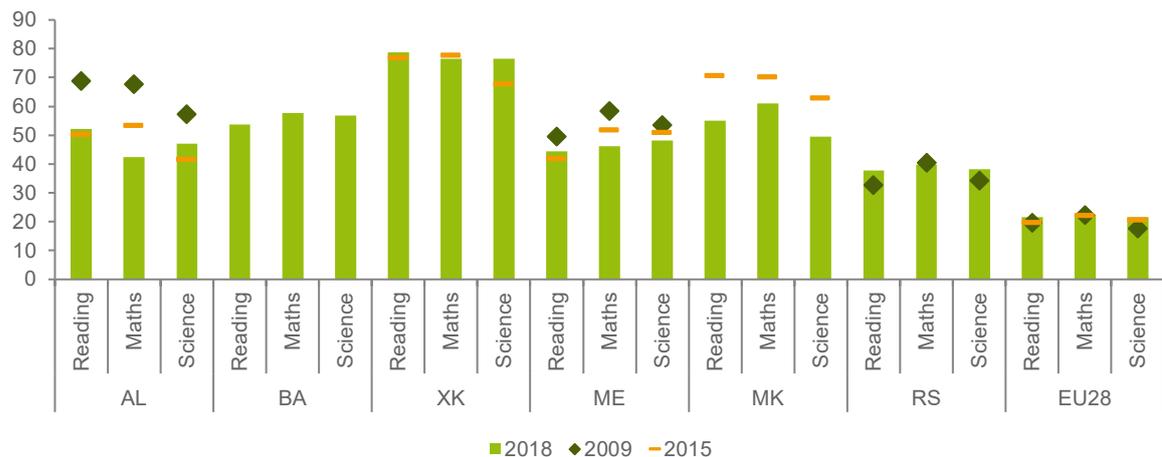


Note: Data for Kosovo are not available.

Source: UNESCO Institute for Statistics, data extracted on 7 November 2020.

The quality of education has been slightly improving for the primary and lower secondary education, but it remains far behind the EU average. In terms of education quality (primary and lower secondary), students in the region show lower scores on the OECD Programme for International Student Assessment (PISA) tests than their peers in the EU28 (Figure 4.7). Still, some progress has been achieved over the last decade in a number of countries in the region such as Albania and North Macedonia. The highest level of underperformance has been observed in Kosovo and the situation seems to have slightly deteriorated over time, while the best performer in the region is Serbia.

FIGURE 4.7 PERCENTAGE OF UNDERACHIEVING STUDENTS AGED 15 IN PISA, 2009, 2015 AND 2018



Note: Low achievers are the 15-year-olds who are failing level 2 on the PISA scale for reading, mathematics and science. The indicator provides a measure of the youth population most at risk due to lack of foundation/basic skills, see ETF (2019), p. 8, i.9, *Key indicators on education, skills and employment 2019*
Source: Own elaboration based on KIESE (low achievers, quality of education indicator), ETF database 2020.

Overall, expected years of schooling have improved over time, and the human capital gap with the EU is narrowing. According to the World Bank it is expected that on average, a child who starts schooling at age 4 in the WB6 is expected to complete 12.5 years of schooling at age 18, against the average of 13 expected in some of EU-CEE countries (Table 4.1). There is some differentiation among the WB6 with average years of schooling, with Serbia and Kosovo being above the EU-CEE average. However, when factoring in what children actually learn at school, then the gap to the EU seems considerably wider.

Other performance indicators also suggest that WB6 lag behind with respect to adult participation in lifelong learning. Adult participation in lifelong learning is the lowest in Albania (at 0.8%) and the highest in Serbia (at 4.3%) with reference to 2019 (ETF, 2020a, p. 59). Furthermore, it has deteriorated in Albania, Bosnia and Herzegovina and North Macedonia over the past decade (ETF, 2019a), while it has slightly improved in Montenegro and Serbia over the same period. However, these countries remain far below the EU average of 10.8% in 2019. In a labour market in which tasks are increasingly shifting towards automation and digitalisation, new skills are becoming increasingly important. Accordingly, lifelong learning is paramount especially for elder age cohorts which lack certain skills deemed as essential in contemporary jobs that often operate in a digitalised working environment. In addition, it matters particularly for those countries where large parts of the young labour force have and continue to migrate, and where the productivity and competitiveness depends on the performance of older workers. Supporting non-formal, but also on-the-job training for

middle-aged cohorts would assist them to perform better at work, adapt to the new work environment, allow them to continue being employed and to not migrate (especially relevant for the age cohorts 30–45 who still have higher inclinations to migrate and have not benefited from the various more recent educational reforms).

TABLE 4.1 HUMAN CAPITAL INDEX SCORES, 2020

	AL	BA	ME	MK	RS	XK	WB6	DE	EU-CEE average
Human capital index	0.63	0.58	0.63	0.56	0.68	0.57	0.61	0.75	0.69
Expected years of schooling	12.9	11.7	12.8	11	13.3	13.2	12.5	13.3	13.0
Learning-adjusted years of schooling	9.0	7.8	8.9	7.3	9.8	7.9	8.5	11.0	10.2
	BG	CZ	HR	HU	RO	PL	SK	SI	
Human capital index	0.61	0.75	0.71	0.68	0.58	0.75	0.66	0.77	
Expected years of schooling	12.3	13.6	13.4	13	11.8	13.4	12.6	13.6	
Learning-adjusted years of schooling	8.6	11.1	10.4	10.3	8.4	11.4	9.8	11.4	

Source: World Bank (2020a–f).

4.2 Impact of migration on human capital: brain drain

The most debated aspect of migration is its impact on the educational composition of the workforce and human capital formation, often framed as ‘brain drain’. In the literature, brain drain usually refers to the substantial outflow of skilled persons, generally operationalised in terms of tertiary educated people who move abroad on a permanent basis²⁴. In its technical usage, however, brain drain occurs when the share of high-skilled migrants among the total migrant population of a country is larger than the corresponding share of high-skilled residents among the total resident (non-migrant) population of a country. This is extremely difficult to document given the scarcity of migration data by education levels and occupational groups. Moreover, the concepts of brain drain, brain gain, brain waste and brain circulation have to be considered to understand all outcomes of skilled emigration. **Box 4.1** gives the definitions used for these concepts.

The phenomenon of brain drain is often mentioned by policy makers in the region, but concrete evidence is rather scarce. The only available migration data by education level for the region is found in the **IAB brain-drain data**, where the emigrant stocks date back to 2010²⁵. Accordingly, most of migration stocks from the region point to a V-shaped pattern, i.e., higher-than-average shares of both low- and high-skilled migrants, and lower emigration rates of medium-skilled migrants (Brucker et al., 2013). The impact seems to vary across countries, with Albania and Bosnia and Herzegovina showing a higher degree of brain drain, e.g., higher emigration of tertiary-educated individuals.

²⁴ See *International movements of the highly skilled* (OECD, 1997)

²⁵ As seen in Figure 3.10 (Section 3.3), these data, based on censuses in 20 destination countries that are members of the OECD, cover immigrant populations aged 25 and older by gender, education level and country of birth for the period 1980 to 2010 (at five-year intervals). The data for Serbia includes both Montenegro and Kosovo.

BOX 4.1 CONCEPTS LINKED TO THE OUTCOMES OF SKILLED EMIGRATION

Brain drain refers to the outflow of skilled labour generating a recognisable problem in the sending country (region), i.e., shortage of particular professions causing problems in the availability and quality of particular services (e.g., healthcare), or experts in technical professions (e.g., ICT) will influence the scale and sectoral composition of investments. Graduates of both tertiary and VET education are considered skilled labour in this study. Some also look at the fiscal costs of educational investments made in origin country as part of the 'brain drain' discourse (see Section 4.5).

Brain gain is likely to result from the acquisition of human capital through increased investment in education linked to the prospects to migrate, or education/training and job experiences abroad. Sending countries may provide a medium- or long-term answer and adaptation to the brain outflow. The adaptation can include wage increases for particular professions, intensifying education/training in particular professions to replace the missing professionals, return migration, or investing remittances in the education of children at home. Loss of skilled labour may trigger automation and technical modernisation, while educational and training institutions may also develop responses to the emerging skill shortages.

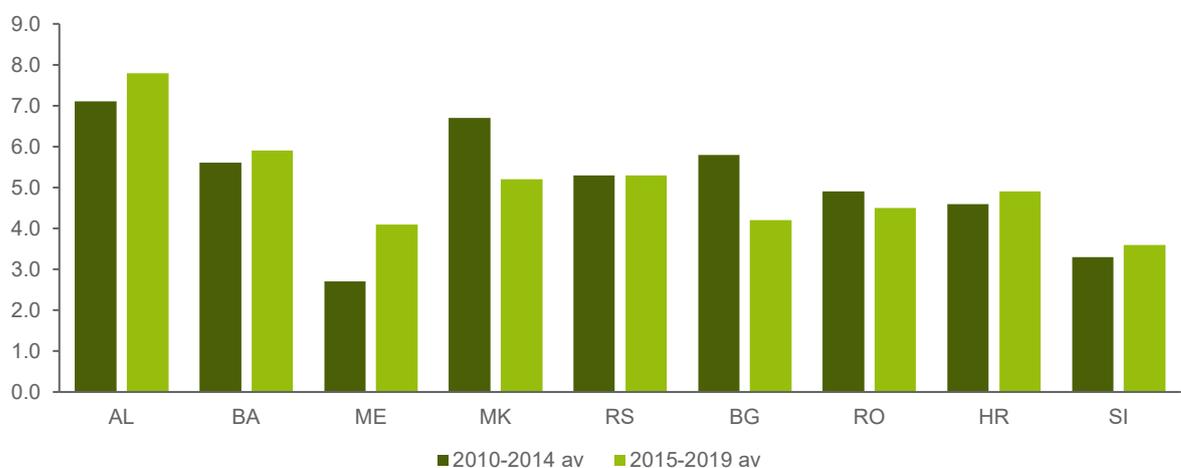
Brain circulation is connected with the human capital acquisition during the migration experience which results from temporary or permanent return migration of previous movers. It can also result from interaction of expats with non-movers. More than full compensation would happen if the emigration has resulted in the acquisition of new skills that can be utilised in the home country. In this regard, complementary factors such as the use of remittances, institutional and business supports can further brain circulation.

Brain waste refers to the underutilisation of expertise of well-educated or trained mobile workers in the receiving countries. The highly skilled worker may accept jobs requiring medium-level non-manual skills or manual jobs without using (fully or partially) their skills. Yet, skill underutilisation is also often present among non-movers in the sending countries. In case of mismatch between demand and supply of highly skilled professionals on the domestic labour market, emigration has the potential to reduce the pressure of less marketable professionals on the national labour market.

The degree to which emigration of skilled labour has positive or negative impacts depends on the short-, medium- or long-term responses and adaptation processes at individual, institutional and policy levels. Moreover, the intensity of brain drain may differ by profession, depending on labour market and policy reactions given to the scarcity of a profession.

Recently the Fund for Peace (2020) developed the ‘human flight and brain drain indicator’ that included data for the WB6 as well. The indicator shows a high degree of brain drain which is increasing over time for a sub-set of countries in the region (Figure 4.8). Although it must be read with caution given the complexity of compiling an index which mixes diverse migration patterns, motives and groups involved, it might still serve as a rough indication across countries and over time. Thus, in the case of Albania and Bosnia and Herzegovina, human capital flight is recorded as the highest in the region and has been rising over time and this might not be a surprise given that these two countries have quite high emigration rates. For other countries such as North Macedonia brain drain seems to have been declining, while in Serbia it has stalled. Based on this indicator, brain drain is higher in the WB6 (except Montenegro) than in some of the EU-CEE countries with high migration rates – particularly Romania and Bulgaria.

FIGURE 4.8 THE HUMAN FLIGHT AND BRAIN DRAIN INDICATOR



Notes: The Human Flight and Brain Drain Indicator²⁶ considers the economic impact of human displacement (for economic or political reasons) and the consequences this may have on a country’s development. This may involve the voluntary emigration of the middle class – particularly economically productive segments of the population, such as entrepreneurs, or skilled workers such as physicians – due to economic deterioration in their home country and the hope of better opportunities abroad. The indicator is between 0 (low) and 10 (high) and available from 2007 to 2019. The average for 2019 based on 176 countries was 5.55 index points, Australia was 1 index points. Data for Kosovo are not available. Details on the methodology for compiling the indicators and a chart for all countries where data are available can be found at: <https://fragilestatesindex.org/wp-content/uploads/2019/03/9511904-fragilestatesindex.pdf>

Source: The Fund for Peace (2020). <https://fundforpeace.org/2020/05/11/fragile-states-index-2020/>

Another study by the Westminster Foundation for Democracy (WFD) attempted to calculate opportunity costs of migration on education – through an analysis of educational costs of emigration in the WB5 (except Kosovo) with three different scenarios (WFD, 2019a–d and 2020). Scenario 1 assumed an educational composition of migrants similar to the one of emigrants aged 15+ as in the 2011 Census; Scenario 2 assumed an equal emigration rate across all levels of education; and Scenario 3 assumed half of migrants have a high (i.e., completed tertiary) level of education (see

²⁶ The final score of the index has been obtained by combining three streams of data source: pre-existing quantitative data sets, content analysis, and qualitative expert analysis. For more details about the methodology, see <https://fragilestatesindex.org/methodology/>. For information about how the index has been compiled, see Fund for Piece, 2020, p. 39.

Figure A12 in Annex for the scenarios). Following OECD statistics, the estimated outflow of migrants during the 2012–16 period for respective economies was reported as 43,000 from Albania, 3 600 from Montenegro, 23,000 from North Macedonia, 49,000 from Serbia and close to 37,000 from Bosnia and Herzegovina (for the 2013–17 period) (WFD, 2019a–d; and 2020).

Under such scenarios the estimated opportunity costs of emigration – calculated as spending on education (from primary to tertiary education) on those who migrate after receiving their education – ranged between EUR 960 million and EUR 1.2 billion in Serbia, corresponding to 2.8% of Serbia’s 2018 gross domestic product (GDP) (Figure 4.9). As expected, emigration opportunity costs tend to be higher for emigrants with a tertiary level of education. The education costs of migration in North Macedonia have been estimated at between EUR 277 and EUR 433 million or close to 4% of the country’s 2018 GDP. Similarly, in Bosnia and Herzegovina such costs – over EUR 800 million – amount to 4.7% of the GDP, while in Albania they were estimated at up to EUR 307 million, or 2.4% of Albanian GDP in 2018. The lowest opportunity costs of emigration are estimated for Montenegro at a level of EUR 37 million, below 1% of GDP. At the aggregate level, on an annual basis, five economies of the region are likely to experience a foregone loss of investment in human capital which ranges between EUR 2.1 and EUR 2.8 billion – around 3% of their GDP in 2019 (Figure 22, see also Figure A12 in Annex).

FIGURE 4.9 FINANCIAL COST OF MIGRATION (EDUCATION COSTS BASED ON THE EDUCATION STRUCTURE OF MIGRANTS) IN % OF GDP, 2019



Notes: Scenario 1 assumes an educational structure for migrants similar to the working people (working abroad) aged 15+ according to the 2011 census. Scenario 2 assumes that participation in migration of all three education levels is equal. Scenario 3 assumes that half of migrants have a high (i.e., completed tertiary) level of education. There are no data available for Kosovo.

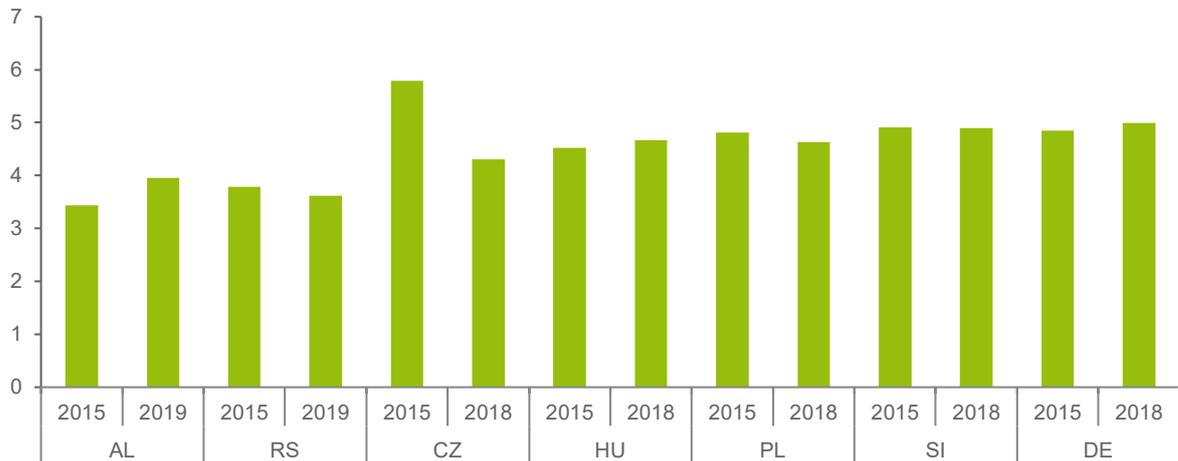
Source: Own elaboration using WFD, 2019a–d and 2020.

For the two countries (Albania and Serbia) for which recent information about GDP expenditure on education is available, the opportunity costs of emigration on education are high given that investment in education in these countries contrasts and are lower than investment in education in EU countries²⁷.

²⁷ This is an issue also recognised in the literature (Katseli et al., 2006, p. 34). A part of education expenditure is covered through fiscal revenues. This is an investment in the sending country of migrants whereby the benefits accrue mostly in the destination country (although the impact on remittances etc. has to be considered). Furthermore, emigration of key or essential workers puts under strain the delivery of certain

Available statistics for Albania suggest that spending on education hover at close to 3.6% of GDP – 1.4 percentage points lower than in Germany or Slovenia – which combined with the potential cost of emigration at 1.9 % of GDP – implies a loss of investment in human capital due to emigration which is far from negligible. Similarly, in Serbia education expenditure hovers at 3.6% of GDP but including the potential costs of emigration this might fall to 2.7% (see [Figure 4.10](#)).

FIGURE 4.10 GOVERNMENT EXPENDITURE ON EDUCATION IN % OF GDP



Note: Data for Bosnia and Herzegovina, Montenegro, North Macedonia and Kosovo are not available.
Source: UNESCO Institute for Statistics.

4.3 Size of recent high-skilled mobility: findings from the estimates of a novel 'cohort approach'

In view of the scarcity of reliable and detailed data on migration, a novel 'cohort approach' was developed within this study to estimate recent migration flows by skill groups (Leitner, 2021a). The cohort approach analysis allowed to deduce from annual LFS data the extent and skill composition of net migration over the 2010–19 period. This was particularly necessary due to the lack of official, comprehensive and home-based migration statistics in WB6, particularly in terms of the skill composition of migrants.

The cohort approach borrowed a key concept from population science, which considers population change to be determined by its components: fertility, mortality and net migration. Put differently, in the absence of fertility and mortality any population changes are assumed to be the result of net migration. It concentrated on the sub-population of persons aged 15–39 (which 'ages' over the ten years observation period into age cohorts 24–49), which is characterised by zero fertility (i.e., they are already borne), very little mortality and strong migration dynamics, so that net migration could be calculated with high precision. This sub-population is further split into five representative age cohorts, who are followed over time and whose change in size and composition provides information about the extent and skill composition of net migration.

services – e.g., in healthcare and education. These estimates, therefore, might be capturing only partly the opportunity costs of migration.

In terms of skill composition, four educational levels are differentiated:

- low – primary or lower secondary education;
- medium-general – upper secondary general education;
- medium-VET – upper secondary VET; and
- high – tertiary education.

Although the period of analysis refers to the period from 2010 to 2019, due to substantial breaks in some of the LFS data (resulting, for example, from a change in the ISCED classification, a shift in the sampling frame for the LFS from the previous census to the 2011 census or incomplete compatibility due to methodological changes), shorter periods are used in some countries to avoid break-related biases (2010–19 for Bosnia and Herzegovina and North Macedonia; 2011–19 for Albania and Montenegro, 2014–19 for Serbia; and 2015–18 for Kosovo). The analysis differentiated between two different periods (2011–14 and 2015–19), which allowed to shed light on general period-specific effects and particular cohort-specific effects, as cohorts tend to display different net migration patterns when they are younger (during the first period) compared with when they are older (during the second period). Since estimated annual net migration tends to fluctuate considerably, we present the results in cumulative numbers by period.

FIGURE 4.11 AVERAGE NET MIGRATION RATES (PER 1,000 POPULATION), 2010–19



Note: The 'average net migration rate' refers to the difference between immigration and emigration, divided by mid-year population averaged over the period 2010–19. The cohort analysis follows the age groups over the period 2010–19; hence they start as age cohorts 15–35 in 2010 and then 'age' into age cohorts 24–44 at the end of the observation period in 2019.

Sources: LFS for Albania (AL), Bosnia and Herzegovina (BA), Montenegro (ME), North Macedonia (MK), Serbia (RS), and Kosovo (XK); own calculations in Leitner (2021a).

The results highlight that all WB6 experienced net emigration of the target population 15–39 in the 2010–19 period. However, the extent of net emigration differs across countries, not least because of the different time horizons analysed²⁸. Hence, for reasons of comparison we calculated average net migration rates²⁹ for each Western Balkan country. Figure 4.11 shows that average net migration rates

²⁸ As an example, the total number of emigrants is estimated at around 105,000 persons in Albania (2012–19), 405,000 in Bosnia and Herzegovina (2011–19), 16,000 in North Macedonia (2011–19), 4,500 in Montenegro (2012–19), 53,000 in Kosovo (2016–18), and 40,000 in Serbia (2015–19). For further details, see Leitner, 2021a.

²⁹ The average net migration rate refers to the difference between immigration and emigration divided by mid-year population, averaged over the period 2010–19.

were highest in Bosnia and Herzegovina (-12), Kosovo (-7) and Albania (-4.5), and lowest in Montenegro, North Macedonia and Serbia at around -1, respectively.

Net migration in the region occurs mainly among the low- and medium-educated, with the exception of Albania and Serbia (Figure 4.12). In Bosnia and Herzegovina net emigration is most pronounced among persons with medium-VET skills, who account for almost 60% of the total estimated outflow, followed by the low-educated. In North Macedonia and Kosovo net emigration occurs mainly among the low-educated and those with medium-general as their highest level of education. However, in North Macedonia net emigration is mainly concentrated among the low-educated, while in Kosovo it occurs mainly among persons with medium-general as their highest level of education. In Montenegro, net emigration is also mainly concentrated among the medium- and low-educated. This differentiated picture across the region has different implications with respect to brain drain, brain gain and brain circulation for each country.

By contrast, in Albania net emigration is highest among the highly educated and those with medium-VET skills. The very low net emigration among the low-educated and the high net immigration among those with medium-general as their highest level of education in the first period of analysis (2012–14) is related to the global financial crisis. The subsequent economic depressions in Italy, and above all in Greece, which hit the Albanian diaspora in these two key destination countries particularly hard, spurred a wave of mass return migration, especially among these two educational groups (Hausmann and Nedelkoska, 2017).

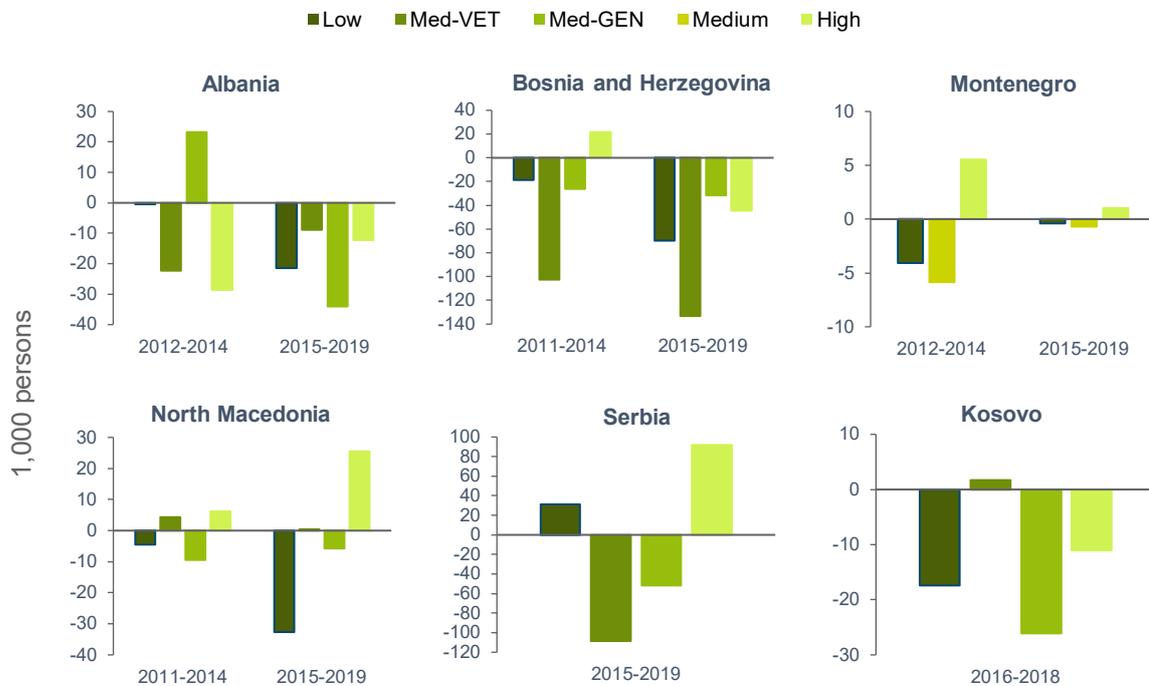
In Serbia, net emigration occurs solely among the medium-educated but is particularly high among those with medium-VET skills. While in absolute terms net emigration of those with medium-VET skills is substantially higher than of those with a medium-general education, given the relatively low number of medium-general educated people in the population (only accounting for around 26% of all medium-educated persons in Serbia), their net emigration is sizeable. Overall, net emigration of the low- and medium-educated is strongest among the younger cohorts, which comprise those who are in their early to mid-20s to early 30s (see Annex, Figure A11 which gives a breakdown by age group as well).

There is evidence of brain drain in Albania, Bosnia and Herzegovina and Kosovo (Figure 4.12). In Albania, net emigration of the highly educated is substantial and accounts for almost 40% of the total estimated cumulative outflow between 2012 and 2019. In Kosovo, net emigration of the highly educated is also substantial, although it is lower than that of the group of medium-general educated and of those with low educational levels. Brain drain in Albania and Kosovo is highest among recent university graduates. Net emigration of the highly educated is particularly pronounced among the young – more specifically among those who are in their early to mid-20s (see Figure A11 in Annex for the breakdown by age cohort). This suggests that the majority leave Albania and Kosovo just a few years after graduating from tertiary education. Better employment prospects and higher pay abroad may be their key motives for emigration.

In Bosnia and Herzegovina, migration patterns of the highly educated are complex and differ according to the period under consideration. There is net immigration among all cohorts during the first period of analysis (2012–14) but substantial net emigration among almost all cohorts during the second period (2015–19). In particular, brain drain in the second period is systematically higher than brain gain in the first period. This suggests that net immigration during the first period was only temporary and probably the result of the global financial crisis, which reduced the employment options for university graduates in their host countries significantly. Once the dust had settled and economies

started to recover from the crisis, net emigration of the highly educated gained new momentum. Overall, however, net emigration of the highly educated is comparatively low and only accounts for 6% of the total estimated outflow between 2011 and 2019.

FIGURE 4.12 CUMULATIVE NET MIGRATION FLOWS BY EDUCATIONAL ATTAINMENT LEVEL, 2011–19



Notes: The period of analysis refers to 2010–19. However, due to various substantial breaks in the underlying data, shorter periods were used for some countries. The cohort approach approximates net migration through the differences in cohort size between two consecutive years. Hence 2011 – the first year reported here – refers to the difference between 2010 and 2011. Educational levels are divided into four categories – low (primary or lower secondary education), Med-GEN (medium-general: upper secondary general education/gymnasium), Med-VET (upper secondary VET), and high (tertiary education) – based on ISCED. Negative numbers refer to net emigration, while positive numbers refer to net immigration.

The ISCED break in the Montenegrin LFS data between 2013 and 2014 strongly affects how the two groups of Med-VET and Med-GEN are classified. To facilitate interpretation, net migration flows for both periods are calculated for the aggregate medium group as the sum of net migration flows of Med-VET and Med-GEN.

Sources: LFS for Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia, and Kosovo; own calculations in Leitner (2021a).

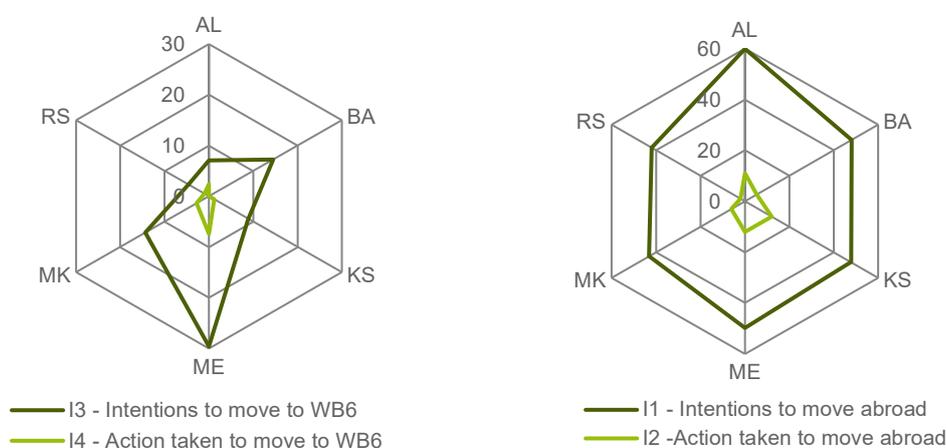
Contrary to widespread perception, there is evidence of brain gain in Montenegro, North Macedonia and Serbia (Figure 4.12). In Serbia and Montenegro this is also attributable to the immigration of highly skilled workers who are attracted to work there, in addition to those receiving higher education (particularly the case in Serbia). Students are the major drivers of brain gain in Montenegro, North Macedonia and Serbia. Generally, brain gain is highest among the youngest cohorts, particularly among those in their 20s. Since this is also the age at which tertiary education is typically completed, this suggests that net immigration of the highly educated is mainly driven by students who return to their home countries after graduating from tertiary education abroad. The simultaneous strong net emigration of both medium-VET and medium-general educated among the youngest cohort is consistent with this idea: both groups seem to leave in larger numbers after graduating from upper secondary education and return as university graduates when they are still in their 20s. In the case of Serbia, brain gain is also related to foreign students attending Serbian

universities, which reports an increase in the number of foreign students (Statistical Office of the Republic of Serbia, 2019a). These students come mainly from neighbouring countries such as Bosnia and Herzegovina, and Montenegro (ibid., 2019b), despite a generally low intra-regional mobility (Box 4.2).

BOX 4.2 INTRA-REGIONAL MOBILITY OF THE HIGHLY EDUCATED

Intra-regional mobility, at least among the highly educated, remains an unpopular choice. Intentions or actions to move within the region, especially among the highly educated, seem to be low. Highly educated persons have a higher preference to move abroad than moving to another country within the region. On average only 13% of the highly educated would prefer to move within the region. Montenegro constitutes an exceptional case as 30% of the highly educated in the country would consider moving within the region, and most likely to Serbia, which is explained by ethnic ties with this country. Actions taken for moving within the region range between 1% (Serbia) and 7% (Montenegro), which suggests that potential mobility within the region might have a diverse intensity across countries, but it is much lower than actions taken for moving outside the region. The overall message here is that there is a strong inclination in the region for moving abroad, but not within the region (see Figure 4.13).

FIGURE 4.13 POTENTIAL MIGRATION OF THE HIGHLY EDUCATED, 2019



Note: **I1. Move abroad** – Question asked: Would you consider leaving and working abroad? Categories of answer: Yes/no/don't know. **I2. Action taken to move abroad** – Question asked: In what phase of consideration are you? Categories of answer taken into consideration: Reviewing and applying to vacancies/I've concretised everything, currently finishing necessary administrative issues/I know the exact date of departure. **I3. Move to WB6** – Question asked: Would you consider leaving and working in another place in the Western Balkan region? Yes/no/don't know. **I4. Action taken to move to WB6** – Question asked: In what phase of consideration are you? Categories of answers taken into consideration: Reviewing and applying to vacancies/I've concretised everything, currently finishing necessary administrative issues/I know the exact date of departure.

Source: Own elaboration using POBB (2020). www.rcc.int/balkanbarometer/publications

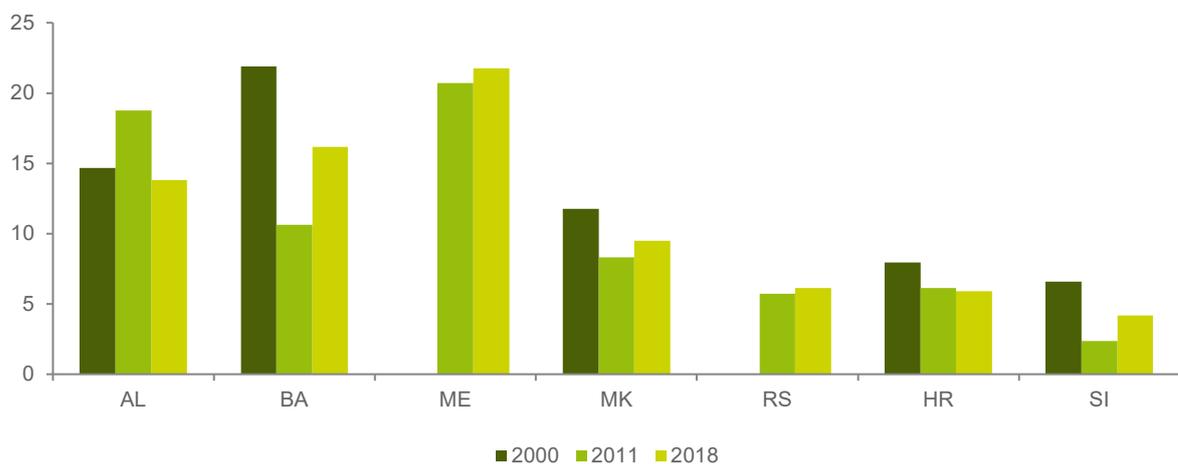
Summing up the results from the above analysis, a detailed look at net migration flows of persons in different age cohorts and with different educational attainment levels reveals quite a differentiated picture across the WB6. Three countries of the region (Albania, Bosnia and Herzegovina, and Kosovo) are characterised by consistently high net emigration rates; while net migration flows for the other

three countries (Montenegro, North Macedonia and Serbia) have been much lower over the past decade. There is also an interesting life cycle of migration pattern which is detected by looking at different age cohorts (within the 15–39 age bracket ageing to 24–48 over the 10-year observation period covered in this analysis): the younger age cohorts emigrate in larger numbers, and this falls quite strongly as these cohorts grow older. This seems to indicate a strong propensity to migrate for work, training and study purposes at a younger age, and for three of the countries (Serbia, North Macedonia, and Montenegro) there is evidence for significant return migration of the tertiary educated, quite a few of these after having obtained tertiary degrees abroad. Another trend is relatively strong outward migration of persons with medium-VET degrees from Albania, Bosnia and Herzegovina, and Serbia (from Albania also of medium-general educated persons), indicating the impact of push and pull factors on those with medium (and particularly VET) qualifications.

4.4 Students' mobility as an important driver of human capital acquisition

International students' mobility has huge potential for improving the quality and quantity of human capital. Over the last decade of 2010–18, the share of WB6 students enrolled abroad relative to those enrolled at home has receded compared with the 2000–10 period (UNESCO). Still, between 2015 and 2018, students enrolled abroad have gained momentum with their number increasing by 12%. The share of students enrolled abroad in proportion to those enrolled at home is the highest in Montenegro, at 22%, while Serbia records a share of only 6%. Bosnia and Herzegovina has recorded the highest increase in the share of students enrolled abroad for 2010–18 – at least by 6 percentage points up to 16%. In the case of Albania (where the share of students enrolled in tertiary education at home has increased very strongly) the opposite has occurred as the share has declined by 5 percentage points down to 14% (Figure 4.14).

FIGURE 4.14 SHARE OF TERTIARY STUDENTS ENROLLED ABROAD (IN% OF TERTIARY STUDENTS ENROLLED IN THE COUNTRY OF ORIGIN)



Note: Data for Kosovo are not available.

Source: UNESCO Institute for Statistics.

Still the enrolment ratio of students from the region is one of the highest given that in the OECD countries it is close to 5%, and it is much higher than in some of the EU-CEE countries which are already EU Member States benefiting from a number of intra-EU mobility programmes, such as

Slovenia or Croatia³⁰. This fact would be good news if students enrolled and graduated abroad would return home (or a significant share of those) and would contribute to mitigating brain drain effects. However, the return migration of international students from Albania, Kosovo and Bosnia and Herzegovina is relatively low – here we would exclude Serbia, Montenegro and North Macedonia – and this generates a further loss of talented and highly skilled people from the region³¹ (see also Figure A22 in Annex about the Global Talent Competitiveness Index).

The EU has been one of the key drivers and destinations that facilitates international student mobility from the WB6. Since 2014, academic and youth mobility have been facilitated by a number of EU programmes which foster further education and training through exchange programmes. Especially over the 2014–20 period thousands of students, researchers and academic staff from the WB6 have benefited from Erasmus+ and other EU mechanisms³². From the WB6, only Serbia and North Macedonia are programme countries, but all six countries can be partners of mobility. One of the Erasmus+ actions is short-term mobility of 3–12 months, known as International Credit Mobility (ICM). **ICM mobility in the WB6 over the 2015–20 period included over 2 372 projects and over 48,000 people moving in both directions** (from the WB6 to EU28 or vice versa). The shares of mobility per country were as follows: Serbia (24%), Albania (27%), Bosnia and Herzegovina (28%), Kosovo (12%), and Montenegro (9%).

To be precise, 29 910 students from the WB6 and academics have benefited from the ICM programme by obtaining credits from short mobility schemes to EU universities and another 18,224 from the EU to the WB6 (see Table A3 in Annex for further details concerning beneficiaries of different Erasmus+ programmes). More than 400 students from the WB6 have benefited from the Erasmus Mundus Joint Master's Degree programme over the 2014–20 period (see footnote 30 for a description of these and the following programmes). Participation in Capacity Building in Higher Education projects has happened in more than 831 cases and for 112 projects. Further, more than 51 activities have been supported through Jean Monnet framework. Moreover, young researchers received support from Horizon 2020 and Marie Skłodowska-Curie Actions. Compared to the previous decade, such achievements look impressive, and improvements have been made to increase capacity of the WB6 to absorb EU funding.

It is important to highlight that student and staff mobility through programmes such as Erasmus+, the Central European Exchange Programme for University Studies (CEEPUS) and the European Regional Master's Programme (ERMA) are very popular in all WB6. Universities from the region are keen and quite active in signing bilateral and multilateral agreements that facilitate the mobility of staff and

³⁰ www.oecd-ilibrary.org/sites/17d19cd9-en/index.html?itemId=/content/component/17d19cd9-en

³¹ UNDP (2018) showed that only 4% of international student from Albania would be willing to return home after graduation. See UNDP, 2018, p. 25.

³² Erasmus+ is an EU-funded programme that supported academic and youth mobility and cooperation projects for the 2014–20 period. It involves 34 'programme countries' (EU28 and EFTA countries, Turkey, Serbia and North Macedonia) and 'partner countries' all over the world. The programme allows students to study in a foreign university for 3 to 12 months and obtain credits which are then recognised at the sending institutions at home. Another action within the Erasmus+ framework is Erasmus Mundus Joint Master's Degrees, which awards full degree scholarships to Master's students from all countries and offers tuition, travel and living allowance. Part of Erasmus+ is also Capacity Building in Higher Education, which includes projects that last for two to three years and assist the participating countries to reform and modernise their higher education institutions, but also prepare the grounds for higher education reforms in cooperation with national institutions. Also Jean Monnet activities, as part of Erasmus+, supports projects promoting excellence in teaching and research and assists the countries in their EU integration process to higher education. See [Erasmus+ factsheets](#)

students, thus the mobility of students from the WB6 to the EU and other developed countries has been continuously rising. The enhancement of human capital through education abroad is likely to raise educational attainment back home. Although the share of graduates abroad who return is unknown, it is a fact that several public and private universities in the region have recruited several employees who were educated abroad and contribute to the education system with professional experience gained in western countries. Besides these usual programmes, the EU-funded Young Cell Scheme in Kosovo has provided young Kosovars with scholarships to attend the EU's most reputable educational institutions for many years. The scheme has assisted many graduates to enhance their skills abroad and upon return to be placed in the public sector and in government administration at various levels.

However, in relative terms two issues emerge to highlight. Firstly, **the region still benefits only marginally from the available EU funding** for capacity building and human capital development through exchange and mobility programmes. Secondly, **some of the WB6 countries have been more agile than others in attracting such funding**. For example, the take up rate of the WB6 concerning Erasmus Mundus Joint Master's Degree scholarships has been only 3.4% and more than half of them have gone to students from Serbia. The success rate of the WB6 in other EU programmes such as Marie Skłodowska-Curie Actions is also relatively low, at a ratio of 1:10, with the total funding being close to EUR 9 million (84% have been won by applicants from Serbia) (RCC, 2020c, p. 92). The EU funding allocated to Erasmus+ for 2014–20 has been estimated at 16.4 billion and for 2021–27 the EU has agreed on a budget of EUR 26 billion³³. This implies that the potential offered by the EU is much higher, and the WB6 should work strategically to improve their chances to benefit from this EU support in enhancing and building further human capital via Erasmus+.

³³ See the [Erasmus+ Programme Guide 2021](#)

5 MIGRATION AND LABOUR MARKETS

This chapter aims to shed light on interlinkages between migration and labour market features. The analysis focused on two channels of interactions. First, the labour market-migration channel: how labour market weaknesses – such as employment and earnings gaps – encourage emigration. Secondly, the migration-labour market channel: how migration trends affect labour market adjustment. Section 5.1 starts with beneficiaries of recent job creation in the region and draws attention to their inequal distribution, both across social groups within countries as well as among the WB6. Section 5.2 discusses the weaknesses of labour markets as drivers of migration, especially the impact of job types and earnings prospects available. Section 5.3 continues with the impact of migration on employment and wages at home, where decrease in unemployment is evident but increase in wages less. Section 5.4 looks at the structural composition of the economies and underpinning sectors to understand skills demand in the region and skill mismatch experienced, including the shortage of skilled workers in some sectors. Finally, Section 5.5 completes the picture by analysing the impact of labour market and policy changes in destination countries, particularly in the case of Germany.

5.1 Beneficiaries of recent job creation

Working age population has been declining or stagnating in the region, to which emigration flows might have contributed. The structure of the working age population (15–64) in the WB6 improved towards increasing employment between 2012 and 2019³⁴. The less good news is the declining working age population by 784,700 persons or almost 7%, driven by low fertility, population ageing and migration³⁵. But there are variations across countries: Bosnia and Herzegovina recorded a dramatic drop of its working age population (-20%), followed by Serbia (-8.5%) and North Macedonia (-1.5%), while it increased in the other three countries, especially in Kosovo, up by 5.3% (Figure 5.1). Over this period, declines in the number of unemployed (by 739,000) and inactive persons (by 827,000) were much higher than the rise in employment (by 780,000 persons). The reason for this is that a segment of the working age population has been leaving the WB6 and this has contributed to alleviating unemployment and inactivity given insufficient job creation on the local labour market (see also Figure A13 in Annex).

Labour market improvements have been significant prior to the Covid-19 crisis, but with considerable variations across countries. Between 2012 and 2019 the WB6 recorded rising activity and employment rates and shrinking unemployment rates but remained far below the EU average. Overall, the regional activity rate increased by 4.5 percentage points – up to 63% rising in all countries except Kosovo and Bosnia and Herzegovina, the two countries with the lowest activity rates (especially those of women) in the region. At the same time the regional employment rate rose by 10 percentage points (up to 54.6% in 2019)³⁶, but not all the countries have benefited equally from these positive developments. Out of the 780,000 newly created jobs in the WB6 between 2012 and 2019, close to 58% were

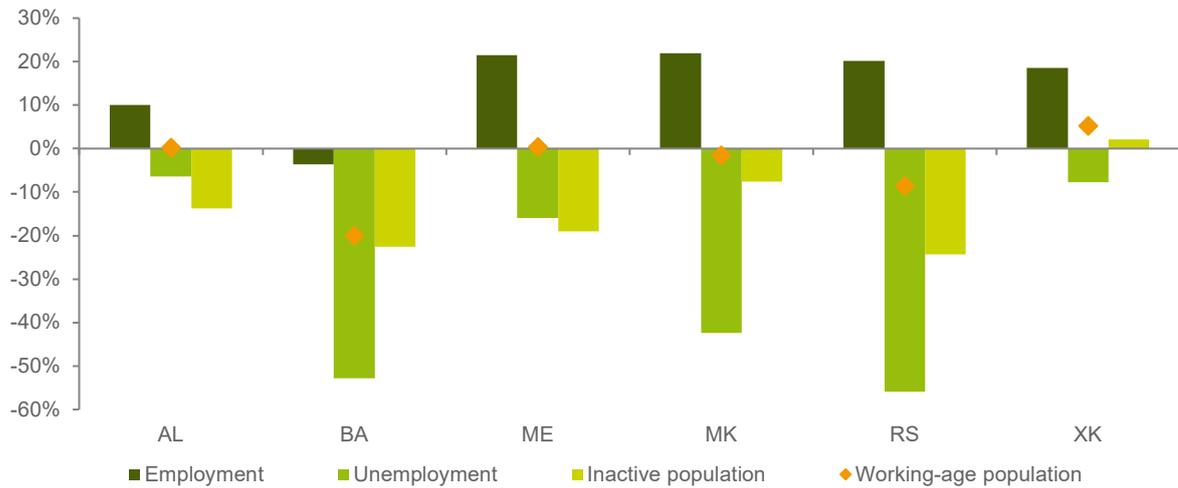
³⁴ Aggregate data for the WB6 – based on the LFS for each country – start from 2012 as data for Kosovo are not available prior to this. For further details, see SEE Jobs Gateway Database.

³⁵ The shrinking of the working age population is a common phenomenon across Europe, putting economies under pressure due to a rising old-age dependency ratio (RCC, 2020). For example, in Bulgaria the working age population dropped by 9% between 2012 and 2019, in Croatia by 6.8% and in Hungary by 5.4%.

³⁶ This section focuses on labour market dynamics in recent years and excludes the pandemic year 2020 in order to cover labour market developments that have not been strongly influenced by the pandemic. The impact of the pandemic on the labour market in 2020 is discussed in detail in Section 8.

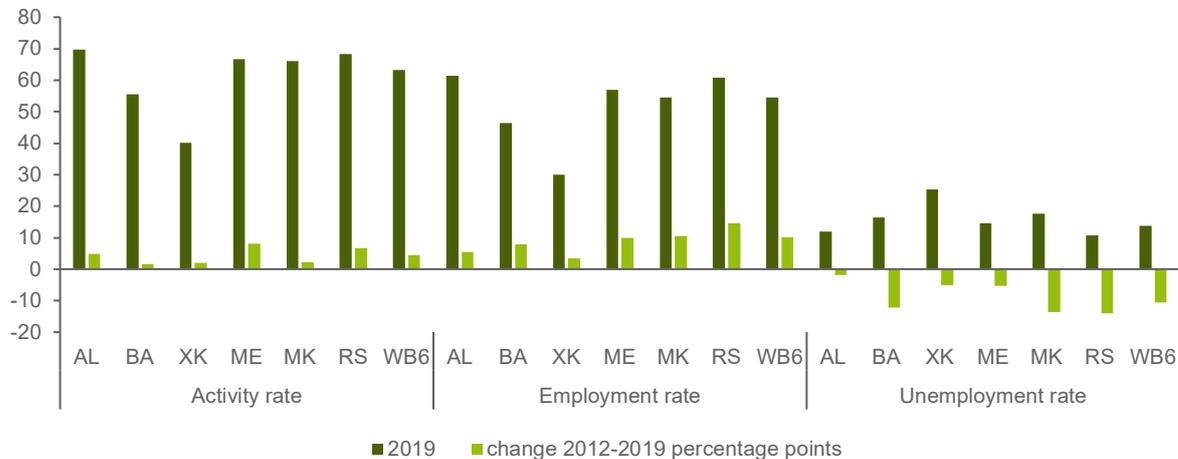
generated in Serbia – which has the largest population in the region – followed by North Macedonia and Albania with 141,000 and more than 110,000 newly created jobs respectively. Employment rose by more than 20% in North Macedonia, Montenegro, and Serbia, by 17% in Kosovo and 10% in Albania (Figure 5.2). Between 2012 and 2019 the unemployment rate fell by almost 11 percentage points, down to 13.4% in 2019, reaching historic lows in all countries.

FIGURE 5.1 CHANGE IN LEVELS OF EMPLOYMENT, UNEMPLOYMENT AND INACTIVITY (15–64 YEARS), 2012 AND 2019 (%)



Source: Own elaboration based on SEE Jobs Gateway Database.

FIGURE 5.2 LABOUR MARKET INDICATORS – TOTAL, 2012–19



Note: Activity and employment rates refer to the working age population (15–64), the unemployment rate to the age group 15+.

Source: SEE Jobs Gateway Database.

Men are more active in the labour market than women and there has been little progress to reduce this gap in recent years. In the entire region, activity rates of women are lower than for men and in some countries (e.g., Kosovo and Bosnia and Herzegovina) these gaps are very pronounced (Figures 5.3 and 5.4). The participation of women in the labour market is highest in Serbia and Albania, but the latter is mainly due to the still high share of agricultural employment in Albania. In both countries the respective employment rates are higher and unemployment rates are lower than in the other countries, and over time there have been further improvements – more than in other countries in

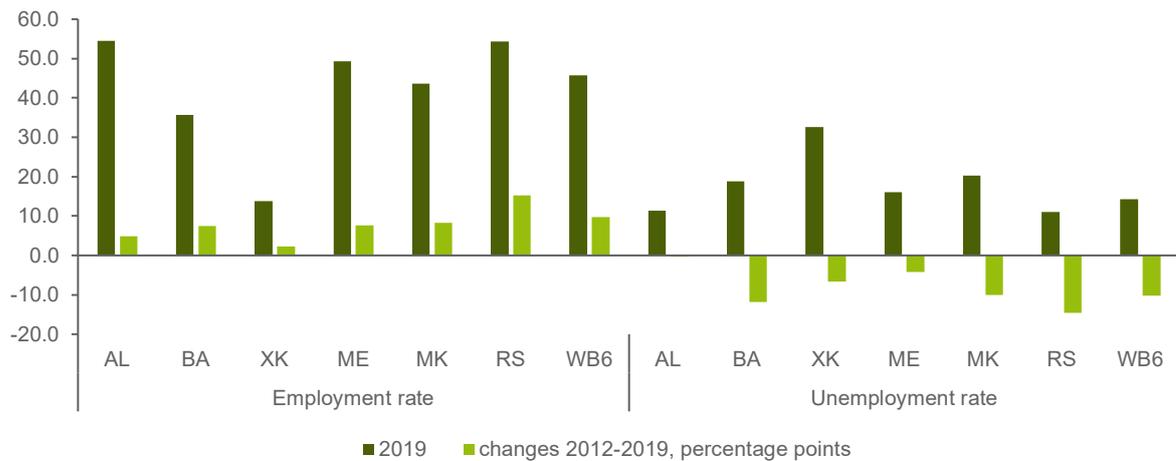
the region. The root causes of gender gap are on family responsibilities (in part related to emigration of the spouse), lack of affordable or available childcare (especially in rural areas), as well as cultural and religious reasons (World Bank and wiiw, 2020).

FIGURE 5.3 ACTIVITY RATE BY GENDER (15–64), 2012–19



Source: SEE Jobs Gateway Database.

FIGURE 5.4 EMPLOYMENT AND UNEMPLOYMENT RATE OF FEMALES, 2012–19



Note: Employment rates refer to the age group 15–64, unemployment rates to the age group 15+.

Source: SEE Jobs Gateway Database.

BOX 3.1 WHO GETS HIRED IN RECENT JOB CREATION IN THE WB6?

Between 2012 and 2019 employment in the WB6 grew on average by 15%, increasing most in Montenegro, North Macedonia, Serbia and Kosovo (by about 20% each), while it was less dynamic in Albania (10%), and it even fell in Bosnia and Herzegovina. In terms of age, employment increased most (33%) for the older workers (aged 55–64) in all the countries of the region (Figure A13 in Annex). This can be partially explained by a cohort effect as this age group has seen a considerable population growth (World Bank and wiiw, 2017) as well as by pension reforms in recent years. The young age group (15–24) also benefited from rising employment (19%), except Albania. Below average employment growth (10.5%) is reported for the prime age group aged 25–64.

Besides the increase in youth employment, both unemployment and NEET (young people not in employment, education or training) rates have decreased in recent years (see Figure A17 in Annex). This was partly due to the economic recovery since 2015 and to young people staying longer in education, but also to migration. **Progress in the labour market has not been enough to prevent young people from migrating** abroad as youth unemployment and NEET rates are still much higher than in EU-CEE countries. Hence, other factors such as the large wage gap between sending and destination countries, better career opportunities, etc. are likely to play a more important role for migration.

Men have benefited more from new job creation than women in most of the WB6 (see Figure A14 in Annex). In Serbia, however, it was women who gained more new jobs than men, while in Albania women and men benefited equally from new job creation. The decline in unemployment was also greater for men, while inactivity fell mainly among women in Albania, Bosnia and Herzegovina, North Macedonia, and Serbia. In Kosovo, on the other hand, inactivity increased to a large extent among women.

Employment opportunities tend to be higher for those with tertiary education. Job creation benefitted most those with high levels of education in Albania (Figure A15 in Annex), Montenegro and Kosovo. In Bosnia and Herzegovina, the only group whose employment rose was the one with a medium level of education (VET or general high school). The medium educated were also the ones that absorbed the majority of new jobs in North Macedonia and Serbia. In contrast, low-skilled workers did not record an increase in employment (except Montenegro), although they were largely responsible for the decline in unemployment and inactivity in some of WB6 (except Serbia). This suggests that emigration for work among the low-skilled might have been an important factor for the other countries.

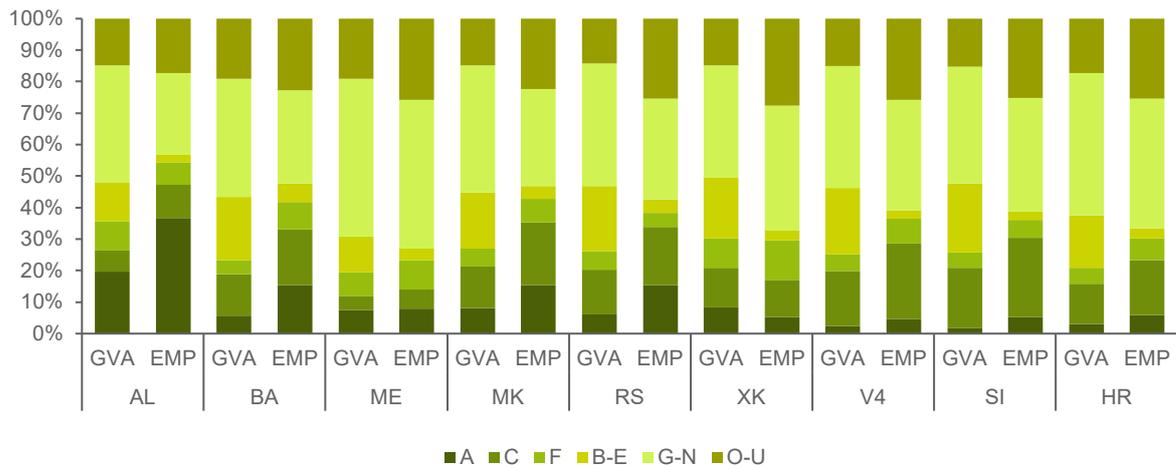
5.2 Labour market weaknesses as drivers of migration

Labour market weaknesses are entrenched in structural economic weaknesses. Figure 5.5 shows that only in three economies (Bosnia and Herzegovina, North Macedonia, Serbia) employment in manufacturing plays an important role, but the shares do not reach the level of the four Visegrad countries or Slovenia. There are two exceptions: Albania with a very large share of employment in agriculture and Montenegro with its large share in private sector services (G–N) which reflects the important role of its tourism sector. An important issue is the structure of the private sector: more than

98% of the enterprises in the region are rather small and medium enterprises – mainly family businesses and/or belonging to self-employment³⁷. Most of the activity is in distributive trade sector and other services, while high value-added activities amongst SMEs are strongly under-represented (OECD et al., 2019). Furthermore, informal employment is prevailing in some of the countries, another source of vulnerable/precarious employment strongly present in the private sector (World Bank and wiiw, 2019). Vulnerability for these categories of employment remains high and earnings prospects low.

The public sector – public administration, community, social and other services and activities (O–U) – remains the most attractive for the medium- and high-skilled workers while the private sector’s potential remains insufficiently tapped. The reasons are as follows: first, wages in the public sector tend to be higher than in the private sector, except for those professionals falling into the groups of ‘information and communication’, and ‘financial and insurance activities’. Consequently, the private sector remains unattractive for high-skilled workers who are mainly in search for a job in the public sector as a better option for employment and earnings stability and this was confirmed for all countries in the region. However, employment in the public sector is subject to non-transparent recruitment practices, nepotism and favouritism depending on links to ruling parties which was also confirmed in the country reports.

FIGURE 5.5 SHARE OF EMPLOYMENT AND GROSS VALUE ADDED BY BROAD ECONOMIC SECTOR, 2019 (%)



Note: V4 refers to the four Visegrad countries: Poland, Czechia, Slovakia and Hungary.

Economic activity: A. Agriculture; C. Manufacturing; F. Construction; B, D, E. Mining and quarrying; electricity, gas and water supply; G–N. Trade, transportation, accommodation and food, and business and administrative services; O–U. Public administration, community, social and other services and activities.

Source: Eurostat (Gross value added and income by A*10 industry breakdowns [nama_10_a10]) and International Labour Organisation (ILO) employment distribution by economic activity – ILO modelled estimates, November 2019 (%).

³⁷ This represents three-quarters of employment in the private sector (OECD et al., 2019).

FIGURE 5.6 MEAN MONTHLY EARNINGS BY OCCUPATION, 2018 (EUR (PPS))



Note: Data for Kosovo, Bosnia and Herzegovina and Montenegro are not available.

Source: Eurostat, Structure of earnings survey: annual earnings [earn_ses_annual].

Earnings prospects abroad are alluring both for the high- and low-skilled. Earnings prospects abroad continue to be a strong pull factor for outward migration to EU and EFTA countries. Important gaps in earnings are striking for specific high-skilled occupational groups such as managers, technicians and associate professionals (Figure 5.6). For some countries the wage differentials are quite remarkable, e.g., in Albania managers are likely to earn less than a manual worker in Slovenia. Professionals in Serbia earn three times less than their peers in Germany. The earnings level of technicians in North Macedonia is far below that of manual workers in Germany. Such earnings differentials continue to be a strong pull factor not only towards traditional destination countries, but also towards the new EU Member States.

5.3 Impact of migration on employment and wages

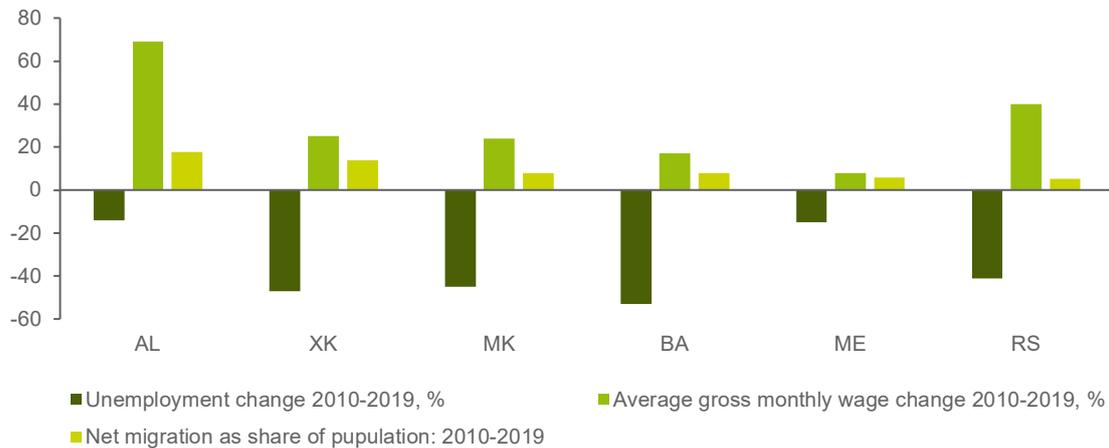
Migration contributes to alleviating labour market pressures in the region, but the impact varies across countries. Labour market developments characterised by stronger drops in unemployment and inactivity than the increase in job creation are connected to both improvements in the labour market and also due to emigration. The result is not surprising given the high level of emigration from the region, but at the same time it is a clear signal that migration might be an important determinant of the structural shifts in the working age populations in the region. As was shown, emigration has been a buffer in the face of the high unemployment and inactivity rates³⁸ prevailing in the WB6. Consequently, labour underutilisation in the region also might have declined due to emigration (see Figure A16 in Annex). Still, women and the young age cohorts (15–24) do suffer from a high rate of underutilisation which explains why the push to emigrate might be stronger for this segment of the population.

The impact of high emigration on wages is less evident. The experience of EU-CEE countries has shown that high outward migration reduces unemployment rates (Astrov et al., 2016). However, when the labour market situation improves and labour demand is expanding, strong emigration followed by

³⁸ Inactivity, particularly of women, is often explained by the reliance on remittances – e.g. Kosovo, see UNDP, [Kosovo Human Development Report 2016: Making the labour market work for women and youth](#)

declining and low unemployment rates might impede the labour market from supplying labour according to labour market needs. Expanding the demand for workers combined with low unemployment rates and high emigration will exert pressure on wages to rise as employers struggle to find the right workers with the right skills (Figure 5.7).

FIGURE 5.7 UNEMPLOYMENT AND WAGE CHANGES VERSUS EMIGRATION



Source: [wiiw annual database](#) and [Eurostat](#).

While for the EU-CEE countries such a scenario has already been occurring, as a chain reaction of migration with unemployment and wages, for the WB6 similar developments are only partly confirmed. Migration has been important for reducing unemployment, but unemployment rates in the region remain at double-digit levels, whereas in EU-CEE – for some of the countries – they are very low (starting from an already low level) and are almost close to full employment levels. Wages in the EU-CEE have been rising much faster than in the WB6 (the wage level in Albania has risen considerably but remains at a very low level (see Figure 5.7). The former group of countries has narrowed the wage gap with the EU15 much faster than the WB6. Wages in the WB6 have been picking up, but not as much as in EU-CEE. Most labour shortages in the WB6 are only partly coming from the sectors of the economy which need high-skilled workers and therefore wages are not rising strongly.

5.4 Structure of skills demand and skills mismatches

The structural composition of the economy and its underpinning sectors suggest quite a divided workforce in the region. While in agriculture a low-educated workforce might be predominant, in the public sector a higher-skilled workforce prevails, and the market services sector is quite heterogeneous as regards its skill composition (see Table A2 in Annex). Hence, the structural composition of the economy and its underpinning sectors to some extent generate a differentiated workforce in terms of the quality of jobs and the level of salaries that can be earned. The share of the high skilled workforce is close to 20% in Albania and North Macedonia and above 20% in Serbia and Montenegro³⁹. In contrast, in Bosnia and Herzegovina and Kosovo the share of high skilled workforce is half of that. Still, the bulk of the labour force falls into the group of low- and medium-skilled in Albania and Bosnia and Herzegovina. Differently, for the rest of the countries the balance is more inclined towards medium- and high-skilled.

³⁹ See [SEE Jobs Gateway Database](#)

Although a lower number of women enters the labour market than men, their educational level is higher than that of men⁴⁰. Over time, women have made more significant progress in raising educational levels, and women with high educational attainment levels exceed those of men. The gains in the educational composition among women in the working age population are reflected in a larger overall increase of highly educated combined with a sizable drop in low-educated. In 2019, 19.5% of women in the working age population (15–64) had a high level of education compared to 13.5% in 2012 (World Bank and wiiw, 2020). Among men, 15.6% have a high level of education in 2019 – a rise of 2.8 percentage points compared with 2012⁴¹. The changes over time (Figures A15 and A21 in Annex) also suggest a shift in the compositional structure in favour of an increasing share of high-skilled labour force for the entire WB6 except for Bosnia and Herzegovina and Montenegro. However, the improvements are meagre and the share of high-skilled labour force in the WB6 stands 10 percentage points below the EU average.

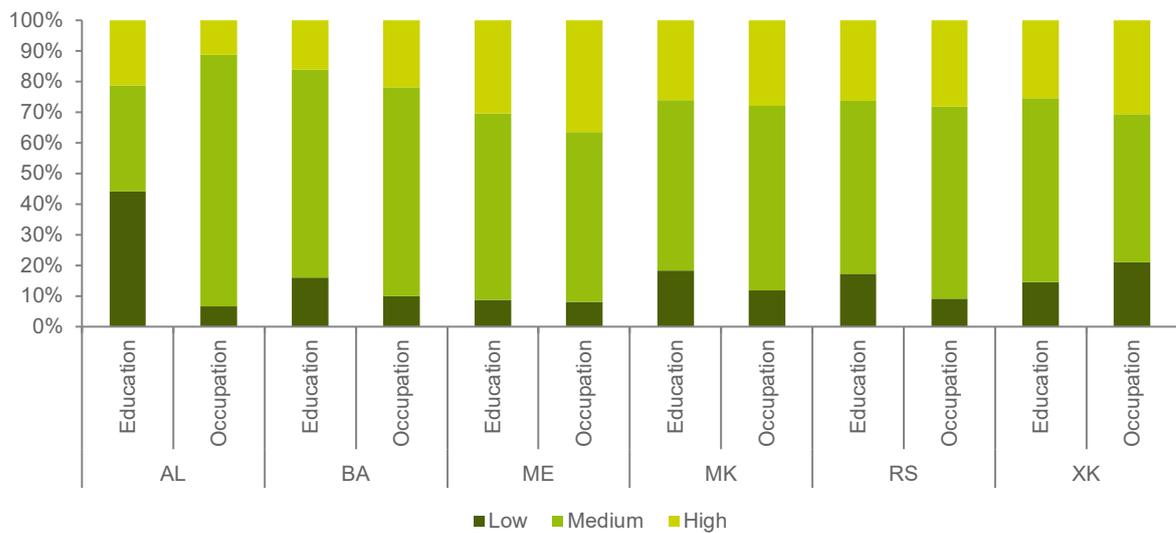
Shortages of skilled workers – both in quantitative and qualitative terms – are becoming a pressing issue also in the WB6. Despite recent improvements in the educational composition of the workforce, the labour markets in the WB6 are afflicted by a relatively lower educated workforce than in the EU. Labour market imbalances are also becoming an issue, but the situation is quite diverse among the WB6. According to a survey conducted by RCC (2020b), quite a large share of companies, especially in Bosnia and Herzegovina (58%) reported that they face difficulties filling vacancies. In other countries, e.g., Montenegro, one third of the companies had similar challenges. Only Albania had a lower share of companies with difficulty filling vacancies, at 14%⁴². The companies stated that the challenge of filling vacancies stems first from applicants' lack of skills – confirmed by 85% of surveyed companies in Montenegro and 56% of surveyed companies in Serbia. Secondly, uncompetitive salaries and compensation offered by companies were among the main reasons why vacancies were hard to fill for 20% of the firms in Serbia and 8% of the firms in Bosnia and Herzegovina. More than two thirds of firms in Bosnia and Herzegovina confirmed that the availability of workforce had 'worsened' or had 'somehow worsened' over time. Similar concerns were confirmed by 47% of firms in North Macedonia and close to one fourth in Albania, Serbia and Kosovo.

⁴⁰ See SEE Jobs Gateway at: <https://data.wiiw.ac.at/seejobsgateway-q-20525a30f207d591f03d2e042.html>

⁴¹ See SEE Jobs Gateway Database

⁴² Companies which suffer the most are medium-sized and large companies, especially in the regions where the population is contracting (RCC, 2019).

FIGURE 5.8 EDUCATION VERSUS OCCUPATIONAL STRUCTURE BY SKILL LEVEL OF THE EMPLOYED, 2019 OR THE LATEST YEAR AVAILABLE



Note: According to OECD and ILO definition, the educational structure can be defined as low skilled (ISCED 0–2), medium skilled (ISCED 3–4) and high skilled (ISCED 5–6) given the ISCED level of education and similarly, the occupational groups can be defined as low skilled (OC9), medium skilled (OC4–8) and high skilled (OC1–3) given the following groups of ISCO. Though this might not be the perfect approach for defining the group of low, medium and high skilled workers, still it might be a proxy for comparing workers' skill level and how education skill level matches with occupational skill level.

Source: [wiiw annual database](#).

Mismatches between skills and jobs are affecting the countries in the region to different

degrees. Figure 5.8 compares the skill levels acquired through education with the skill levels required in the occupations of employed people in the labour market. The mismatch is particularly evident in Albania where only half of those who are highly skilled have a job that is considered as well matched. This suggests that quite a large share of high skilled workers is in jobs that are below their qualification level (European Commission, 2016). As the labour market does not generate enough jobs for the high skilled, there is a higher motivation for the high skilled to leave. This might explain why emigration is very pronounced among the high skilled in Albania, on top of low earnings prospects and meagre employment possibilities in the private sector. Further, a large share of medium-skilled jobs is covered by those who have a low level of skills which indicates shortages of workers with medium skills. In Albania and Montenegro, the tourism sector is affected by insufficient hotel staff and employers see immigration from neighbouring countries or East Asian countries as a solution.

For other countries such as Montenegro, Kosovo and Bosnia and Herzegovina the situation seems different. The share of high-skilled occupations is larger than the share of high-educated workers, indicating a shortage of highly skilled workers; on the other hand, the pressure to migrate might be stronger among low- and medium-skilled workers driven mainly by low earnings and employment prospects. In Serbia and North Macedonia, the match between high education and occupational skill levels is relatively balanced, suggesting a better matching in the labour market for the high-skilled. A much higher absorption capacity of high- and medium-skilled in the manufacturing sector, apart from the public sector; and a more vulnerable employment situation among low-skilled might explain why emigration is prevalent among the low-skilled. On top of that, high labour demand in Germany backed by favourable immigration regulations that support regular migration for employment from the WB6 in Germany is driving emigration also for the low-skilled, most likely much more than for highly skilled.

As a consequence, finding construction workers or truck drivers has become challenging in Serbia and Montenegro. Furthermore, in Serbia and North Macedonia the relatively positive development of the manufacturing sector has expanded the demand for medium-skilled and high-skilled workers – including engineers – and meeting the demand for this group has become difficult. Foremost, all countries in the region confirmed the existence of shortages of nurses, doctors and general health professionals.

A recent ETF's measurement of skills mismatch incidence through LFS data also confirms the high skills mismatch experienced among the medium- and high-skilled workers in the WB6, albeit with different degrees (ETF, 2022). Most countries have had higher shares of skills mismatch at tertiary education level than secondary education, but in general both medium-skilled and high-skilled employees working in jobs below their qualification levels are observed. According to this study, the greatest gaps of skills mismatch are found in Serbia and North Macedonia, followed by Albania and Bosnia and Herzegovina.

New jobs require new skills. Firms in the WB6 have identified the 'availability of labour' and 'skills and education of available workers' as two of the obstacles facing companies aiming to expand and carry on their activity (RCC, 2020b). Companies in Bosnia and Herzegovina are especially affected by such challenges and obstacles, while companies in Kosovo and Serbia seem to be the least affected. With the only exception of Albania migration was not seen as a major or moderate obstacle for the activity and expansion of companies (e.g., in North Macedonia, Serbia and Montenegro this was an issue for 10%, 12% and 13% respectively) (Table A2 in Annex). By contrast, in Albania more than half of companies confirmed this, which points rather to an issue of quality and composition of the education system and not migration as the main problem.

Education curricula do not properly meet labour market needs. New jobs require an upgrading of skills and qualifications according to those demanded in the labour market. From the point of view of employees, a Balkan Public Barometer Survey (RCC, 2020a) also confirms that skills taught in the education system hardly meet job qualification requirements (on average this is confirmed by 28% of employees in the WB6). Besides, a higher share of those who were taking actions to migrate – in comparison with those who had no intention to leave – confirmed that the 'skills taught in the education system do not meet the qualifications required on the job'. This was especially the case in Bosnia and Herzegovina, Kosovo, Montenegro and Serbia. Furthermore, discontent with the education system has become a push factor to migrate (recall that Section 3.5 found that those taking actions to leave were less happy than those with intentions to leave as concerns the skills taught in the education system). These findings suggest that skills-qualification mismatches such as being over-qualified or lacking adequate skills needed in the labour market, or dissatisfaction with the education system and the decision to migrate might be positively interrelated. These conditions might constitute a strong push factor to migrate, and it becomes a source of concern among employers for finding the right people with the proper skills.

The education/training systems need to be complemented by firms' in-house training to achieve necessary skills upgrading. In addition to the qualifications and training acquired in the education system, the skill composition of the workforce also depends on the propensity of companies to invest in skills and training of their employees. Further, many companies claim that the skills taught in the education system do not meet the needs of their company (RCC, 2020b); most are in Bosnia and Herzegovina (44%), while the least are in Serbia (8%). On average, one fifth of companies in the region make this assessment. Close to half of the companies in Bosnia and Herzegovina arrange training for their staff and more than 44% of companies regularly monitor the skills and training needs

of their employees. Most firms arrange 'on the job training' or 'internal/in house training'. Elsewhere, fewer companies provide training, especially in Albania concerning 'arrangement of training' and in North Macedonia concerning 'monitoring of skills'. Many employers also state that their employees are interested in improving their skills and acquiring additional qualifications, especially in Montenegro (e.g., at 62%), and in other countries about half of employees are interested in upgrading their skills.

Overall, tangible improvements as concerns job creation have been achieved, but this is not enough. The channel labour market – migration shows that the weaknesses of the former are important push factors of emigration as long as employment and earnings gaps with labour markets abroad remain high. On the other side, migration has continued to smooth labour market tensions by reducing unemployment. Emigration from the region has involved both the employed and unemployed and there is evidence of a certain positive association between migration and labour/skills shortages in some specific sectors. The potential of the private sector remains untapped, and the public sector cannot be the only anchor for high-skilled workers. Unemployment has been declining and wages have been rising, but wage gaps with the EU and EU-CEE countries remain high.

5.5 Policy changes in destination countries: the case of Germany

This section draws attention to changing policies of destination countries in shaping recent migrant outflows from WB6. Germany's importance as a traditional destination country for WB6 emigrants has continued to grow in the last decade, especially after the policy changes Germany introduced between 2010 and 2020.

First, the adaptation of the [Act on Asylum Applications](#) in October 2015 that expanded the list of safe countries of origin to WB6 following the sharp increase in asylum applications from these countries (see AIDA, 2015). As shown earlier in Box 3.1, the number of asylum applications from these countries dropped significantly afterwards.

The second important legislative change was the temporary policy implemented in October 2015, which entered into effect as of 1 January 2016 and was to expire on 31 December 2020 – the so-called [Western Balkan Regulation](#) (§26.2 German Employment Regulation). This regulation was introduced to (i) create a legal pathway to migrate to Germany and reduce the number of irregular migrants and asylum seekers from the WB6; (ii) provide access to the labour migrants from the WB6 regardless of their skill level; and (iii) meet labour market needs in Germany – both for low- and high-skilled workers in sectors affected by labour shortages. The Western Balkan Regulation did not impose any restriction on minimum language or professional qualification requirements. Under the new regulations, WB6 citizens have to meet two main conditions to obtain a work permit in Germany. First, have a job offer from an employer in Germany (including the 'priority check')⁴³. Second, the job offer should comply with German labour laws and minimum wage standards and should have been approved by the Federal Employment Agency⁴⁴. In late 2020 the German Federal Council (Bundesrat)

⁴³ 'Priority check' implies that the job offer is for a position for which no eligible person in Germany can be found and that the job offer does not fall into those sectors that are regulated by the labour law and for which a certain level of qualifications is required (Bither and Ziebarth, 2018; GAP, 2021).

⁴⁴ From 1 November 2017, the latter requirement was also abolished to avoid lengthy processing of applications at the embassies in the countries of origin and the latter is the first point of contact for the entire application process. Further, the right to apply for a work visa under §26.2 is only available for someone who has not received any benefits under the asylum system in Germany 24 months prior to applying for a work permit. Also, asylum seekers and persons from safe countries of origin with a tolerated status who submitted their

approved the extension and amendment of the regulation until 31 December 2023 with a new maximum number of 25,000 permits to be issued per year by the Employment Agency. The new regulation became effective as of 1 January 2021⁴⁵.

The third policy change was the **Skilled Workers Immigration Act**⁴⁶ in force since 1 March 2020, which offers free access to the labour market to non-EU skilled workers with vocational training besides those with tertiary education; and abolished the requirement to submit a labour market test to work in occupations with labour shortages. The earlier adoption of the Federal Recognition Act of Foreign Qualifications in 2012 complements this package for equivalence assessment of over 600 occupations, including the Vocational Qualifications Assessment Law (BQFG) for dual system occupations. Since 2012 Germany has offered prospective labour migrants the possibility to have their foreign qualifications assessed and completed prior to arrival in the country.

Migration from the WB6 to Germany has increased enormously thanks to these new regulations. The trend of migrants' stock from the WB6 to Germany indicates an increase of 66% between 2010 and 2019 – close to 900,000 (see Figure A23 in Annex). The largest share of migrants from the WB6 in Germany originates from Serbia (27%), Kosovo (26%) and Bosnia and Herzegovina (23%), followed by North Macedonia (13%), Albania (8%) and Montenegro (3%). The number of emigrants from Montenegro and Albania to Germany has increased massively from 2015 onwards, thanks to the Western Balkan Regulation §26.2. From Germany's perspective, the new regulation satisfied the demand for both low- and high-skilled workers drawing on a flexible and viable workforce from the WB6 and the WB6 migrants who moved to Germany through this regulation tend to have high employment rates, stable employment relationships, and low rates of unemployment and other benefits (Brücker et al., 2020).

Migration from the WB6 to Germany dates back to the 1960s as it concerns citizens from the WB6 which, in the past, were part of the former Yugoslavia and became part of the guest worker programme applied by Germany at the time. While for Albanians, migration to Germany is more recent and the exodus of July 1990 signalled the first wave of emigration from Albania to Germany. However, over the last three decades and until 2015, employment opportunities for migrants from the WB6 to Germany have been constrained by limited options for attaining a work permit – some could benefit from the Blue Card regulation (very low number) or from a field of profession falling into the group of shortage occupations.

Under the new regulation, the most beneficial outcome has been the regulation of mobility from the WB6 to Germany through official channels and for work purposes. As a result, the stock of migrants from Montenegro to Germany increased by eight times from 2010 up to 2020 or by six times between early 2015 and 2020. The stock of Albanian migrants in Germany in 2019 (end of the year) is six times higher than in 2010, or three times higher than in early 2015. The stock of emigrants from Kosovo in Germany has more than doubled for 2010–19; emigrants from North Macedonia have recorded an increase of 74% and both Serbia and Bosnia and Herzegovina have experienced an increase of 33% of their emigrants' stock in Germany. In this decade, outward mobility was particularly high amongst the younger age cohorts. A significant share of the WB6 emigrants is in the age group 20–45, but

request after 31 August 2015 have not been authorised to work. For further details about the procedure, see Bither and Ziebarth, 2018, p. 18.

⁴⁵ See the [Western Balkan Regulation](#) from 1 January 2021

⁴⁶ www.anerkennung-in-deutschland.de/assets/content/Medien_Dokumente-Fachpublikum/anwendungshinweise-fachkraefteeinwanderungsgesetz.pdf

there are also many children and teenagers – which is typical for outward mobility through family reunification (see Figure A24 in Annex).

The Western Balkan Regulation opened the doors both to low- and high-skilled workers from WB6 and this opportunity has been embraced especially from the former group. The spectrum of occupations obtained by recent the WB6 migrants in Germany is very wide, but also polarised between low- and high-skilled. For the 2015–20 period based on German statistics, the top 10 occupational groupings in which recent emigrants from the WB6 have been employed include: laborers in construction, manufacturing, drivers, craft and related trades workers, cleaners and helpers and personal care workers (see also Figure A27 in Annex). Another group which emerges among the top ten and with an important share are health associate professionals⁴⁷ (which includes mainly medical and pharmaceutical technicians, nursing and midwifery associate professionals, traditional and complementary medicine associate professionals)⁴⁸.

Among highly skilled, emigration is demand and supply driven and their emigration to Germany has intensified. Apart from health associate professionals (see Figure A28 in Annex) recent emigrants from the WB6 to Germany attaining high-skilled occupations fall into the group of science and engineering associate professionals, business and administration associate professionals, information and communications technology professionals, and legal, social, cultural and related associate professionals. Among the high-skilled, emigration is demand-driven, but also supply-driven given the high wage gaps for these occupational groups and difficulty in finding a job at home. As indicated above (Figure 5.6), the wage gap in the WB6 with respect to EU countries, but particularly with Germany, remains very large. The share of the WB6 emigrants in the high-skilled occupations in Germany reached 17% by 2020, up by 2.5 percentage points since 2015. For some countries such as Bosnia and Herzegovina, the share of emigrant workers in high-skilled occupations has increased by 4 percentage points – up to 23%; among Albanians it has increased by 5 percentage points – up to 16%.

It is useful to **compare the occupational skill composition of emigrants in Germany with that of workers in the origin countries**, with the aim of highlighting selectivity among emigrants relative to non-migrants ('stayers') at home (Figures A25–27 in Annex). The comparison shows that within the occupational structure of emigrants in Germany there are diverse patterns across the countries of the region. For example, Albania shows a similar share of workers in high-skilled occupations both in Germany and at home; but with larger share of medium-skilled among stayers in contrast to a larger share of low-skilled among emigrants. Such structural differences can be demand driven – given Germany's need for both low- and high-skilled workers. The high emigration of low-skilled workers might have contributed to a structural shift of the remaining workers at home in favour of the more medium-skilled. On top of that is also the phenomenon of skills mismatches which might be also affecting recent migrants. Frequently, high- and medium-skilled emigrants accept jobs below their occupational skill level because of obstacles in the destination country such as language barriers,

⁴⁷ ISCO 32 'health associate professionals' includes medical and pharmaceutical technicians, nursing and midwifery associate professionals, and traditional and complementary medicine associate professionals. The tasks performed by workers in the sub-major group usually include testing and operating medical imaging equipment and administering radiation therapy; preparing medications and other pharmaceutical compounds under the guidance of pharmacists; designing, fitting, servicing, and repairing medical and dental devices and appliances; providing nursing and personal care and midwifery support services (see OECD et al., 2017, p. 444).

⁴⁸ The example of health professionals (both health professionals and associate health professionals) will be discussed in more detail in Chapter 6.

difficulties in recognition of qualifications, or regulations that hamper labour market entry and career paths⁴⁹.

So far other Western European EU countries have not followed Germany for more liberalised access of the WB6 citizens to their labour markets. Rather, some of the traditional host countries have gone through a very difficult period on their own labour markets (Greece, Italy) or kept to a rather restrictive stance vis-à-vis new migrant flow (e.g., Austria). Nonetheless, shortages of qualified personnel in particular areas in a number of Western European countries might lead to a rethinking of their stance with respect to renewed migration of workers from the WB6 in the future – depending, of course, on the pattern of recovery following the Covid-19 crisis.

On the other hand, there has been an intensification of emigration from the WB6 – especially from Serbia – to the EU-CEE countries, driven by the evolving labour market situation in these countries as well as improvements in immigration policies towards the WB6 (see Table A7 in Annex). Labour and skill shortages in these countries is in part also due to the legacy of past strong emigration flows from the EU-CEE countries to Western Europe. Thus, Hungary in 2016 eased access to work permits for Serbian migrants for those occupational groups in Hungary affected by shortages such as ICTs, engineers, drivers, nurses and carpenters. Romania also introduced policy changes and signed an agreement with Serbia on the recognition of social security contributions and facilitation of access to social benefits and social rights for Serbian workers in Romania. Significantly, neighbouring EU-CEE countries to the region (Hungary, Slovenia and Croatia) became important destination countries for the WB6 migrants, reflecting not only geography but also historical linkages and the growing wage gaps between these countries and the conditions on WB6 labour markets (see Figure 3.5 and Figure A9 in Annex).

⁴⁹ Similar patterns were highlighted also in the country reports (ETF, 2021a–f).

6 TRIANGULAR RELATIONSHIPS BETWEEN MIGRATION, HUMAN CAPITAL AND THE LABOUR MARKET

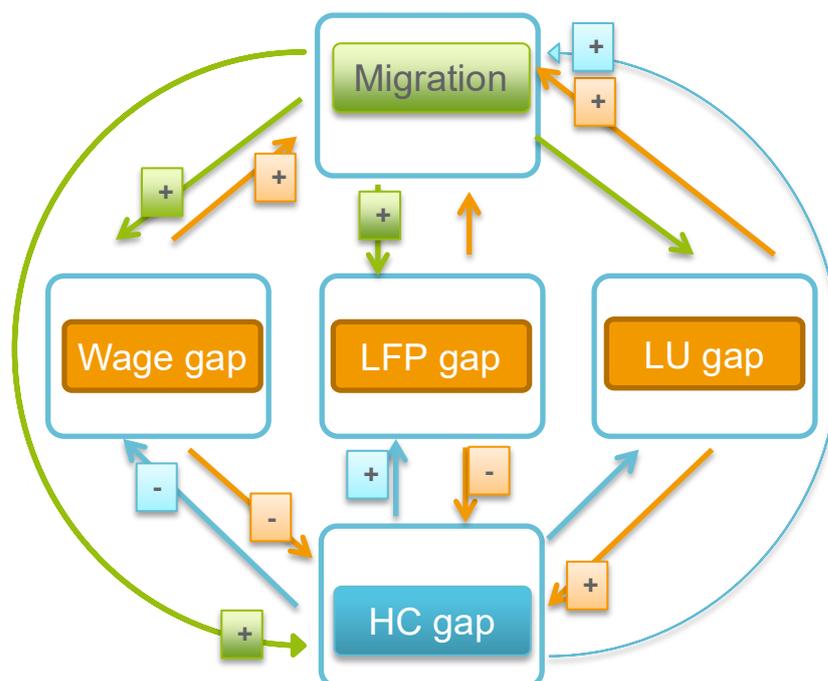
This chapter elaborates on some of the central relationships that connect the three poles of analysis: migration (M), human capital formation (H) and labour markets (L). The chapter is organised in two sections. First, the main findings of a regional, macro econometric analysis that establishes interrelationships between the three poles of analysis are presented in Section 6.1. Secondly, two case studies in two sectors are selected and analysed to illustrate such triangular interrelationships in Section 6.2. Within this context, Section 6.2.1 reviews and discusses the mobility of health professionals from the WB6, while Section 6.2.2 focuses on the mobility of ICT professionals. These two cases aim to demonstrate beneficial and detrimental aspects of the interrelationships between migration, human capital and the labour market.

6.1 A regional macro-assessment of the interrelationships

This section presents the main findings of a regional econometric study analysing the dynamics and causal interrelationships between migration, human capital and the labour market and the implications of mobility on employment, wages, human capital formation and labour utilisation (for details see Mara and Landesmann, 2021). The study was undertaken at the macroeconomic, cross-regional level, using data for the WB5 as main countries of origin (except Kosovo due to lack of data) and for the EU15 as main destination countries over the period 2007–19 (or the latest available year). A priori hypotheses are listed below (see [Figure 6.1](#)).

- **Wage gaps** between potential destination and origin country are a pull factor for emigrating to those countries where earnings prospects are higher.
- **Labour underutilisation** in the source country is expected to act as a push factor to move to potential destination countries where employment prospects are higher.
- **High labour force participation** (synonymous with a high activity rate defined as the proportion of employed and unemployed in the population) from the perspective of the destination country might suggest a dynamic labour market that would mobilise an active labour force and attract migrants. On the other hand, high labour force participation could also reflect an excess labour force in the source country that might look for employment elsewhere especially if unemployment rates are high.
- **Human capital endowment** differences between the country of origin and the country of destination could mean (i) that strong differences in the skills composition of the available labour forces would make migration flows complementary with respect to the available labour forces in the country of origin and potential destination country; or, alternatively, (ii) that particularly skilled workers are attracted by the facilities in countries which already have a strong skilled labour force and where working and living conditions (e.g. research facilities for scientists, good hospitals for doctors and other medical staff) are at a higher level than in the source country. We call this the 'suitable work' hypothesis.

FIGURE 6.1 INTERRELATIONSHIPS ESTABLISHED BY A PVAR MODEL ESTIMATION



Note: LFP – labour force participation rate, LU – labour underutilisation, HC – human capital. The direction of the arrow and the sign indicates the effect of one variable on the other.

Source: Landesmann and Mara (2021).

The main findings of the regional econometric study – as illustrated in Figure 6.1 – can be summarised as follows (Mara and Landesmann, 2021):

1. **Earnings gaps between the WB5 and EU15 are an important push factor for moving abroad.** Lower wages in the WB5 with respect to EU15 destination countries induce further emigration. Similar results are obtained with respect to gaps in labour underutilisation. The key message here is that if the available workforce is underutilised – more than it would be in a potential destination country – this would push to further emigration.
2. **Differences in human capital endowment between the WB5 and EU15 pushes to further emigration.** The explanation for this effect is that the country with higher human capital endowment might attract more low-skilled migrants which are scarce in the destination country, but plentiful in the origin country. This can be further strengthened by the fact that emigrants would work in jobs below their qualifications ('skill-jobs mismatch').
3. **Differences in human capital between the WB5 and EU15 are likely to widen further if the underutilisation of skills worsens in the WB5.** Underutilisation of skills would discourage further investment in skills and human capital formation. Furthermore, rising wage differences between the WB5 and EU15 could lower the human capital gap between the two sides. This might be explained by the indirect effect of migration: better earnings prospects abroad can incentivise further investment in human capital at home – as Stark (1997) has argued, aspirant migrants might be motivated to invest further in education – with the scope of improving their employment and earnings prospects abroad – though only a part of them will leave the country. As such, the migration possibility might induce further human capital formation.

4. **Differences in human capital endowment between the WB5 and EU15 widen the gap in activity rates.** This can be traced to those low-educated who have also lower activity rates in the labour market (as also shown in Section 5). In addition, widening differences in human capital endowment between the WB5 and EU15 would also lead to the lowering of wage differences between the two sides. This is possible indirectly through migration channels: when the more educated and productive workers migrate, this would first lower the human capital of the workforce in the WB5 and secondly it might be accompanied by shortages of workers. In this context, employers might respond to labour shortages by raising wages to satisfy their labour demand needs and this might result in a narrowing of the wage gap between the WB5 and EU15.
5. **Migration is likely to widen further the wage differences between the WB5 and EU15 countries.** This is strongly dependent on who migrates given that wages are positively related with worker productivity – if relatively more productive workers leave the country, the wage gaps between destination and source country would widen.
6. **Emigration especially among the highly educated in the WB5 would generate brain drain for the sending countries.** The results indicate that further emigration of especially high-skilled workers would widen the gap in human capital between the WB5 and EU15 and, in this context, migration would produce a brain drain effect for the sending countries of the WB5.

6.2 Case studies of triangular relationships

This section illustrates further how the triangular relationships between migration, human capital and labour market are functioning in two selected examples – health and ICT professionals. It is important to emphasise that such interrelationships are operating in the wider context in which the economies are operating. Depending on the structure of the economy and the dynamics established, the interrelationships between migration, human capital and labour market can be very different, ranging from detrimental to beneficial impacts. The former outcome might generate a ‘vicious circle’ of interrelationships and the latter a ‘virtuous circle’ of interrelationships.

A vicious circle is likely to occur when investment in human capital is not adjusted to labour needs of a given sector. The issue is not only the level of skills – demand versus supply – but the type and composition of skills demanded by the domestic labour market, by international labour markets and those produced by the education system. A weak absorption capacity of the labour market⁵⁰, especially with regard to highly educated persons, and high rates of labour underutilisation of their skills might encourage emigration. Vice versa, emigration of the highly educated, if persistent and intensive over time – such as in the case of the WB6 – might generate shortages of high-skilled workers and depending on labour market needs and changes over time it can become a trap for the economy. It can impact on its sectors to expand, invest, innovate, attract FDI, thereby depressing investment in technology, productivity and competitiveness. The system would then be characterised by a vicious circle which is hard to break if there is no proper coordination between demand and supply of skills, the education system, the functioning of the labour market and the migration policy framework.

The circle can turn into a virtuous one under better coordination of different stakeholders.

On the one hand, there is a good deal which domestic policy can do to address the issues: a better

⁵⁰ Further details about the capacity of WB6 countries on this aspect is provided in Figure A16 in Annex.

orientation (in some areas, much stronger investment into) of the educational and training systems towards areas which cater to the needs of the domestic labour market in a forward-looking manner; accompanied by labour market policies that aim towards strong coordination with the private sector to achieve higher rates of employment and better skills-jobs matches. On the other hand, a better utilisation of mutually beneficial interactions with the economies with which the WB6 are mostly connected through migration, diaspora links, trade and potential FDI flows. Thus, efforts are necessary to enhance the cooperation and coordination concerning the management of migration flows among sending and destination countries, especially for achieving mutual benefits from human capital acquisition before and after migration. This can be done through the setting up of joint educational and training centres that cater to the needs of labour markets both domestically and in the destination countries. Further, positive spill overs would emerge if the engagement of migrants and their networks abroad is strengthened, and with this cross-border economic activities are fostered especially in certain sectors. Encouraging trade links and attracting FDI flows between home and host countries through such networks could spur investment at home which would generate employment and facilitate the transferability of knowledge and know-how, including through foreign companies operating in the domestic market.

Following the analytical framework and the empirical findings, **two case studies** are brought here to illustrate how such interrelationships can operate. The first one is the case of emigration of healthcare professionals from the region (Section 6.2.1): how push and pull factors drive emigration from the region, how this is affecting the human capital and labour supply for this category of professionals in the country of origin, and how different migration policies in the destination country combined with training programmes in the sending country are affecting human capital formation and mobility. The second case presented is the one of ICT professionals and ICT activities in the region which is an important example of a potentially significant development, although so far more significant in some countries than in others (Section 6.2.2).

6.2.1 The case of health professionals' mobility

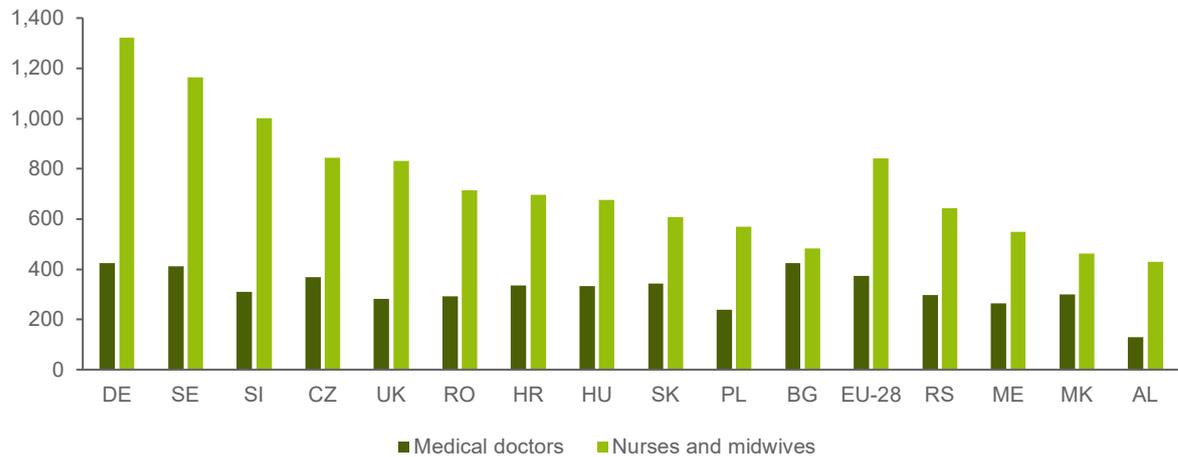
Health professionals' mobility from the region can be considered as forming part of a vicious circle. Starting from a situation of large-scale migration of health professionals from the region, the encouragement and expansion of programmes that focus on skills development alongside mobility might break this vicious circle to generate positive outcomes for all stakeholders involved – sending and destination countries and potential migrants and stayers. This section is an attempt to show that.

Countries in the region are characterised by insufficient and regionally unbalanced capacities of the health system – as shown in [Figure 6.2](#) on the number of health professionals in per capita terms⁵¹. It is important to highlight that the provision of health services in the WB6 is under the domain of the public sector and the private health sector is still underdeveloped. Consequently, the public sector is the main source of employment for health professionals in the region – which often lacks resources and investment, necessary for expanding further the public health systems. Especially, healthcare services in rural areas are scarce and in some remote areas these services are practically unavailable. Ageing of the population affects the region, and this implies that the demand for health

⁵¹ Health professionals here include medical doctors, nurses and midwives. According to WHO, the density of 'skilled health professionals' (medical doctors + nurses + midwives) should have as a threshold 22 health workers per 10,000 population. The WHO Global Code of Practice on the International Recruitment of Health Personnel adopted in 2010 urges that recruitment from health systems affected by shortages of health professionals should be avoided (Glinos, 2015).

services is increasing and will increase in the future. It is one of those typical cases where insufficient resources and investment and lack of employment opportunities generate outward mobility which raises further the risk of certain services being left uncovered.

FIGURE 6.2 HEALTH PROFESSIONALS: MEDICAL DOCTORS, NURSES AND MIDWIVES PER 100,000 INHABITANTS, 2017



Source: Eurostat [hlth_rs_prsrg].

Despite a low number of health professionals, emigration for this category of workers has accelerated significantly over the last decade. According to the OECD database, the stock of medical doctors abroad from the region is estimated close to 7,000 in 2021⁵². This would correspond to 13% of medical doctors available in the region (Table 6.1). The emigration of health professionals seems to have affected especially Albania and North Macedonia where the stock of doctors abroad is estimated to be at a ratio of 2 to 10 in Albania and 2.8 to 10 in North Macedonia. These statistics have to be handled with caution, considering the information which can be obtained from international statistics – in this case the only available source, the OECD – includes only a selected number of destination countries where information is provided⁵³. Similarly, only a partial picture can be obtained as concerns the mobility of nurses and midwives moving abroad. Missing information for several countries does not allow making any sound inference of how large a drain might exist for this category of professional workers⁵⁴.

⁵² See <https://stats.oecd.org/index.aspx?lang=en#>

⁵³ The country reports (ETF, 2021d and f) suggest that in the case of Montenegro over 160 medical doctors have emigrated in the last five years – equivalent to 7% of the total number of licenced doctors in the country. In the case of North Macedonia, the report states that the statistics on foreign-trained doctors in the OECD countries is fairly scarce and blurred by the fact that many doctors have obtained their degrees in Bulgaria, so they may be registered as Bulgarian citizens in their destination country.

⁵⁴ An example is Bosnia and Herzegovina, where the report (ETF, 2021b) indicates that over the period 2013–19 more than 5,000 nurses went to Germany, while the numbers from OECD statistics are much lower.

TABLE 6.1 HEALTH PROFESSIONALS' MOBILITY FROM THE WESTERN BALKANS: THE CASE OF MEDICAL DOCTORS AND NURSES

	Medical doctors				Nurses and midwives			
	Stock at home (A)	Year	Stock abroad (B) 2019	Ratio (B/A) in %	Stock at home (A)	Year	Stock abroad (B) 2019	Outflow 2010–19
AL	4,745	2019	1,028	22	14,658	2019	1,056	2,246
BA	7,413	2015	812	11	19,057	2018	273	2,823
ME	1,730	2018	46	3	3,283	2018	16	43
MK	6,219	2015	1,714	28	7,884	2015	107	2,020
RS	27,563	2016	2,729	10	53,881	2016	596	2,616
XK	4,429	National statistics (2020)	600	14	16,415	National statistics (2020)		

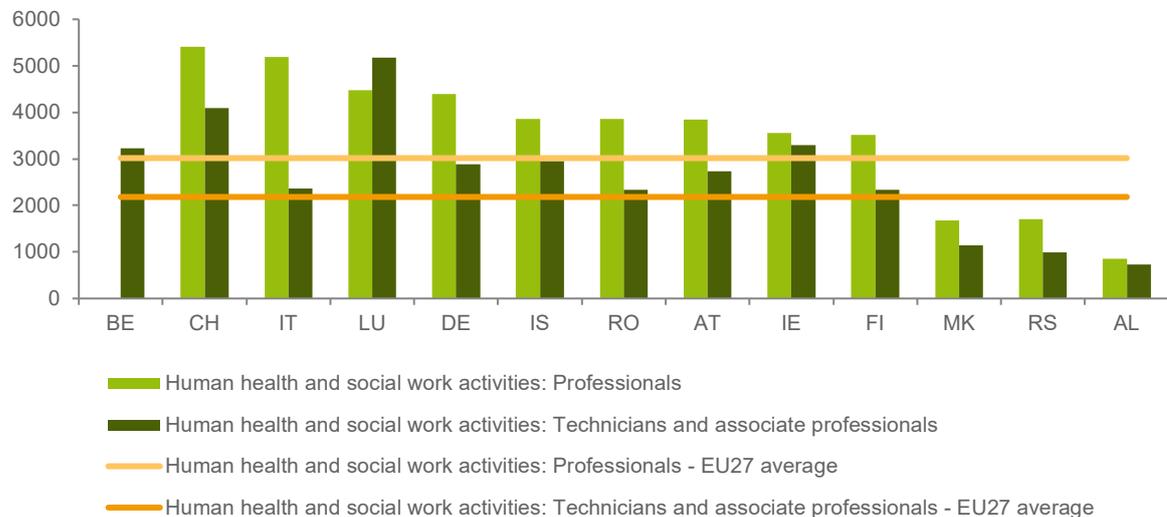
Source: Own elaboration using World Health Organisation statistics for the stock of medical doctors, nurses and midwives at home for all countries (except Kosovo), the stock and outflow of nurses and midwives. Data for the stock of medical doctors, nurses and midwives from Kosovo refer to national statistics. OECD data are used for the stock of medical doctors abroad.

A strong pull factor for health professionals is the large wage gap at home with earnings abroad. The comparison across countries of the level of earnings (in EUR at purchasing power standard (PPS)) among health professionals, hospital nurses and health specialists show that there are big gaps especially with EU and EFTA countries (Figure 6.3). The wage gaps are important drivers of emigration especially for health personnel in the WB6. These persist despite strong hikes of salaries in the health sector in 2020: 16.2% increase in Serbia, 12.8% in Montenegro, 8.8% in North Macedonia, 5% in Bosnia and Herzegovina, and 3.8% in Albania (Tverdostup and Bykova, 2021), motivated by the rising demand for health services due to Covid-19. The exodus of medical staff that has been reported seems to have continued in the WB6.

A strong push factor for moving abroad are poor working conditions and lack of employment opportunities at home. Public spending on health continues to be low. According to World Bank, in 2018 health expenditure to GDP in Albania was at 5.3%, in Bosnia and Herzegovina at 8.9%, in Montenegro at 8.4%, in North Macedonia at 6.6%, in Serbia at 8.5%, in Germany at 11.4%, in Austria at 10% and in the EU overall at 10%. The private health system is small and is in many instances functioning as a second source of employment for those already employed in the public sector. The country studies unanimously report that health professionals are leaving not only because of better earnings prospects, but also because of poor quality working conditions and limited job openings. Rural areas in particular suffer from a lack of health services, due to limited investments in infrastructure, a dearth of medical centres, and consequently shortages of medical staff.

Especially over the last five years, Germany has turned into an attractive destination for health professionals from the region. As already mentioned, the large income gap between WB6 and Germany acts as a strong magnet for low-paid health workers in the region. Nevertheless, another important driver of mobility are Germany's proactive recruitment policies for health professionals from the region. According to (Sauer and Volarević, 2020), Germany is already grappling with a nursing staff shortage of anywhere between 50,000 and 100,000, depending on the estimate. In a worst-case scenario, the continued structural transformation of age will result in a shortage of skilled workers on the order of 1.3 million full-time positions in the healthcare and social services sector by 2030.

FIGURE 6.3 GROSS MONTHLY EARNINGS FOR PROFESSIONALS AND ASSOCIATE PROFESSIONALS PROVIDING HUMAN HEALTH AND SOCIAL WORK SERVICES, 2018 (EUR (PPS))



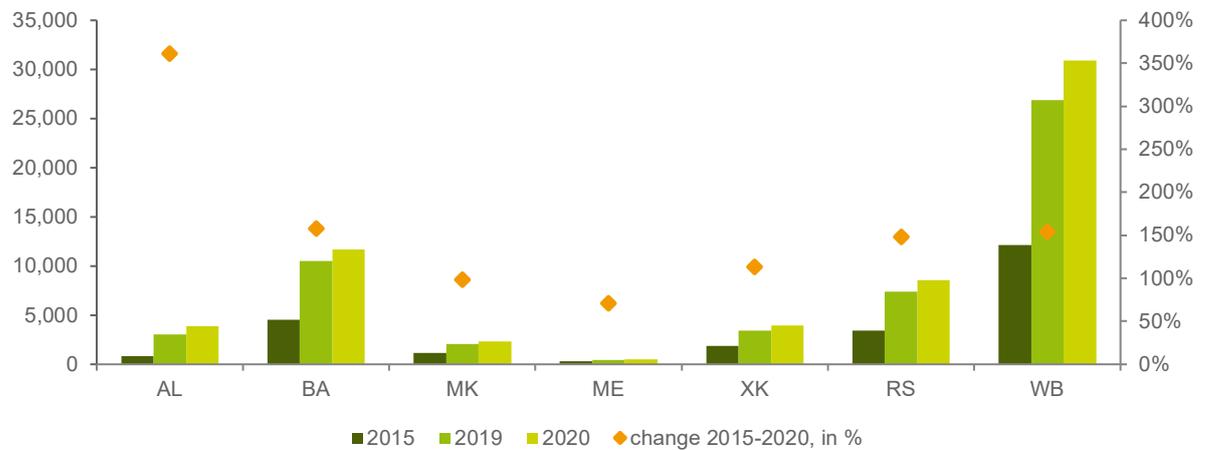
Source: Eurostat, Mean monthly earnings by economic activity and occupation [earn_ses18_48].

As a result, between 2015 and 2020 the stock of the WB6 health workers in Germany has increased significantly (Figures 39 and 40) based on the data provided by the German Federal Labour Agency including doctors, nurses, but also other specialist health professionals such as dentists, pharmacists, or physiotherapists for the period June 2015–March 2020. Over this period, Germany has attracted more than 18,000 health professionals from the WB6 – representing close to 20% of foreign trained health professionals moving to Germany over the last five years. As such the stock of health professionals from the WB6 in Germany exceeded 30,000 by 2020 – two and a half times higher than in 2015 (German Federal Labour Office; Schmitz-Pranghe et al., 2020).

More than 37% of health professionals from the WB6 in Germany are from Bosnia and Herzegovina, 28% from Serbia, another 13% each from Albania and Kosovo, 7% are from North Macedonia and less than 2% are from Montenegro. Besides, Bosnia and Herzegovina and Serbia continue to be the main sending countries from the WB6 to Germany – more than 7,000 and 5,000 health professionals respectively having moved in the period 2015–20. Albania has recently recorded a strong outflow of health professionals directed to Germany – between 2015 and 2020 its stock of health professionals in Germany more than quadrupled, rising to close to 4,000⁵⁵. More than 16% of health workers from the WB6 in Germany are ‘health professionals’, mainly represented by medical doctors (by more than 70%). The rest consists of associate health professionals of which the vast majority is nurses. Besides Germany, other countries such as Slovenia, Austria, Switzerland, Croatia, Denmark and Italy which are in need of health professionals from abroad have been important destinations for the region.

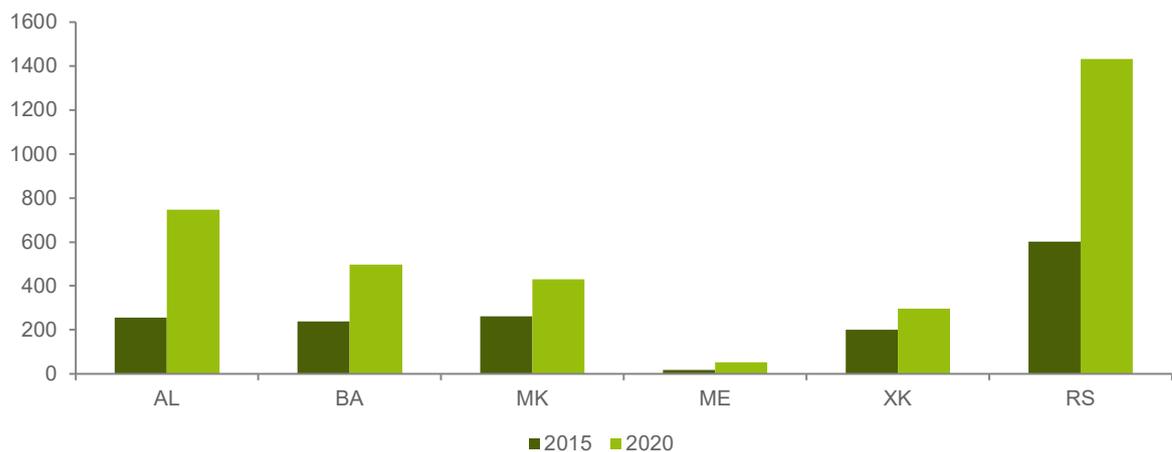
⁵⁵ For an inside view of healthcare shortages in Albania due to migration, see Druga (2020).

FIGURE 6.4 HEALTH PROFESSIONALS AND ASSOCIATE HEALTH PROFESSIONALS FROM WB6 IN GERMANY AND CHANGE IN THE STOCK OF HEALTH PROFESSIONALS, 2015–20 (%)



Source: <https://statistik.arbeitsagentur.de>

FIGURE 6.5 STOCK OF MEDICAL DOCTORS FROM THE WB6 IN GERMANY, 2015–20 (MARCH)



Source: <https://statistik.arbeitsagentur.de>

The high emigration of health professionals from the WB6 to Germany is both supply and demand driven. Recent migration regulation changes in Germany have facilitated the mobility of this category of professionals. Germany has also been a pioneer in developing a ‘triple-win’ concept or Transnational Skills and Mobility Partnerships (Sauer and Volarević, 2020). This means a partnership of skill formation, recognition and skills transfer between Germany and third countries, linking skills formation and mobility for mutual benefits with technical and financial assistance. Several partnership agreements which offer training and specialisation for nursing and healthcare – both in the country of origin and at home – have not only eased mobility but have generated spill-over effects on human capital and improvement of education curricula at home. Some examples of such programmes between Germany and the WB6 are the Dekra Academy, operational in Albania and Kosovo, as well as the Heimerer College in Kosovo (see [Box 6.1](#)).

BOX 4.1 EXAMPLES OF COMBINED SKILL DEVELOPMENT-MOBILITY PROGRAMMES

Dekra Akademy is one of the largest private education companies in Germany. Operational in Albania since 2015, it provides professional training for nurses as well as training courses in German language (see <https://dekra.al/>). It offers the following services: (i) workplace in Germany, hospitals, clinics and healthcare centres, geriatric rehabilitation centres, being part of a qualified international team with high standards; (ii) monthly gross income starting from EUR 2,700–3,600; (iii) employment contract as a licensed nurse and residence permit to work and live in Germany; (iv) free preparation for the examination of the license to practice the profession of nurse in Germany; (v) free German language lessons in Tirana, Durres, Elbasan, Korca, Fier, Shkodra, Gjirokastra, Vlova, Saranda and Berat; and (vi) support for the transfer, integration and start-up process in Germany.

Another example is the **Heimerer College** of Health and Nursing in Kosovo, established in 2010 by two partners, one German and one Kosovar. It is an independent, fee-based education provider in healthcare services, accredited by the Kosovan authorities. The interesting part is a fully operational dual-track model with a relatively high degree of success, training students in Kosovo for labour opportunities in Germany and in the local Kosovo labour market (Clemens et al., 2019). Between 2010 and 2019, more than 1,800 students obtained a bachelor's degree in this programme, with 35% doing so in the away track (Sauer and Volarević, 2020). Those in the Germany track must complete an additional programme for the qualification recognition and language training. Besides students through tuition fees, German employers and the two founders cover the costs of education.

At EUR 1,850 per year, tuition fees are comparable with those charged by other private universities in Kosovo. The placement fee for away track graduates, which is paid by the interested companies in Germany, is at the lower end of the market-standard range of EUR 4,000 to EUR 12,000. Since the start of the programme, some 50% of graduates have been placed as skilled workers in Germany. According to the college, 90% of those completing their training in Kosovo find employment as skilled workers. The college also brought in new healthcare skills and pedagogy in Kosovo healthcare training, helping the Ministry of Health add new sectors to its training and recognition priorities.

In July 2019 Germany also signed an agreement with the government of Kosovo to offer assistance for the training and qualification of nurses. Dekra Academy is operational also in Kosovo, since 2019, offering free services such as German language training, vocational training, certification, employment mediation, transfer to Germany and family reunification assistance (see <https://dekra-kosovo.com/>). Currently the programme has seven centres, one in all the major cities of Kosovo: Prishtina, Mitrovica, Peja, Prizren, Ferizaj, Gjakova and Gjilan. The Skilled Immigration Act, which came into force in March 2020, further facilitates the mobility of health professionals from the WB6 to Germany, as it eases the employment of highly qualified professionals from non-EU countries. The Dekra Working Group is also engaged in recruitment processes in Bosnia and Herzegovina, North Macedonia and Serbia (see www.dekra-arbeit.al/home).

Education programmes that focus on skills development alongside mobility have the advantage of enhancing skill supply also at home in the medium and long run assuming that not all the trained staff will decide to migrate. The partnership programmes mentioned above have led to an increase in the enrolment in healthcare courses in Albanian and Bosnian universities and thus bring an increased overall supply of nurses, so that emigration is not a zero-sum game. The limited existing examples of Transnational Skills and Mobility Partnerships in the region (especially from Germany) have also led to the adjustment of curricula to international standards, contributing to quality improvement and the process of recognition of educational qualifications. In the long run such programmes therefore contribute positively to human capital formation as well as the quality of staff trained at home. However, they are also criticised for the risk of detrimental impacts of the migration of health professionals on the healthcare system in the region (Schmitz-Pranghe et al., 2020), where some recommendations are developed for Albania, Bosnia and Herzegovina, and Germany to ensure benefits for all sides⁵⁶.

Some of the negative outcomes are that the human capital enhancement is biased towards skills which are required abroad and are driven by the demand abroad rather than the domestic labour market. In the long run this might generate an excessive supply of certain skills, but it might also put under strain the provision of certain services especially if outward mobility is persistent over time and lack monitoring and coordination also with the domestic labour market needs⁵⁷. Hence, circular migration of health professionals or short-term exchange programmes between countries might be a much more effective approach. Training programmes which facilitate outward mobility of health personnel should be monitored and take into account both domestic and foreign labour market needs (Mara, 2020).

6.2.2 The case of ICT professionals' mobility

Opportunities of migration can affect the labour market and labour deployment in various ways. For certain sectors in rapid expansion and rising demand for certain skills, both in the domestic market and abroad, education curricula and human capital enhancement can be strongly oriented towards such skills. A vibrant example is the ICT sector. Besides the sector itself, gradual diffusion of technology and IT tools to all other sectors also keeps the growing demand for digital skills. Digitalisation and automation are generating new jobs, while others are disappearing. People are adjusting their educational choice towards those programmes that offer better earnings and employment prospects, both at home and abroad. Some of the ICT professionals will migrate, another part will stay. In addition, a better educated workforce with ICT skills will be attractive to foreign companies which are looking for such skills at a competitive wage. Working through remote services provision for foreign companies, job creation is likely to rise, and outward mobility might decline. This creates a kind of virtuous circle, initially through migration, especially skilled migration, the formation of human capital, the attraction of foreign (and local) investment and, consequently, the use of labour, as is the case with the rise of the ICT sector in some of the Western Balkan countries.

Migration can also drive FDI inflows into the country of origin of migrants through the establishment of networks and the transfer of know-how. As shown by Saxenian (2002) in the case of Indian and

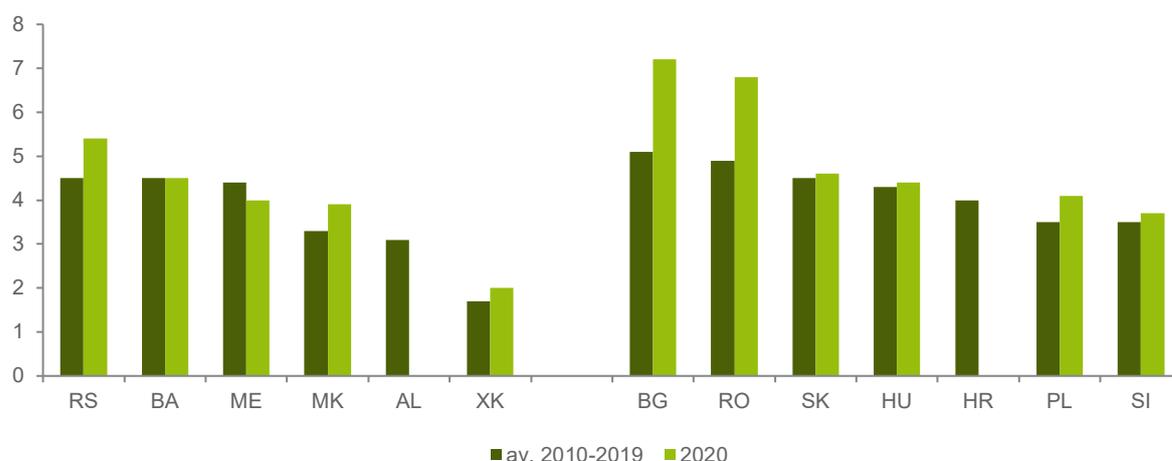
⁵⁶ For a review of existing German initiatives regarding transnational skills partnerships, see BertelsmannStiftung, [Establishing transnational skills partnerships](#)

⁵⁷ The Covid-19 emergency has further evidenced the weaknesses of the health system and exposure to the exodus of health professionals. A number of governments in the region have doubled the salaries offered to health professionals who are at the forefront providing assistance against Covid-19.

Chinese expatriates of the Silicon Valley, mobile experts have the potential to become catalysts for expanding knowledge, business and venture initiatives and enhancing the knowledge transaction across borders. They do not need to be financial investors; they can serve as ‘bridges’ by providing access to markets, sources of investment and expertise. They can link local producers more directly to the market opportunities and networks of more advanced economies, create new market incentives that affect profoundly the pace and direction of economic progress in both locations, and transfer not only technology and capital, but also managerial and institutional know-how to formerly peripheral regions (Saxenian, 2002).

The ICT sector is one of the few sectors with great potential to boost economic growth and become an important source of skilled employment, especially for the younger age groups in the WB6. Over the last decade, the ICT sector's contribution to GDP has increased in several countries in the region, with growth in Serbia and Northern Macedonia being particularly remarkable (Figure 6.6). In these two countries the contribution of the ICT sector to the GDP is much higher than in some of the EU-CEE countries, e.g., Slovenia or Poland. For some other countries, such as Albania and Kosovo the performance of the sector is still amongst the lowest in WB6 and the EU-CEE countries. The region has been able to attract an important share of FDI to the ICT sector which for some countries (Albania, Bosnia and Herzegovina) is much higher measured as a share in the GDP than in some of the EU-CEE countries (Table 6.2). In Albania, for example, major export market is Italy with 24% of total ICT services export (PwC, 2020).

FIGURE 6.6 GROSS VALUE ADDED OF THE ICT SECTOR IN GDP (%)



Source: wiiw annual database.

TABLE 6.2 FDI STOCK IN THE ICT SECTOR AS A SHARE OF GDP (%)

	AL	BA	MK	XK	BG	HR	CZ	HU	PL	RO
2019	12.8	11.0	2.9	3.5	3.3	6.4	5.3	5.1	5.5	3.9
2020	12.6	10.9	3.1	3.3	3.1	6.6			6.7	

Source: wiiw annual database.

Many studies point to the ICT as fastest growing sector in the region, as well as excellent supply of young well-educated ICT experts with lower labour costs, high entrepreneurial potential and growing soft infrastructure (PwC, 2020; article 2 in ETF, 2021g). The number of workers in the global Internet freelance market also confirms similar trends, with Serbia ranking 11th globally (Analyticshelp.io).

Looking at freelancers per 1,000 people, freelancing as a career is most widespread in Serbia, where there are 3.52 freelancers per 1,000 people, followed by North Macedonia, Montenegro, Bosnia and Herzegovina, and Albania (Table 6.3). A community of so-called ‘tele-migrants’ is growing, who live in the region but work for foreign clients via the internet as their primary source of income. Young and highly educated people with university degrees in economics, design, marketing, architecture, and engineering make up the majority of digital workers in Serbia (Box 6.2). The Covid-19 pandemic has facilitated further the growth of new forms of work in the region, increasing the volume of remote and online work and e-commerce.

TABLE 6.3 ONLINE FREELANCERS, END 2018

Ranking worldwide	Country	Freelancers	Active freelancers	% of active freelancers	Freelancers per 1,000 inhabitants
11	Serbia	24,605	5,534	22.49	3.52
38	North Macedonia	7,155	1,583	22.12	3.41
45	Bosnia and Herzegovina	5,414	927	17.12	1.55
53	Albania	3,769	665	17.64	1.3
92	Montenegro	949	179	18.86	1.58

Note: Online freelancers include only digital freelancers who work via online marketplaces. Offline and independent freelancers are not included.

Source: <https://analyticshelp.io/blog/global-internet-freelance-market-overview-2018/>

The data is based on publicly available data from the World Bank and freelancing sites.

The Public Policy Research Centre based in Belgrade developed a tool (so-called Gigmeter) to identify online workers from the region by screening the most popular online digital freelance platforms, where it found over 100,000 registered individuals from South Eastern Europe, notably from Serbia, Albania and Bosnia and Herzegovina⁵⁸. Only over the last six months, more than 3,000 new workers joined these online platforms. It must be reminded, though, that the sector’s overall contribution to total employment continues to be relatively low (Figure 6.7). Except for Kosovo and Serbia, the employment share of ICT is lower than in the EU-CEE countries. Although the statistics for Albania are missing, the country report (ETF, 2021a) indicated that the ICT sector and call centres are very popular and employ between 25,000 and 30,000 people (students in particular); call centres are mainly working for Italian companies. The Macedonian ICT sector is benefitting from neighbouring countries such as Serbia and Bulgaria given that a growing number of ICT companies located there are hiring teleworkers (for further details see ETF, 2021e).

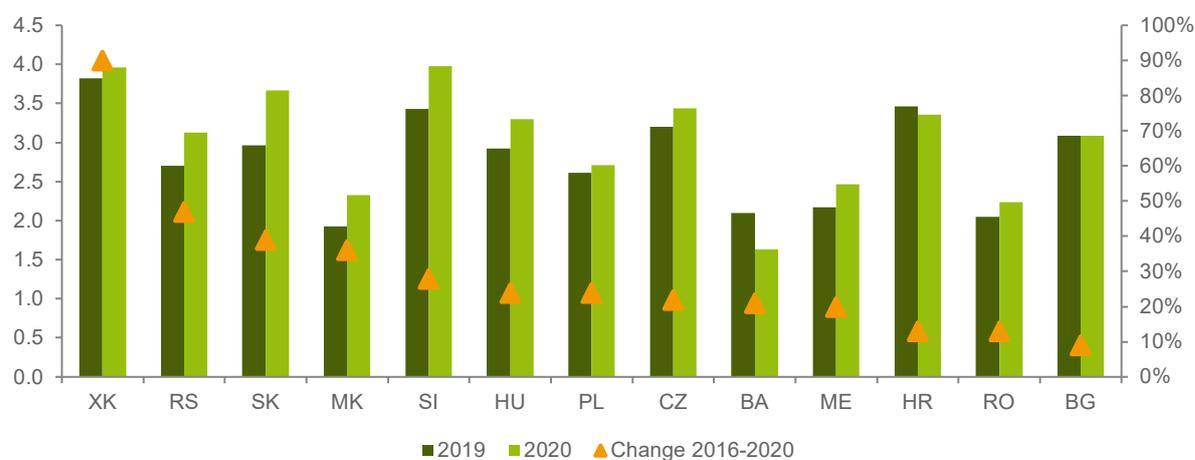
⁵⁸ See Public Policy Research Centre, [Gigmeter](#)

BOX 6.2 EXAMPLES OF THE ICT SECTOR SURGE IN THE WESTERN BALKAN REGION

Serbia is emerging as the ICT hub in the region thanks to higher integration into global value chains and high investment in human capital in ICT. Serbia is one of the leading countries in Europe in terms of the percentage of its digital workforce as a share of its total population and total workforce. It seems to have generated some comparative advantage in this context given that the annual numbers of graduates in ICT are above 2,500 and it has been successful at attracting and retaining ICT professionals. Most observers claim that the launch of the Microsoft Development Centre in 2005 in the country (to develop Live Search, handwriting recognition, image analysis and database management technologies) was a turning point, spawning local start-ups in its proximity, both in Serbia and beyond (ETF, 2021f). In addition, a very supportive investment and taxation regime and digital skills provided in public schools from primary education onwards have supported integration into global value chains in the ICT domain. Serbia's Strategy for Digital Skills Development 2020–24 includes improvement of digital competences in the education system and of basic and advanced digital skills for all citizens. The contribution of ICT exports was estimated at 2.5% of GDP in 2018, rising to 5.4% in 2020, a pandemic year. Serbia has also started to attract and retain talents in the ICT sector by boosting the number of ICT graduates, offering tax relief to employers hiring high-skilled returnees educated abroad, and offering relatively high wages (e.g., three times the average wage) to returnees or high-skilled foreign nationals employed in ICT in Serbia. In the case of the ICT sector the linkages between migration and human capital enhancement are well established and can be considered a success story. ICT graduates abroad are not only returning home but have also attracted into the country several foreign digital experts.

In Kosovo the outsourcing of services is becoming an important development factor. The ICT sector is among the few sectors within the Kosovo economy that is characterised by a positive trade balance – around 78% of existing companies in ICT export their services (PwC, 2020). Out of this, around 27% of companies export to Switzerland and 23% to Germany. It is also becoming an increasingly important source of employment, reducing the incentive for outward migration among the young and exerting pressure to build up human capital in this area. The comparative advantage of Kosovo stems from the availability of highly skilled and well educated ICT professionals, language skills, a convenient time zone, and the ease of starting a business and doing business. Some 61% of ICT companies in Kosovo work with international clients (ETF, 2021c). Until recently, Kosovo had a specific Ministry for Innovation and Entrepreneurship, which focused on supporting innovative ideas and new start-ups. Given the possibility to work for international companies, the demand for ICT fields of studies has increased in recent years.

FIGURE 6.7 ICT SECTOR'S SHARE IN TOTAL EMPLOYMENT AND CHANGE IN ICT EMPLOYMENT, 2016–20



Note: Share of employment in the ICT sector to total employment, in % – left axis. Change in employment in ICT sector, in % – right axis.

Source: wiiw annual database.

As a response to these trends, **the share of students' enrolment in ICT programmes has been rising in all countries of the region.** Serbia and North Macedonia record the highest enrolment rates of students in ICT – at 6.3% – which is higher than in some of EU-CEE countries (Table 6.4). The rising number of students in ICT is also reflected in a higher number of employed in the ICT sector. Especially, Kosovo, but also Serbia has experienced a strong rise in employment in the ICT sector; Kosovo almost doubled the number of ICT professionals up to almost 14,000 compared to 7,300 in 2016. The number of employed in the ICT sector has increased by 70% in Serbia – up to 90,000 compared with 62,000 in 2016. Indeed, digital readiness index seems to be higher in some countries than others such as Serbia, Montenegro and North Macedonia, so as the global innovation index (see article 2 in ETF, 2021g).

TABLE 6.4 STUDENTS' ENROLMENT IN ICT PROGRAMMES AS A SHARE OF TOTAL

	AL	BA	ME	MK	RS	BG	HR	HU	RO	SK	SI
2015	5.1	3.0		6.0	5.0	3.1	4.1	2.4	5.4	2.9	3.5
2019	5.3	4.9	4.5	6.3	6.2	4.0	4.4	4.9	6.3	3.9	4.1

Source: UNESCO Institute for Statistics.

Several education/training offers in ICT skills with international links exist as well. Besides many donor-supported and non-governmental projects to develop digital skills, Semos Education Serbia implemented the free online training project within the framework of Microsoft Global Skills initiative and with the support of government. Covering 5,000 young people, the project offered mentoring workshops and training related to several ICT occupations (software developer, data analyst, IT administrator and AI practitioner)⁵⁹. TUMO Centre for Creative Technologies⁵⁹ opened in 2020 in Tirana is designed for teenagers and combines self-learning and workshops to teach young people specialised digital skills such as programming, robotics, graphic design, and animation.

⁵⁹ See more: [Free online training for digital skills](#)

With increasing number of ICT graduates, an increase in emigration of ICT personal from the WB6 is also observed. The rising number of ICT graduates is driven by the rise in demand for this category of professionals both in the domestic labour market and at international markets. Better employment and earnings prospects abroad are pulling many ICT professionals to move abroad; a higher demand of foreign companies for ICT professionals from the region (both in the region as well as abroad) is becoming an increasing source of employment for this category of professionals. Overall, shortages of ICT professionals and digital skills is still an issue which needs to be tackled, as the demand for ICT professionals is higher than the supply and the quality of digital skills taught in the education system needs to be improved (ETF, 2021g).

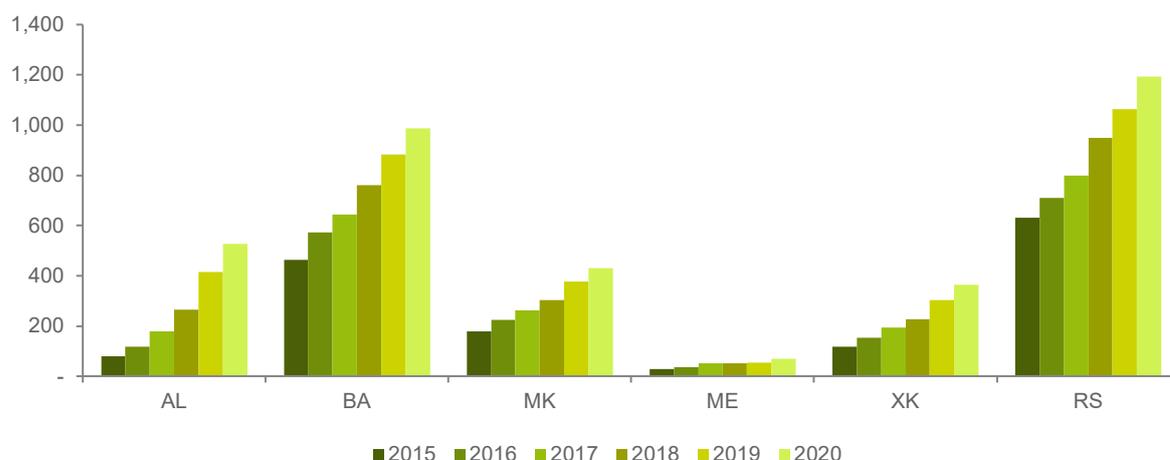
The gap in terms of earnings makes this specific category of professionals also quite prone to emigration. Better earnings prospects abroad are an important pull factor also for professionals of the ICT sector. ICT professionals in Germany are likely to earn more than three times what their peers earn in Albania – or two and a half times the earnings level in Serbia and two times the wage level in North Macedonia. Data for Germany indicate that the number of ICT professionals from the WB6 working in Germany has more than doubled from 1,497 in 2015 to 3,569 in 2020 (see Figures 43 and 44). The number of ICT workers from Albania in Germany in 2019 was more than 6 times higher than in 2015. For North Macedonia the number of new ICT professionals employed in Germany corresponds to 8% of ICT graduates on average per year. Data for Bosnia and Herzegovina in 2018 suggest that the number of graduates in ICT is above 800, and with respect to ICT professionals who move to Germany between 2019 and 2020 this would correspond to 13% of ICT graduates.

FIGURE 6.8 GROSS MONTHLY EARNINGS OF PROFESSIONALS AND ASSOCIATE PROFESSIONALS WORKING IN THE ICT SECTOR, 2018 (EUR (PPS))



Source: Eurostat, Mean monthly earnings by economic activity and occupation [earn_ses18_48].

FIGURE 6.9 IT PROFESSIONALS FROM WB6 IN GERMANY, 2015–20



Source: <https://statistik.arbeitsagentur.de>

Summing up, the ICT sector is a positive example showing that interrelationships between human capital development, migration and employment can positively impact each other.

Devoting a growing number of human resources to this sector combined with a more moderate emigration rate of ICT professionals, as well as higher wages, might very likely generate a kind of leapfrogging in this sector similar to what has happened in India. Part of ICT professionals will emigrate, but there will also be a significant share of ICT professionals who will stay at home and these professionals can support domestic companies to adopt or leap into advanced technologies, as well as attract foreign companies interested in a trained workforce with specific skills (Stark and Fan, 2007; Stark and Zakharenko, 2012).

There is a central role here for policy makers: Developing concrete measures to foster a skilled workforce in a well-matched way between the education system and the needs of the business sector; to develop and adopt strategies for governments in the region to play an active role in providing the necessary support to domestic and foreign companies to establish and expand such activities with the aim of spurring economic growth and job creation in a sustainable way. There is also room for wage policies and the role they can play to labour market adjustment given that wages are not purely established in the free market.

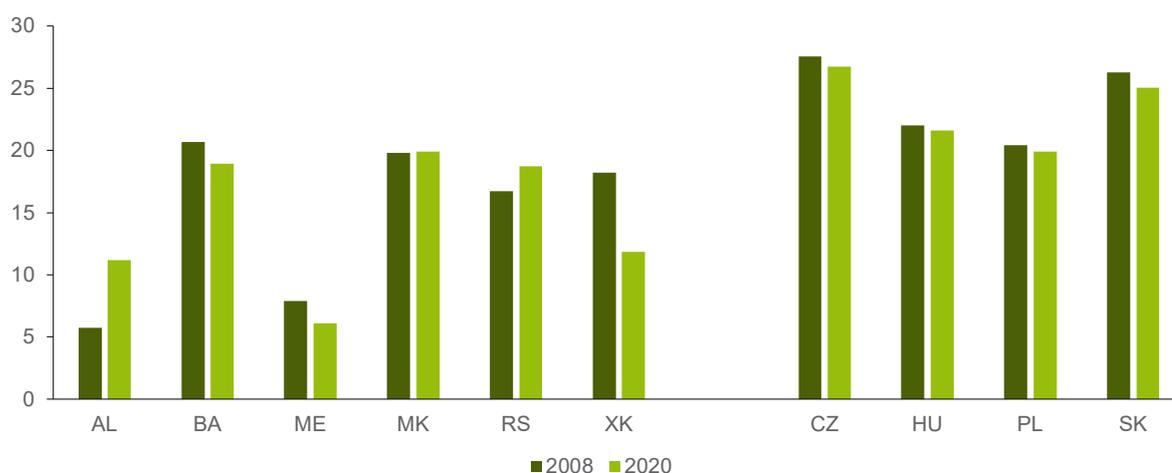
7 RECENT ECONOMIC TRENDS SHAPING MIGRATION

This report has already pointed to some differences in structural characteristics and labour market performance of the WB6 economies in previous chapters. Although both Chapter 1 and Chapter 5 gave some elements of differences in the economic structures of the WB6, this chapter makes further elaboration on these differences and their impact on migration characteristic, particularly in terms of sectoral distribution of available jobs. As discussed in Section 7.1, this has implications for the emigration tendency of certain skill groups due to the quality of available jobs and their skill demand at home. Section 7.2 continues with the impact that the Covid-19 pandemic on the recent economic growth, employment and migration trends in the region. Finally, Section 7.3 attempts to look at future trends until 2030 by presenting the results of a projection undertaken for this project on labour demand and supply by skill groups under various scenarios in the region.

7.1 Continuing structural differences amongst the Western Balkan economies

It is important to highlight the structural economic/sectorial differences across the countries in the region, as this has further implications on the emigration tendency of certain skill groups due to the quality of available jobs and their skill demand at home. First point to make is that all WB6 suffer from persistent and very large deficits on the current accounts which in turn stem from the large deficits on the trade accounts (see Table 1.1 in Chapter 1 for data on exports and imports as % of GDP). Only Serbia and North Macedonia (and to some extent in Bosnia and Herzegovina) show signs of significant closure of these deficits over the past 10 years. The trade deficits in the case of Albania, Kosovo and Montenegro remain at over 15% of GDP, while they have come down in the case of Serbia and North Macedonia to 10% and 14% respectively (all in 2019). All countries have relatively weak private sectors (mostly in services) and attractive public sectors for medium- and high-skilled relative to private one, albeit with differing degrees.

FIGURE 7.1 SHARE OF EMPLOYMENT IN MANUFACTURING IN TOTAL EMPLOYMENT (%)



Note: AL 2008 reg. NACE1, BA, XK 2008 reg. Data, employees. MK 2008 data refer to 2009. ME 2008 refer to 2011.

Source: wiiw annual database using Eurostat LFS statistics.

The single most important feature which accounts for the difference is the role of manufacturing (see Figure 5.5 in Section 5.2 and Figure 7.1). Manufacturing in terms of value added and employment occupies a more prominent place only in Serbia, North Macedonia and Bosnia and Herzegovina. However, it does not yet achieve even these the prominence it reached in the more advanced Visegrad economies. These latter countries have achieved an important place in what is now called the Central European Manufacturing Core (Stehrer and Stöllinger, 2015), i.e., based on a deep integration in cross-border production networks ('value chains') which is still in a very rudimentary state in WB6, except some developments in this direction specifically in Serbia and North Macedonia. On the other hand, Albania has a very large share of employment in agriculture and Montenegro has a large share in private sector services reflecting the important role of the tourism sector.

FIGURE 7.2 FDI INWARD STOCK IN % OF GDP



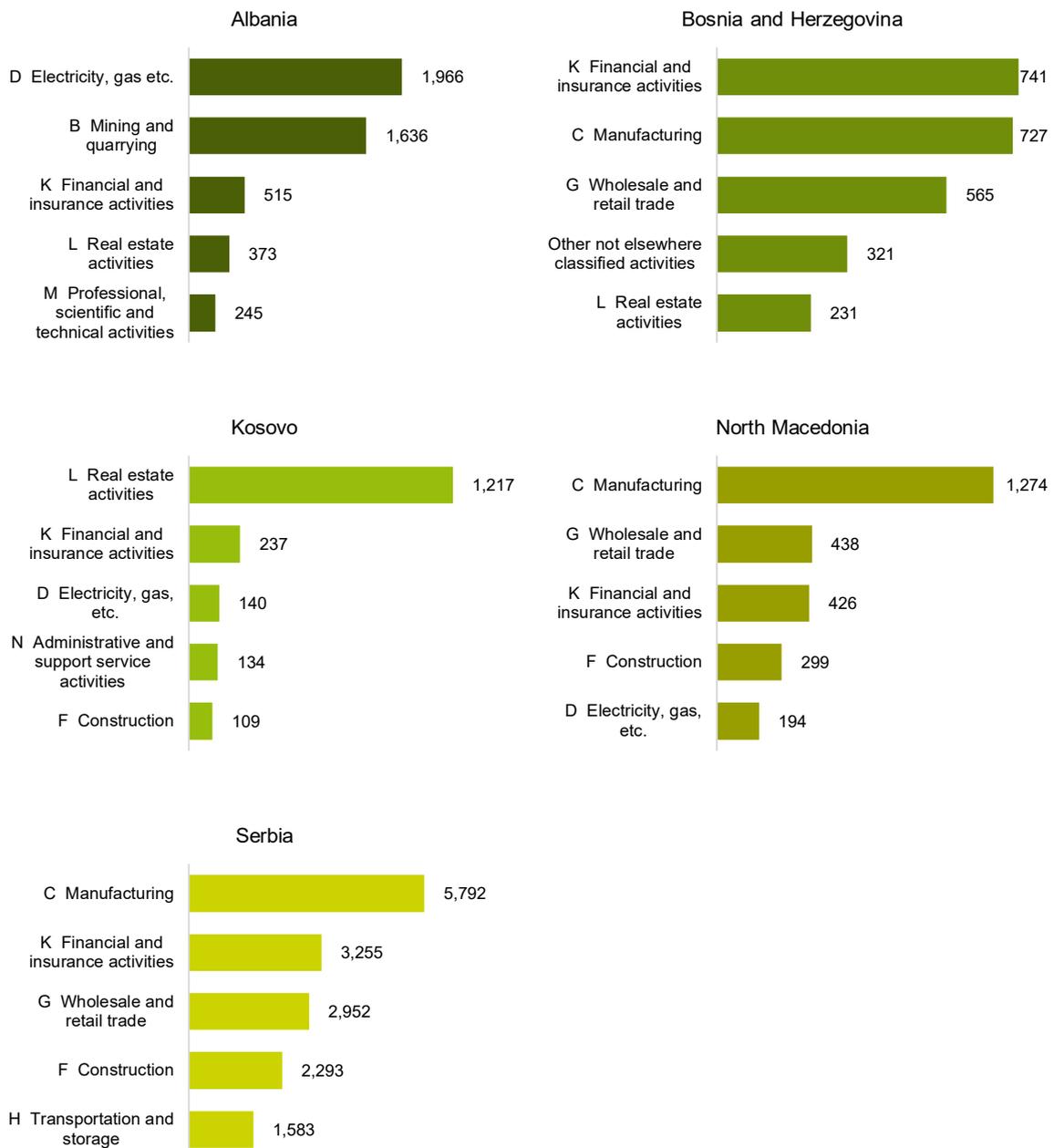
Source: [wiw annual database incorporating national statistics and Eurostat](#).

Integration into cross-border production chains depend on attractiveness of countries for foreign investors, but beyond that the sectoral composition of such investment is important. Figure 7.2 shows that all countries in the Western Balkans have been able to increase the stock of FDI in GDP; however, the composition of FDI across sectors differs a lot across these economies. As seen in Figure 7.3, manufacturing features strongly in the allocation of FDI in Serbia and North Macedonia and – together with the finance and insurance sector – also in Bosnia and Herzegovina. However, in Albania and Kosovo manufacturing does not enter even amongst the top five sectors receiving FDI inflows over the period 2010–19.

Instead, the dominant sectors are real estate in Kosovo and the energy sector and mining in Albania. This means that in these two countries FDI is either heavily invested in highly capital-intensive sectors such as mining and energy generation or in non-tradable sectors such as real estate. In the first case, it does not have much impact on employment, in the second case it does not favourably impact on trade accounts. Due to lacking data, the sectoral breakdown of FDI inflows into Montenegro could not be presented in Figure 7.3, but there the tourism sector plays an important role. As regards the impact of tourism sector on employment and on the trade accounts, in fact it does account for significant inflows of migrants from the region who could find seasonal employment in the Montenegrin tourism sector (ETF, 2021d). On the other hand, a thriving tourism sector can have ambivalent impacts on the trade accounts: on the one hand it is a contribution to exports as tourists spend money in the country; on the other hand, it contributes towards a pressure on the price level and thus towards a real appreciation of the currency and thus makes other sectors less competitive. Similar to the impact of

remittances, it is a phenomenon akin to the so-called Dutch disease. Such developments have been observed in other 'transition economies' such as Croatia, and this might be a serious impediment to the development of an industrial sector in Montenegro. It is therefore unlikely that Montenegro will be able to get integrated in cross-border industrial production networks as is increasingly taking place in Serbia and North Macedonia, despite significant FDI inflows.

FIGURE 7.3 TOP 5 SECTORS FOR FDI INFLOWS IN FIVE ECONOMIES, 2010–19 (EUR MILLION)



Source: [wiw FDI Database](#).

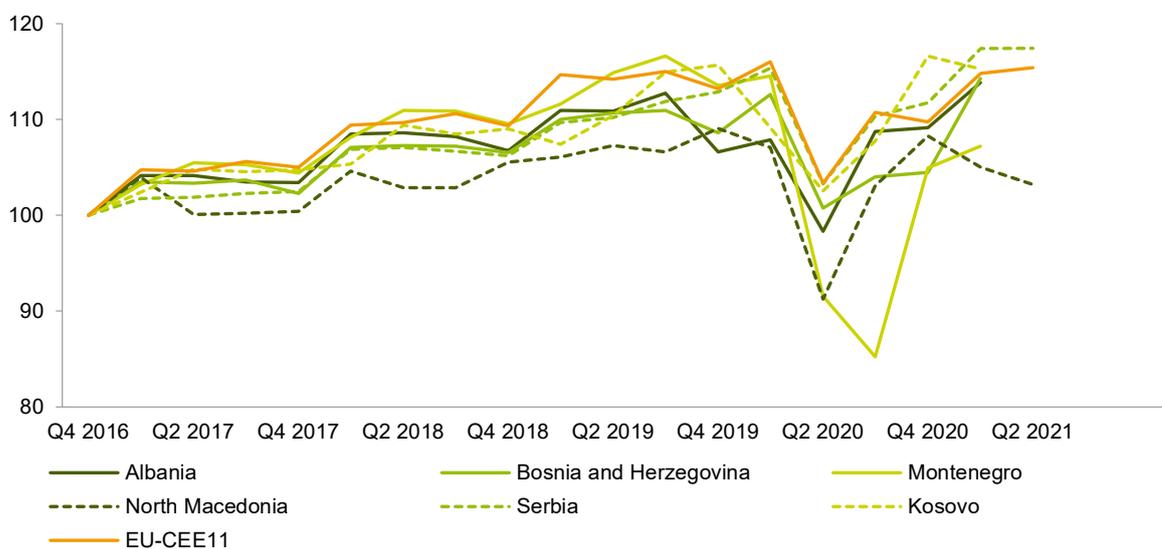
Hence each of the WB6 economy is differentiated in terms of economic structure and the development path it pursues, and this differentiation will impact future trends as well. As explained, manufacturing implies a higher demand for more skilled workers (both medium- and high-skilled) in the countries,

which can keep some of them from migrating. This differentiation of economies is kept in mind when discussing employment implications and likely future scenarios until 2030 in Section 7.3, which presents the results of labour demand and supply projections by skill groups under various scenarios.

7.2 Impact of the Covid-19 pandemic

The negative effects of the Covid-19 pandemic on the economic growth, employment and migration trends have been strongly felt in the WB6. But contrary to what might have been expected, the impact has been less severe than in other EU or EU-CEE countries. As seen in Figure 7.4, GDP in the WB6 contracted in 2020 by 3.1%, against the 3.9% and 6.1% GDP decline in EU-CEE and EU countries respectively over the same period (wiiw, 2020a; 2021a). One of the reasons for the recession being less severe than in some of the EU countries was that countries in the region responded quickly to the pandemic by introducing several fiscal and monetary stimuli, (wiiw, 2020b; ETF, 2020c). Serbia responded with especially strong fiscal support estimated at 5.1 billion EUR or 11% of GDP and the economy contracted only 1%.

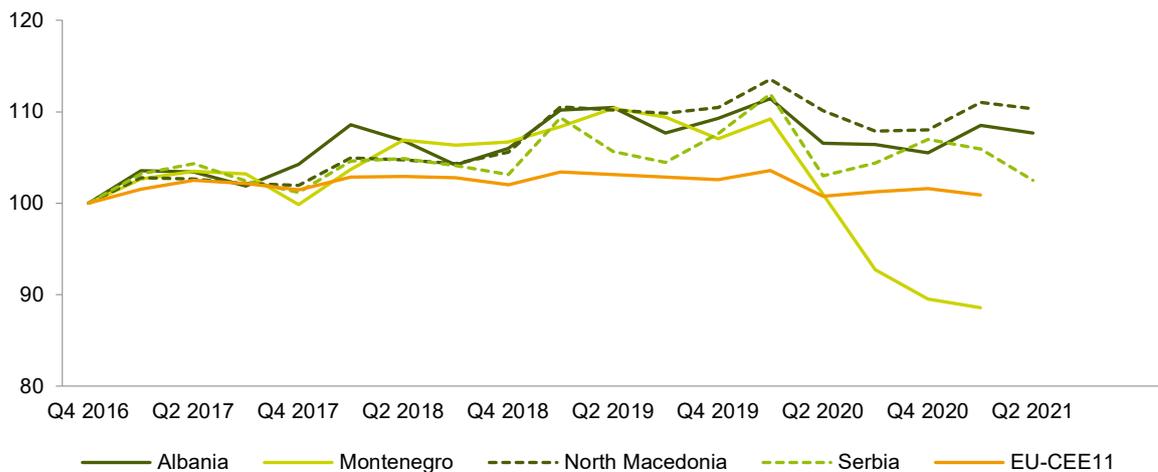
FIGURE 7.4 GDP DEVELOPMENTS, 2016=100



Source: wiiw Database incorporating national statistics.

Exceptionally, Montenegro contracted by 15.2% in 2020 because of the high dependence of its economy on tourism – the main sector hit by the restrictions on mobility (see Figures 48 and 49). Due to mobility restrictions, the tourism sector was also severely affected in other countries such as Albania and Bosnia and Herzegovina. Starting in the second half of 2020, the countries in the region introduced only mild lockdowns, economies opened up again and only partial stringent measures were applied. The outlook for 2021 has been slightly better than expected as vaccination rollouts have been launched massively, especially in Serbia and Albania. These vaccination drives are helping the economies to recover quickly and countries in the region seem to be benefitting in terms of trade, FDI inflows, and exports of certain categories of goods and remittances.

FIGURE 7.5 EMPLOYED PERSONS, LFS, 2016=100



Source: [wiiw Database incorporating national statistics](#).

An analysis of the labour market responses to the pandemic in the region reveals employment shifts between economic sectors (Tverdostup and Bykova, 2021). Manufacturing, transportation, accommodation and food services are affected most by the pandemic; while ICT, professional and scientific activity sectors remained widely unaffected, or even reaped benefits from the crisis. The discrepancies between losing and winning sectors prompts potential structural changes in the labour markets. This was already seen in wage growth which uneven across sectors, with healthcare and ICT sectors incurring the largest wage increases recently (Tverdostup and Bykova, 2021).

In general, the pandemic has led to slow down labour migration and mobility worldwide and it led to a general easing of the rules on work for foreigners already in host countries. **Outward mobility from the region slowed down too as restrictions on mobility were introduced in the first half of 2020.** While for quite several WB6 citizens the pandemic prohibited their return home, for those who wanted to leave – including international students – the departure had to be postponed or their mobility plans were changed. Seasonal mobility was particularly affected and challenged by stringent measures affecting movement to the EU as well as to other countries in the region. A lot of seasonal and circular migrant workers were trapped and could not emigrate; the social vulnerability of this category of workers was clear, e.g., in Serbia, North Macedonia and Bosnia and Herzegovina. For Bosnia and Herzegovina return migration seems to have intensified due to the pandemic. In Montenegro, students' mobility abroad was negatively affected to the point that student enrolment in the University of Montenegro increased 8% in 2020/21, while outward mobility of high skilled – particularly health professionals – appeared to remain unaffected. In Albania too, outward mobility seems to have shrunk or was postponed because of travel bans. Restrictions on mobility temporarily halted intensive outward mobility and emigration has been less strong than in the previous years (see ETF, 2021 a-f).

Unemployment did not rise significantly, but many workers moved to inactivity because restrictions on mobility obstructed job searches. A large category of workers – those with precarious employment or those informally employed – have been more exposed to the negative effects of the pandemic: the risk of poverty and the vulnerability of families relying on remittances might have increased given that this source of income often flows through informal channels.

The pandemic gave a push to remote/teleworking. During the pandemic remote work gained in importance given the stringent measures and the impossibility to emigrate. Responses have been

different depending on the level of digitalisation, skills of the workforce, access to internet and opportunities of employees to use mobile devices for business purposes. The share of teleworking reached close to 5% in Serbia and 5.8% in Montenegro while in other countries of the region the share of teleworking is much lower⁶⁰. The pandemic is reshaping the world of work and pushing further digitalisation also in the region and will continue to do so even when it is over. It also created more competition for 'digital nomads' as many countries in the world created programmes to attract mobile technology workers.

Labour market conditions had differentiated impacts on different groups of workers depending on their skills. Labour demand in the public sector such as in health, education, and administrative and support service activities fluctuated less than in other parts of the economy. In these sectors it is expected that demand will continue to stay at a high level and employment will be more stable. Education and teaching through online platforms and use of teleworking rose quite significantly in the countries of the region. Still, they are lagging behind as concerns training and the upgrading of teachers' skills to teach online and ensure better accessibility and participation in digital distance learning to those students and pupils who are socially and economically less advantaged (ETF, 2020d).

Digital and distance learning expanded rapidly, but a thorough transformation is needed to guarantee access to education by all social groups. Shifting to online and distance learning has transformed the world of education, the engagement of teachers and learners and how they interact with each other. The big divide between different social groups, urban and rural areas emerged even more strongly in this context. Thus, during the Covid-19 pandemic inequality in education has risen again (ETF, 2020d). However, online platforms might offer great opportunities and contribute to closing the gap on access to education, and digitalisation and the application of new and advanced technologies could also offer greater flexibility in adjusting to labour market needs.

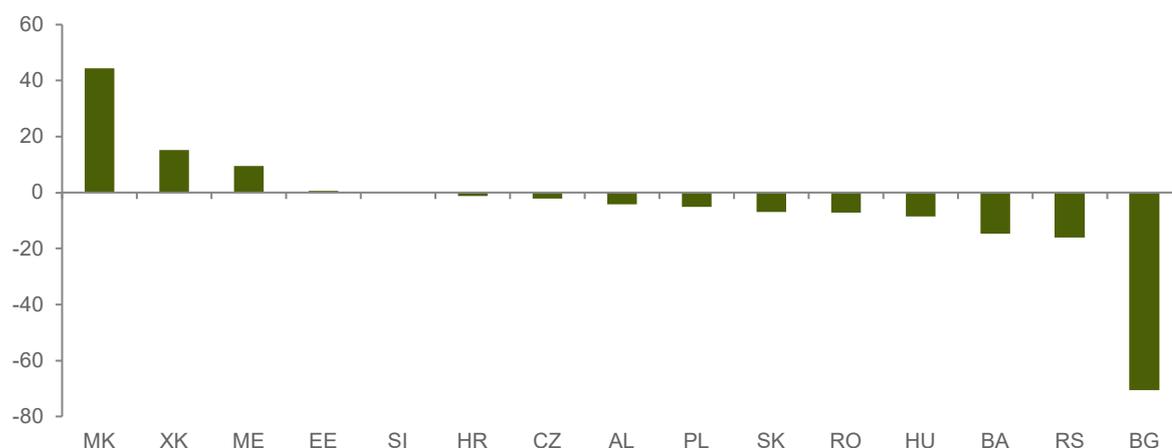
Despite the pandemic, remittances have still been just as important as the financial support provided by governments in the region in response to the pandemic. In 2020 remittances amounted to EUR 8.4 billion, or close to 8.6% of GDP in the WB6, which is of a similar magnitude to the financial assistance allocated by (some of the) governments in the region to tackle the negative effects of the pandemic (wiiw, 2020b). In particular, remittances rose by 40% in North Macedonia, 15% in Kosovo and 10% in Montenegro (Figure 7.6)⁶¹. They remained an essential source of income especially for those countries where the social and economic impact of the pandemic has been more severe. The change in remittances was quite minimal in Albania, while remittances dropped by 15% in Bosnia and Herzegovina, and Serbia.

The pandemic has further increased precarious and informal employment prevailing in most countries in the region. Many people working in such conditions have been left uncovered by the social security system. In this context relying on remittances and large communities of migrants abroad has been a great source of support. The large share of migrants residing in the EU – e.g., in Germany, Austria and Switzerland – who fall into the category of essential workers (e.g., in construction, manufacturing, and health and care services) were therefore particularly important during the pandemic.

⁶⁰ See Eurostat data, [Employed persons working from home as a percentage of the total employment](#)

⁶¹ These figures must be interpreted with some caution as during the Covid crisis, more remittances were sent via formal channels compared to other years.

FIGURE 7.6 ANNUAL CHANGE IN WORKERS' REMITTANCES, 2019–20 (%)



Source: Own calculations using Eurostat [BOP_REM6 – secondary income: Workers' remittances, EUR million, annual].

After a difficult year in 2020, there are positive dynamics as concerns FDI inflows in 2021. The pandemic halted a number of FDI projects in 2020, which in 2021 restarted again (wiiw, 2020c). The pandemic and difficulties with global supply chains for some EU companies are also inducing some of these companies – especially German ones – to bring their businesses closer to home with potential benefits for some of the WB6 (so-called near-shoring) (Jovanovic et al., 2021). Evidence suggests that some of the WB6 – particularly Kosovo, Serbia and North Macedonia – seem to already be benefitting from nearshoring of FDI by some EU companies (wiiw, 2021b). Employment and potentially the quality of jobs could benefit, also depending on the sectoral allocation of such investments and the impact on the highly skilled and medium-skilled employment.

7.3 Long-term projections of labour market supply and demand under different scenarios

This section looks at the future trends of labour demand and supply by skill groups under various scenarios, based on the results of a technical study undertaken within the context of the project. The technical study attempted to provide **scenarios of potential future labour supply and demand dynamics of different skill groups** in the WB6 up to the year 2030 (see Leitner, 2021b).

The analysis started with a baseline scenario in which demographic population projections were partly used from existing sources and partly developed by the author of the study; other labour market indicators (such as activity rates, productivity growth, etc.) were mostly derived from past trends. Then a number of different scenarios were built up to examine how they would affect the employment situation of different skill groups in the WB6, e.g., the possible impact of potential labour market policies, education policies, migration flow scenarios, development policies, GDP growth developments and structural change could have on 'surplus' and 'shortage' situations with regard to different skill groups. In particular, the study examined whether the different scenarios would lead to different 'switchover points' when a 'surplus' labour situation changes into a 'skill shortage' situation for particular skill groups, and vice versa, as compared to the baseline scenario.

The analysis differentiated between **four educational levels** (based on ISCED 2011): low (primary or lower secondary education); medium-general (upper secondary general education); medium-VET (upper secondary VET); and high (tertiary education). These were also distinguished in the study

which estimated net migration flows by skill group over the period 2010–19 (Leitner, 2021a; see the summary in Section 3.2 of this report).

Within the projection period of 2020–30, **the results of the *baseline scenario* point to both shortages and surpluses of labour for different skill groups** in the region (see Figure A29 in Annex for the features of this scenario). Albania, North Macedonia and Serbia would face labour shortages for all four skill groups already within or shortly after the projection period. On the other hand, Bosnia and Herzegovina would experience labour shortages of the low educated and medium-VET educated in the same period, but excess labour of the highly educated (with labour market equilibrium for medium-general educated). Similarly, Montenegro would also face labour shortages of the low educated in the same period but excess labour of the medium-VET and the highly educated (with labour market equilibrium for medium-general educated). Finally, Kosovo would experience labour shortages among the low and the highly educated shortly after the projection period, but substantial and persistent excess labour among the medium educated (i.e., medium-VET and medium-general educated).

To mitigate these projected labour market imbalances among different skill groups, additional **policy scenarios are developed to illustrate the country-specific differences and possible policy options**. These scenarios are explored in a ‘stacked manner’: they served, at first, to partially address one or the other labour market imbalance (such as the low activity rates of the low educated, or the relevance of projected migration flows for the labour supply), but they then build up to explore new scenarios affecting the labour demand and supply in a way that amount to a structural ‘upgrading’ of WB6 economies and which could also lift overall growth performance as well as their employment absorption capacities. Thus, the study investigated an ‘education scenario’ in which the supply of the higher skill groups is strengthened but, as this might accentuate excess supply of these groups (which was one of the factors that has led to their high migration propensity), this was then accompanied by changes on the demand side through structural policies (increasing the demand for the higher educated) thereby also lifting the GDP growth prospects of WB6.

The last step of the exercise built up into a ‘development policy scenario’ which addressed all the points in a synthetic manner: using active labour market policies to increase activity rates amongst those groups with particularly low participation rates, i.e., the low educated and of women, the latter specifically problematic in some of the WB6, adding efforts to improve the skill composition of the available labour force through educational policies. However, these could lead – if left to themselves – to excess supplies of the better trained and better educated and therefore such policies would have to be combined with structural policies (e.g., industrial and regional policies; policies to attract FDI; support to upgrade capabilities of the SME sector) so that the better trained/educated can actually be absorbed and used in the economies and all of this in combination could lead to an improved growth performance in the region.

A short synopsis of the main features emerging from different scenario analyses is presented below. It starts with a discussion of the possible importance of migration flows over the projection period until 2030 by contrasting a zero net migration scenario across all educational groups with the baseline scenario (for further details on these scenarios, see Leitner, 2021b).

Zero net migration: Such a scenario would generally have little discernible effect in the majority of WB6, as projected migration flows do not amount to high shares of the labour supply in the different skill groups. Notable exceptions were found in Bosnia and Herzegovina, North Macedonia and Kosovo. However, *active labour market policies*, which aim at increasing the activity rates specifically of the low and the medium-VET educated, would help to avert projected labour shortages among the

low and the medium-VET educated in Albania and among the medium-VET educated in North Macedonia. Conversely, given different starting points and projected labour demand trajectories, they would 'overshoot' and generate excess labour supply among the low and the medium-VET educated in Bosnia and Herzegovina, and the low educated in North Macedonia, Serbia and Kosovo.

Education policies: Putting strong emphasis on upgrading the skill mix of the working age population towards the medium-general and the highly educated would exacerbate projected labour shortages among the low and the medium-VET educated in all the WB6 (except Kosovo) – because of the shift towards the medium-general and the tertiary educated. But it would also generate or further exacerbate excess labour among the medium-general and the tertiary educated in all the WB6.

Joint labour market (activation) and education policies: These policies in combination and without other measures would still lead to labour market shortages among the low and the medium-VET educated in all the WB6, except for Bosnia and Herzegovina and Kosovo, where the low-educated would face excess labour beyond the projection period. By contrast, in all the WB6 countries, the medium-general and the highly educated would experience substantial labour surplus.

Lifting GDP growth beyond the trajectory in the baseline scenario (but not adding other policies) would result in labour shortages in all the WB6 except for Kosovo, where the medium-VET educated, and temporarily also the low and the medium-general educated would still experience excess labour.

Employing structural policies: Structural policies could shift labour demand in a direction that would increase the demand for the higher-skilled) and avert actual or imminent labour shortages and, in some cases, further enhance existing excess labour among the low-educated. On the other hand, they could lead to labour shortages among the medium-general and the highly educated in all the WB6 except for Kosovo.

Higher GDP growth and structural change together would lead to moderate labour demand effects among the low and the medium-VET educated but would result in significant increases in labour demand among the medium-general and the highly educated in all WB6. Therefore, this scenario further aggravates already existing or imminent labour shortages.

Finally, all these labour market and education policies with the high GDP growth and structural change scenarios could be combined in a **Development Policy Scenario**. This last scenario could result in labour shortages among the low-educated (either within or shortly after the projection period) in Albania, Montenegro and North Macedonia and in excess labour in Bosnia and Herzegovina, Serbia and Kosovo. The medium-VET educated would experience labour shortages within or shortly after the projection period in all the WB6 except for Kosovo. There would also be labour shortages – either during or shortly after the projection period – among the medium-general and/or the highly educated in Albania, Montenegro, North Macedonia and Serbia but excess labour among the medium-general and/or the highly educated in Bosnia and Herzegovina, Montenegro and Kosovo. A comparison of the differentiated labour supply and demand trajectories envisaged in the study for the different skill groups in the 'development scenario' with the 'baseline scenario' can be seen from Figure A30 in Annex.

It thus emerges from analysis of these scenarios that depending upon the starting points (initial labour supply composition by educational group), as well as demographic and migration projections and evolving supply and demand structures associated with the different scenarios, each of the WB6 economies would be faced with diverse challenges with regard to labour shortages and surpluses in

the future. Therefore, different mixes of policies will have to address these diverse situations in each of the six countries.

The results provide some lessons from different policy options. For instance, policies to reduce migration flows (simulated through the *zero net migration* scenario) would have hardly any significant impact on labour supply over the time horizon of this modelling exercise. Therefore, they would not be particularly important in alleviating labour market imbalances in the WB6. By contrast, *active labour market policies* targeting increases in activity rates would raise the labour supply of low and medium-VET educated and would help to avert labour shortages of these groups which are projected to occur in the same period. However, the outcome of this policy action differs across the WB6 and is comparably small in Albania, where the activity rates of the low-educated are already quite high in the baseline scenario. This reflects the high share of agricultural employment there; but with increasing rural-urban migration, the problem of low activity rates for the low-educated will also become apparent in this country.

An important aspect in this regard is **gender-specific differences in activity rates** which tend to be higher among the lower-educated. Hence, increasing the activity rates of women is generally of key importance and it should be an important policy objective. In view of observable effects, the increase in the activity rate among the low-educated in Montenegro needs to be much higher to avert imminent labour market shortages. Conversely, in Kosovo, a more moderate increase would suffice to address projected imminent labour shortages among the low-educated. This also applies to Bosnia and Herzegovina, where a more moderate increase in the activity rate would be enough to address projected imminent labour shortages among the medium-VET educated.

Some important policy options can also be deduced from the **development scenario** which combined increases in GDP growth and structural change with labour market and education policies and therefore looks at a situation when countries have embarked on an improved overall economic development trajectory. In addition to labour market policies, it points to the importance of education policies for upgrading the skill mix of the workforce. It shows that a shift in the skill mix of the working age population towards the more highly educated is indispensable⁶² in all the WB6 to be able to meet the growing demand for skilled labour from higher economic growth and structural change. It also highlights that some labour market imbalances would nonetheless occur in almost every WB6 country – which is to be expected in such a context. Despite applying an equally optimistic ‘development’ scenario in all the WB6, labour market imbalances remain most pronounced in Kosovo where all educational groups still encounter a substantial excess labour. This suggests that in the case of Kosovo, much higher GDP growth would be needed to address labour surplus.

As specified in the introduction before, this report excluded on purpose the inflows of economic migrants and refugees into the WB6 – even on a temporary basis on transit. Some of these arrivals could stay in transit routes with increasing immigration as a new and possibly increasing phenomenon in the region. This is important to keep this in mind when reading these future scenarios of labour supply and demand, including potential labour and skills shortages in the WB6 due to its demographic

⁶² Though distinguishing four educational groups (low, medium-general, medium-VET, high), this exercise cannot capture any more details regarding the upgrading of the skill structure of the labour force beyond allowing for a change in the composition across the four groups. There are, of course, further details to be discussed – e.g., how to improve the quality of the various educational programmes (specifically of VET programmes, which represent the vast bulk of upper secondary education in five countries (except Albania)). Further discussion on these is included in Section 8.2.

trends and migration outflows. The inflows could be potential opportunity to consider in the future in terms of demography and skills provision for the region.

8 POLICY RESPONSES AND ACTIONS

Against the background of information and analysis presented before, the citizens of the WB6 make decisions by weighing their options based on education/skill levels, available jobs/wages and opportunities available both at home and abroad. Similarly, relevant institutions from three areas (migration, education and training, and the labour market) are developing responses to each other due to their permanent interaction. This chapter reviews those policy responses with a specific objective: to analyse the interactions of different policy domains such as migration/mobility policies (external and domestic), education and training policies, and labour market policies or other policy domains that could positively contribute to improve the triangular relationships and thus socio-economic developments in the WB6. Section 8.1 starts with policy responses in the field of migration governance, followed by Section 8.2 on policy responses in education and training and Section 8.3 on policy responses in labour market fields. Most of the information in this chapter comes directly from the country reports (ETF, 2021a–f).

8.1 Policy responses in the field of migration governance

Governments of the WB6 have intensified their engagement as concerns both emigration and immigration in the region. Broadly speaking, all the governments in the region have established governmental agencies which are responsible for the implementation of a national migration policy. They have introduced new national policies and strategies aimed at managing and addressing several issues that facilitate regular migration, including labour migration. Within the cooperation with the EU, such policies and strategies also focus on prevention of irregular migration, and integration and inclusion of immigrants in their countries (see Table A4 in Annex). Montenegro has amended some laws which facilitate the entry and stay of high skilled worker from non-EU countries to align with the EU's *acquis communautaire*.

The countries have also adopted national policies and strategies which address several aspects of economic migration including the departure, stay and employability of emigrants in destination countries – and signing various bilateral agreements with countries where there is high demand for certain categories of workers. Furthermore, they have established government units (a ministry or a unit of a department) which are dedicated to assisting nationals abroad through a number of arrangements. These entities are also engaged in implementing formal mechanisms which ensure that migration policy is gender responsive. They are also engaged in migration data collection by the government and from other sources (Table A4 in Annex).

Migration governance has gained momentum due to demographic, social and economic developments. Newly introduced migration strategies and policies have been driven by the necessity to counteract long-term population decline and addressing the ageing of populations (North Macedonia, Serbia); meeting labour demand in certain sectors of the economy (Montenegro⁶³); safeguarding employment opportunities for nationals and retaining specific categories of workers (Montenegro and Serbia). Accordingly, governments in the region have been taking several measures

⁶³ According to the country report (ETF, 2021d), Montenegro is affected by labour shortages especially in construction, tourism, hotels and restaurants, agriculture and trade. These labour shortages are mainly compensated by seasonal immigration from neighbouring countries. In 2019, a total of 27,634 permits for temporary residence and work of foreigners were issued in the country. Of these, 15,582 were given within the quota system and 12,052 were out of quota.

to foster cooperation among countries and encourage stakeholder inclusion and participation in designing migration policies. Such measures include inter-ministerial coordination mechanisms on migration (Albania, North Macedonia, Montenegro, Serbia); bilateral agreements on migration including labour migration (Albania, Serbia); agreements for cooperation with other countries on return and re-admission (Albania, Montenegro, North Macedonia, Serbia) and formal mechanisms for engaging civil society and the private sector in the formulation and implementation of migration policy (Albania, Montenegro, North Macedonia, Serbia) (see Table A5 in Annex)⁶⁴.

Emigration and immigration of high-skilled workers has gained in importance. High-skilled migration has mobilised some of the governments in the region, some more promptly than others – such as Albania, Serbia and Montenegro. In contrast, this is a low priority in North Macedonia and policies dealing with the immigration of high-skilled workers have not yet been implemented. Other countries such as Bosnia and Herzegovina and Kosovo seem to prioritise bilateral agreements that facilitate employment abroad. For example, in Bosnia and Herzegovina bilateral employment agreements especially with Slovenia and Germany have been introduced with the scope of easing the emigration of those interested in moving abroad because of rising job opportunities emerging in these destinations. In Kosovo institutions provide services to support legal emigration and a number of responsible agencies have prepared manuals on the migration rules and regulations of Austria, Germany, Slovenia, Croatia and Switzerland. However, this support is not very structured and information on labour market conditions in destination countries is not updated on a regular basis. Promoting return migration, especially of high-skilled professionals, has been prioritised in Serbia. In 2019 the government passed several ad hoc measures aimed at preventing and reversing migration, especially of high-skilled workers, for which a special tax relief is offered to employers hiring high-skilled returnees or educated abroad.

Within the context of EU accession, alignment of national migration policies with EU legislation is progressing in the six countries. Some of the governments in the region have introduced several new laws and strategies that address migration aspects according to the EU's acquis and international initiatives. Montenegro has made progress in the direction of aligning policies with EU legal migration legislation – including the application of the EU's Blue Card Directive 2009/50/EC on conditions of entry and residence of highly qualified third-country nationals. It strengthened the institutional framework and established a monitoring system for the implementation of such a strategy and action plans. The government of Albania has also passed several laws and developed strategies on different issues of migration, which have been amended and improved over time with the aim of properly addressing the problems and needs of migrants.

Return migration has been gaining further attention. Governments in the region have adjusted their national strategies to better manage return migration and the reintegration of their citizens from abroad. There is an increasing awareness of and response in Albania to the return of migrants including 'virtual return'⁶⁵ of the well-educated and scientific diaspora, which is seen as one of the major beneficial aspects of emigration involving the transferability of know-how acquired abroad. Montenegro, but also Kosovo, have further adjusted their national strategies for facilitating the return and reintegration of returnees.

⁶⁴ For more information, see the country reports (ETF, 2021a–f).

⁶⁵ 'Virtual return' means strengthening contacts with migrants abroad, engaging them in the transferability of know-how as well as various forms of investment – not necessarily by returning physically to the country of origin but by using other means which the world of digitalisation and remote teleworking offer.

New actions have been taken to foster the positive effects of migration for socio-economic development. Some of the new measures taken include the alignment of labour migration policies with actual and projected labour market needs through periodic assessments (e.g. Montenegro, North Macedonia) – though such measures are not being implemented yet in Albania and Serbia; facilitation of the portability of social security benefits (e.g. Albania, North Macedonia, Serbia); facilitation of recognition of skills and qualifications acquired abroad (e.g. Albania, North Macedonia); facilitation and promotion of the remittances flows and transferability (e.g. Albania, North Macedonia) and promotion of fair and ethical recruitment of migrant workers (e.g. Albania and North Macedonia) – though not in Serbia (see Tables A5 and A6 in Annex).

In all countries institutional attention is given to the country's diaspora. In Bosnia and Herzegovina this is done through the Ministry of Human Rights and Refugees with a Diaspora Department. This department has been active in encouraging its diaspora to support local development, which is an important government policy. Several projects have been initiated with the scope of encouraging members of the country's diaspora to return, invest and transfer their knowledge and skills. In North Macedonia the National Diaspora Cooperation Strategy adopted in 2019 aims to intensify the engagement of the diaspora in support of local development. However, the strategy offers little concrete actions as to how to achieve such objectives. In Serbia the Strategy for Economic Migrations 2021–27 adopted in 2020 aims at advancing cooperation between the diaspora and the homeland and encouraging transnational entrepreneurship; creating conditions for monitoring and supporting circular and returning migration; and creating conditions for more efficient management of internal migration flows (see Table A6 in Annex).

Engaging diasporas to contribute to economic and social development has gained momentum. Although several policy measures were adopted by governments to facilitate diaspora involvement in support of economic development and local economies, such policies are still at an initial phase. Albania, for example, has introduced policy measures to facilitate the transferability of financial assets and have streamlined bureaucratic procedures⁶⁶. New initiatives have been introduced with the scope of fostering the engagement of the scientific diaspora in the country: 'Ready for Albania' invites all Albanian emigrants to contribute to their country (physically or virtually) and support the public administration, a new initiative which has generated a strong echo within just a few months of its launch. The 'virtual return' of educated and scientific diaspora is proposed as one of the key solutions for engaging the diaspora and benefitting from the transferability of know-how acquired abroad. However, the idea is still in its embryonic phase. Furthermore, tangible efforts have been taken to boost the positive effects of remittances such as supporting the use of remittances for private sector development. However, there is still a long way to go to redirect remittances more towards investment (other than investment in health and education). Although very important, other measures such as tax exemptions, financial incentives or preferential treatment for providing credit have not yet been introduced (see Table A6 in Annex). In July 2021, the government of Kosovo issued for the first time a Diaspora Bond to the value of EUR 20 million, with a maturity of three or five years, paying an interest rate of 1.2% and 2.4%, respectively. The amount that can be invested ranges from EUR 10,000 to EUR 500,000. The capital invested in these bonds by emigrants will be used for strategic investment

⁶⁶ According to the Albanian report (ETF, 2021a), formalising and easing the transferability of remittances is given precedence by financial institutions. The Central Bank of Albania is producing regular statistics and reports on remittances and has been working recently on a new Law on Payment Systems, which will enable easier and cheaper transfer of remittances and further formalisation of money transfers.

projects to generate employment. This initiative seeks to boost the role of the diaspora and ensure that its financial support creates the momentum for investment and job creation.

8.2 Policy responses in the field of education and training

As discussed in Chapter 4, education and training system affects migration flows and vice versa – even if the systems prefer to ignore this interaction. **Reforms of the education systems have taken place, but challenges remain.** Several countries have undertaken policy actions to enhance access to further formal education and training. Domestic universities have been expanding significantly in all the WB6, but the quality of education has not improved as reported for example in Albania and North Macedonia, where new universities were set up all over the country (ETF, 2021a,e). In Bosnia and Herzegovina, the reform of the education system has proceeded slowly, and the decentralisation of institutions challenges the implementation of the reforms in the educational system and their impact on the labour market (ETF, 2021b). In Kosovo, the implementation of reforms in the educational system has been more on experimental grounds, as such lacking strategic underpinning (ETF, 2021c). Those reforms of educational systems have often not dealt sufficiently with the implications of migration on human capital.

On the other hand, some of these domestic reforms have implications for migration. For example, Serbia has implemented a number of educational programmes from primary education onwards – e.g., teaching a foreign language from the first year of primary school has become mandatory, and English is the most popular language, followed by German language. The latter is particularly gaining importance thanks to increasing presence of German companies investing in Serbia (ETF, 2021f). Informatics has furthermore been taught as an elective subject from primary schools since 2002 – before becoming mandatory in 2017. North Macedonia has been moving in this direction, as has Albania from September 2021. As a result of individual choices, preferences of students and graduates are also changing towards programmes such as engineering, ICT, health and business administration as discussed in Section 4.1, where demand is rising quickly both domestically and globally (see Figure 4.6). Similarly, enrolment shares to ICT graduation programmes have increased significantly for all countries in the region (see Section 6.2.2 and Table 6.3). However, there is a big divide across countries as concerns the availability of resources for teaching such programmes – e.g., financial support, proper infrastructure and qualified teaching staff for teaching such programmes. Therefore, much remains to be done in this respect.

In all the WB6, **international students' mobility is very popular as proven by high learning mobility by international standards** (see Section 4.4). This type of mobility has high potential for improving the quality and quantity of human capital if a significant share of those students who have enrolled and graduated abroad would eventually return homeland. Most of exchange programmes and schemes also foresee and motivate return after graduation, though the effect has not been as strong as expected – e.g., North Macedonia and Albania – as the outward mobility of students continues to considerably outpace the return of students (see Table A3 in Annex).

Besides Erasmus+ programme, available programmes in VET include INTERVET (Internationalisation of VET systems in the Western Balkans), providing mobility opportunities for VET learners and

teachers from the six countries, both within the region and to some EU countries, for training and study, job-shadowing, and training for VET instructors in summer schools⁶⁷.

New initiatives tackling migration, human capital formation and employment have been introduced by different actors. The report identified several projects initiated by international, EU and Member State donors. In Kosovo, new initiatives and programmes in the education system are being implemented with the scope of addressing skill and labour market needs both at home and abroad. It is possible to list for these some of GIZ projects as well as ALLED (Aligning Education and Training with Labour Market Needs) Phase 2 project, financed by the EU within the financial umbrella of IPA II 2017 for Kosovo with co-funding by the Austrian Development Agency (ADA)⁶⁸. While the adjustment of public education system has been very slow to those trends, donor projects as well as few private education sector initiatives and models bring some interesting practices of transnational skills and mobility partnerships, mostly programmes for skill formation and transfer between WB6 and some destination countries⁶⁹.

The idea of developing skills partnership to facilitate international migration between sending and receiving countries has already been popular for a while among some development experts and international organisations (see ETF, 2015; Clemens, 2017; OECD, 2018; ICMPD, 2020; IOM, 2021; Sauer and Volarević, 2020). Recently this idea is also taken up by the European Commission in its proposal for Talent Partnerships in the new EU Migration Pact, where the Western Balkan region was specifically mentioned (European Commission, 2020b)⁷⁰. The proposed Talent Partnership could indeed provide an opportunity to develop a dialogue for boosting mutually beneficial international mobility between the WB6 countries and the EU Member States, by including ‘skills development’ at the centre of mobility⁷¹. Depending on the interest of main destination countries, this could even lead to some regional dialogue and actions at the EU-Western Balkans level. The number of initiatives involving transnational skills partnerships between sending and receiving countries remains limited to the ‘pilot projects’ so far, but Germany has taken some steps on this aspect. Moreover, given the high demand for health professionals, some private higher education institutions have expanded their educational offering such as the Heimerer College and the Dekra Academy (Section 6.2.1), which train students for work opportunities both in Germany and in local labour markets (see Box 6.1).

These examples prove that the private sector is quite agile in taking up opportunities on skill development for mobility in third countries including the WB6. They might be even considered more ‘organic’ and genuine grass-root initiatives, and private-initiated response to the high mobility demand. In most cases, they have not only eased mobility but also generated spill-over effects on human

⁶⁷ INTERVET aims to improve the quality of VET in the Western Balkans by creating opportunities for learning mobility in the training centres of WB6 and improving the competence building in the field of VET. This three-year project includes associations, vocational schools and SMEs from the WB6, as well as eight partners from the EU Member States (Italy, Belgium, the Netherlands, France, Malta, Spain, Slovenia and Poland). For more information, see [INTERVET Western Balkans](#).

⁶⁸ According to the Kosovo report (ETF, 2021c), ALLED 2 aims to develop and modernise higher education programmes in accordance with labour market needs; improve teacher training programmes in line with the requirements of the New Curriculum of Kosovo and the priorities of the Ministry of Education; and enhance the quality of practical and applied teaching and learning in vocational schools and vocational training centres.

⁶⁹ For more information on similar projects, see Migration Partnership Facility, www.migrationpartnershipfacility.eu/mpf-projects and ICMPD, 2020.

⁷⁰ See [Talent Partnerships](#)

⁷¹ For the perspective of the European Commission, see blog post [How can the EU match skill needs and legal migration: talent partnerships](#)

capital and improvement of education curricula at home. Such an approach has its own benefits and risks, but it may be worth to investigate further for their sustainability. In general, skills partnerships must be understood broader scale and involve many unusual actors (public and private education and training providers, public and private intermediary bodies/employment services, employers from both sides). Often mentioned perspective is investment in the education and training systems of origin countries; special cooperation programmes between education and VET institutions of origin and destination countries with longer-term impact (e.g., twinning, dual certification programmes, common curricula, student exchanges, international traineeships); and focus on the sectors with high labour mobility and migration (ETF, 2015).

However, a strong orientation of education curricula towards international markets has its drawbacks. Most of the country reports confirmed that education curricula have been under revision. Their adjustment has been different depending on the field of education and seem to have been more oriented towards international than domestic labour markets – in part driven by emigration and skills demanded abroad; the latter are seen as essential to improve employment chances if migrating (such as for nurses, other health professionals, but also ICT experts). Such strategy risks leaving uncovered the needs of domestic companies regarding certain skills. Furthermore, some country studies (North Macedonia and Kosovo) pointed out poor cooperation and communication between the education system and domestic companies with little feedback on curricula. This needs to be improved in the process of educational curricula adjustment so that both domestic and international labour market skills needs can be addressed. To benefit from joint skill development-for-mobility programmes, attention is necessary to the cost structure of training (who pays for what), curriculum development (which country's needs to take into account), selection process of students and their profile, links to legal migration channels in place, higher number of graduates than those of migrating -also not only the best performers migrate, recognition of certificates in both countries' labour markets, and existence of return or continuing professional contacts on both sides.

Within the context of EU accession, **alignment of education and training policies with EU legislation is progressing as well**⁷². Qualifications and qualifications systems, including recognition processes, influence the experience and outcome of mobility and migration, in particular integration into the labour market, whether that is movement outwards to the EU, or on return to the home country. The WB6 operate systems, processes, and tools, and participate in international schemes, to recognise the qualifications and validate the skills of their citizens (Table A6 in Annex). Each of the six countries are at varying stages of implementation of their own domestic systems and tools in certification, recognition and validation academic and professional recognition and national qualifications frameworks (NQFs). The countries are required to align with the Directive 2005/36/EC on the recognition of professional qualifications, which combines two approaches: sectoral and general (combining harmonisation and recognition): seven specific occupations (doctor, nurse, dentist, midwife, pharmacist, veterinary surgeon and architect) automatically recognised across the EU, while for all other professional qualifications an application is needed to the authorities in the host country for qualifications to be assessed as equivalent to local qualifications. Compared to recognition of academic qualifications, more efforts are needed for the recognition of professional qualifications.

⁷² This part on the recognition and validation of foreign qualifications and skills was drafted by Michael Graham, ETF Senior Human Capital Development Expert.

In higher education, all countries (except Kosovo) are members of the European Higher Education Area (EHEA), or the Bologna Process⁷³. Four of the participating five countries (except Bosnia and Herzegovina) have self-certified to the EHEA Qualifications Framework. This procedure links the higher education levels of their NQFs to the Bologna Framework, so supporting the comparability and recognition of their higher education qualifications with those from all countries (most of them in the EU) in the Bologna Process, including when used for mobility purposes. Bosnia and Herzegovina is undertaking this linking and comparison process at the time of writing. All five countries have also signed the Lisbon Recognition Convention, a legal instrument developed and overseen by UNESCO and the Council of Europe, which promotes fair recognition of higher education qualifications in Europe. Implementation of the Lisbon Recognition Convention is supported by two networks of national recognition centres: the network of National Academic Recognition Information Centres (NARIC) in the EU, and the European Network of Information Centres (ENIC) in the wider Europe⁷⁴. The same five countries are members of the ENIC network.

In addition, all six countries are full members of the European Qualifications Framework (EQF) process. Five of the six (except Bosnia and Herzegovina) have already referenced, or linked, their NQFs to the EQF. This procedure allows qualifications from these and EU countries to be compared. Certificates, degrees, diplomas etc. from the five countries can bear both NQF and EQF levels, thus giving visibility and allowing comparability with EU qualifications. Therefore, for example, an outgoing Serb migrant could present a national certificate with an EQF level indicated. A returning migrant to one of the countries holding say a German qualification with NQF and EQF levels indicated would be able to show this qualification to an employer or college at home, using the common language of levels. By contrast, recognition of foreign vocational qualifications generally lags recognition of higher education qualifications and does not always run smoothly. The heterogeneity of VET qualifications – which are developed for more specific local and national labour market need – hinders their international comparability. Here, NQFs and the EQF can help due to the same conceptual principle of learning outcomes. The EQF provides the necessary common reference point, linking all participating NQFs to support cross-country comparison – levels and learning outcomes from one country against levels and learning outcomes from another – and so functioning as a translation device for individual qualifications.

While the above measures address recognition processes applied to formal qualifications presented to authorities, recognition centres, providers etc. there is also the matter of recognising people's learning outcomes – knowledge, skills, competences – acquired through, for example, work experience but not officially documented. People returning home after a period of work abroad will have acquired skills, but sometimes these have not been certificated with a formal qualification. Traditionally in the region, awarding a certificate, diploma etc. was tied to the completion of a specified programme, and people could not apply to have their skills assessed without pursuing a full training course. For returning migrants, this inflexibility can be an obstacle to formal acknowledgement of their new competencies acquired while working in the EU. Validation of non-formal and informal learning (VNFIL) systems can offer assessment, leading to formal certification, for such people, independent of programme, so aiding their integration into labour markets at a level suitable to their capabilities. All six countries are developing their VNFIL systems, linked to their respective NQF. The VNFIL is most advanced in Kosovo and Montenegro, which already award certificates via validation, while Albania, Bosnia and

⁷³ [The Bologna Process and the European Higher Education Area](#)

⁷⁴ See www.enic-naric.net

Herzegovina, North Macedonia, and Serbia are at various stages of piloting, legislating and planning VNFIL systems.

8.3 Policy responses in the field of labour market

Given the fact that most emigrants are young people in the WB6, **what young people think and perceive about the future and education and job opportunities in their country is crucial**. It is expected therefore a special attention to youth policies and their employment performance in the labour markets. In fact, all labour market policies and programmes that aim to reduce unemployment and increase the number of decent and well-paid jobs are very relevant for migration flows. Special focus on those affecting medium- to high-skilled workers is consistent to attenuate their propensity to emigrate. For example, subsidising high wages and introducing progressive taxation are not mutually consistent and, if applied to highly paid sectors such as ICT, may spur emigration.

Although some progress has been made in aligning the educational curricula and formal training to labour market needs, **the transition from school to work remains challenging**⁷⁵. Those who enter the labour market for the first time are confronted with many obstacles in the region. Many of current workers benefit only marginally from non-formal, on-the-job training and a rudimentary lifelong learning system. In North Macedonia, the reform of the educational system and higher accessibility to VET programmes have contributed to strengthening and adjusting the qualifications and skills of those demanded in the labour market. In Montenegro the Smart Specialisation Strategy 2019–24 envisages to introduce new and continuing VET programmes (retraining opportunities for adult workers) in three key sectors: sustainable agriculture and the food value chain, energy and sustainable environment, and health tourism, where labour demand is high. It is still too early to be able to judge the extent and success of implementation of this strategy.

Vocational training programmes have been implemented with the help of foreign organisations and companies in some countries. Serbia has adopted a law on the introduction of a dual education system, similar to the systems in Germany, Switzerland and Austria and a recent far-reaching VET reform was supported by the German International Development Agency (GIZ). In North Macedonia there have been positive developments through multinational companies and the strategy of the government to locate them closer to industrial zones and secondary vocational schools. This has not only produced a better matching of demanded skills with those provided by the education system but also shortened the school-to-work transition for VET graduates. German companies have played an important role in implementing such a model (ETF, 2021e).

Many actions have focused on youth employment with the aim of discouraging emigration. New initiatives to raise the employability of vulnerable groups have been undertaken in most countries of the region. Further steps have been taken to narrow employment and wage gaps across gender and different age cohorts. Youth employability has been one of the main targets by the North Macedonian government and many young people have already benefitted from the Youth Guarantee scheme, which offers employment, internships and training to young people within six months of graduation. While the initial effects on youth have been very favourable in terms of employment, the potential effect on their migration inclination has not yet been measured (ETF, 2021e). The recent deal of governments with the EU to mobilise IPA funding for the **new Youth Guarantee scheme in the region** might have the potential to change the dynamics of triangular relationship between the region's

⁷⁵ See [Study on youth employment in the Western Balkans](#)

human capital, labour market and migration⁷⁶. Within the context of EU accession, alignment of employment policies with EU legislation is progressing as well. Among these are measures to facilitate the portability of social security benefits, and policies to monitor actual and projected labour market needs to align with labour migration policies through assessments (see Table A6 in Annex).

In Bosnia and Herzegovina, the focus of recent active labour market programmes has been to provide employment opportunities in particular to young people, who are also more likely to emigrate as well as those in vulnerable categories. Young people have been assisted with different subsidies for further education or house purchasing⁷⁷. Similar programmes have been launched in Serbia and North Macedonia. In Serbia, an affordable housing programme for public-sector employees and young researchers has been announced. Nonetheless, emigration intentions among youth remain high and trust in state institutions and their policies is rather low, particularly among potential migrants, except in Serbia. In Montenegro, new programmes of professional training for the young – e.g., support for young people with no work experience to gain professional skills and be more competitive on the labour market – have been introduced. Other policies focus on increasing self-employment and on encouraging entrepreneurship, especially in peripheral areas of Montenegro. Furthermore, in Montenegro, incentives for entrepreneurs such as favourable tax policies have been introduced with the scope of attracting investment and generating employment in those regions marked by depopulation (ETF, 2021d).

Overall, the contribution of the private sector to job creation remains weak in the WB6, with high shares of the informal sector, of self-employment and of micro-firms. Widening job opportunities for the better educated as well as for further on-the-job training and skill acquisition are still needed. As a consequence, structural weaknesses in the educational system and in the labour market result in skills mismatch and chronic challenges such as high unemployment, particularly structural unemployment, persist over time. More flexibility and significant entrepreneurship support are required for the development of new businesses that can generate much-needed jobs, while employment in the public sector also needs to be rationalised, with the establishment of fair and transparent recruitment procedures. As discussed in Sections 5.3 and 5.4, job and wage responses to skill shortages experienced in domestic labour market have been weak.

Some wage incentives and increases have been introduced with the aim of retaining and attracting talent and deterring the outward mobility of high skilled professionals. Wage hikes have been introduced, aimed to counter the role of high wages abroad attracting migrants from North Macedonia, Serbia and Albania. For example, in North Macedonia the minimum wage was raised by nearly 50% between 2017 and 2020, and generous subsidies were offered for social contributions when wages were increased by up to EUR 100 per month. Medical staff particularly benefitted from several wage rises between 2017 and 2020, which were justified by the high emigration rates in the sector. In North Macedonia, furthermore, the salaries of young people who obtained employment in the manufacturing sector should be topped up with a monthly allowance of EUR 50. In Albania, starting with January 2021 health professionals' wages have risen by 40% in part to deter the high exodus of doctors and nurses. In Serbia, salaries at least three times higher than the average wage have been offered to highly-skilled foreign nationals employed in the country, in an effort to attract

⁷⁶ See leaflet [Youth Guarantee in Western Balkans](#)

⁷⁷ In the specific circumstances of Bosnia and Herzegovina, effective labour market policies are difficult to implement because labour market institutions responsible for the implementation of labour market policies are rather decentralised and fragmented at the state level (ETF, 2021b).

foreign ICT talent to support the growing needs of the ICT sector. Pay rises have also been offered to medical staff in public hospitals and health centres in Serbia. The substantial double-digit increase in the minimum wage in 2020 in Serbia was partially presented as an anti-migration measure. Similarly, the government has also committed itself to ensuring that the average net monthly wage would be EUR 900 by 2025, as well as the average pension to be no less than EUR 400 per month (ETF, 2021f).

Foreign workers' employability and sectorial quotas have been introduced. As part of the transposition to the EU acquis, in Montenegro the Law on Foreigners updated in 2018 regulates foreign workers' employability and residence permits in Montenegro without establishing any occupational/educational profile of foreign workers (medium- or high-skilled workers). However, in addition it establishes annual quotas for specific economic sectors (not professions). The main goal is first to protect the domestic labour force, secondly to ensure that Montenegrins have the first chance at available jobs and thirdly balance immigration flows to specific sectors' needs. The country also made necessary adjustments regarding the requirement of EU Blue Card Directive and regulated the entry conditions of highly skilled workers into Montenegro (ETF, 2021d).

As already discussed in Sections 5.3 and 5.4, all countries of the region experience some labour and skill shortages and/or surpluses as a result of migration. Rather than a nation-wide shortage of all skills, this is more of a shortage of specific occupations in some sectors, and one of the main examples is the shortage in tourism sector in Montenegro (ETF, 2021d). Other countries also experience shortages of workers in construction, transport, manufacturing, and repairs; for this reason, **labour markets in all the WB6 need to be monitored regularly for their labour and skill shortages and/or surpluses.** All country reports mentioned a lack of regular mechanisms in place, which would allow a proper monitoring of skills in supply and demand, how they match or mismatch and how migration is affecting different sectors or occupational groups. This would be a challenging task, given that emigration per se is better monitored from the destination rather than the sending country, as the leaving the country does not require any registration before departure and for what purpose.

Still, regular labour market monitoring through systematic enterprise surveys for their skills needs and more systematic analyses of LFS datasets by researchers over time can be helpful to understand how migration is affecting labour demand on a regular basis. Furthermore, new monitoring measures could be introduced to upgrade workers' skills in primary economic sectors – including lifelong learning – primarily in response to domestic labour market needs, but also to aim towards harmonisation of skill development also prevalent in international markets.

9 CONCLUSIONS AND RECOMMENDATIONS

The stock of emigrants from the Western Balkans was more than 4.6 million in 2020, equal to one quarter of the region's total population, and with significant differences between the countries. Thus, the economic, political and social consequences of migration remain a fundamental issue in the WB6, where education and training systems are still trying to catch up with EU levels and labour markets operate at sub-optimal levels (e.g., coexistence of high unemployment and skill shortages, regional disparities, high levels of inactivity and skill mismatch, dominance of low-skilled and often informal jobs). This report has tried to demonstrate skills-related interactions among the three policy domains of education, labour market, and migration. These interactions are dynamic and multidimensional and can be influenced and changed over time by policies. Since a policy action in one domain has repercussions on the others, all policy responses from the three areas must complement and reinforce each other.

The report confirmed the continuing net emigration from the WB6 between 2010 and 2020, albeit with country variations: highest in Bosnia and Herzegovina, followed by Kosovo and Albania, and lowest in Montenegro, North Macedonia and Serbia. The main destinations are also changing to some extent, with Germany continuing to recruit among the traditional destinations, and recently increasing outflows towards the newer EU Member States. Besides the internal dynamics of low-quality/low-paid jobs, policy changes in destination countries have contributed to this trend. Meanwhile, the enrolment ratio of international students from the region is one of the highest in the OECD countries. The estimate of net migration flows by education level in the same period indicated the evidence of net emigration among the highly educated (evidence of brain drain) in Albania, Bosnia and Herzegovina and Kosovo. In contrast, the study found net immigration of the highly educated (brain gain) in Montenegro, North Macedonia and Serbia, with net emigration of the secondary VET and general education graduates. Outward mobility from the region is expected to be persistent in the coming years, while intra-regional mobility remains a less favoured choice.

The report also showed the vital role of the structural composition of economies and underpinning sectors in defining the job types and earning prospects in the WB6, which in turn shaped the migrant profiles in each country. The labour underutilisation in these economies, which is still dominant for younger age cohorts and women, seem to be driving migration. If policies fail to respond and undermine each other with negative outcomes, this can lead to 'vicious circles' with negative spillovers onto different domains. Examples include labour markets which are not monitored for their labour and skill shortages or surpluses, jobs/wages not responding to shortages, education systems not responding to skill needs, and migration policies not responding to people's aspirations for skills and jobs. Insufficient responses generate negative impacts on human capital: loss and waste of skilled workers, high emigration and population decline, factors which in turn lead to matching problems in an inefficiently working labour market.

The results of the case studies on health and ICT professionals clearly illustrate the diversity of the triangular interrelationships among the three policy domains of education, labour market, and migration. This report called the positive outcome of such relationships a 'virtuous circle' and the negative outcome a 'vicious circle', observed more in some countries and/or sectors than others. In the health sector, several factors such as low public investment, a lack of job openings and large wage differentials encourage health workers to emigrate in search of better wages and quality jobs. Thus, insufficient job creation in the sector leads to a vicious circle. In the ICT sector, the three elements feed off each other to create a virtuous cycle of development: despite existing wage gaps, migrants

create links with professionals back home and some of them return home to start their own business, which helps the integration of these countries into international value chains.

Findings from this report suggest the importance of monitoring the key sectors in the WB6 in terms of skill shortages and surpluses. As a result of migration, the region has already experienced labour and skill shortages in some sectors. The country reports provide examples of shortages in tourism, construction, transport, manufacturing and repairs. As a result, policy designs for the WB6 must have an awareness of the interconnectivity of the three domains – e.g., efforts in the employment policy need to be coordinated with policy engagement in education and training and cannot abstract from the migration context in which the WB6 find themselves and how policies in all three domains (and others such as economic policies and FDI) impact on migration flows. Policy actors in the three domains need to coordinate when designing and implementing state policies and strategies, making coherent decisions that consider the impact on each other.

Considering the developments in all three areas, the future will be shaped by the attractiveness of the region to international business and the nature and extent of integration of regional economies into EU/global value chains; by the need to overcome market segmentation and market barriers within the region; and by the significant demographic decline and ageing population, with the possibility of increased emergence also of labour and skill shortages. In fact, in all future scenarios of labour supply and demand in the region, even in a baseline scenario, most of the countries will start to experience labour shortages for different skill groups before 2030. At the same time, the region is expected to continue facing cross-regional and intra-country economic differentiation and regional inequalities. These trends call for more concerted action across the region in the three areas, more assertive stances on industrial, regional and active labour market policies from the policy makers in the region and support from the EU countries at bilateral and EU levels.

In line with many other analyses of the Western Balkans, this report emphasises the need for a strong EU anchoring of the region by maintaining a clear perspective of eventual accession, keeping track of a definite timeline and conditionalities attached to it, combined with the need to solve the political issues within and among countries, and pushing further in the direction of a fully integrated regional market with all four freedoms of movement. There is no reason why the WB6 could not, in due course, follow the example of the successful catching-up processes of the EU-CEE economies. This requires improving infrastructure and institutional governance, avoiding back-sliding towards political instability and regional fragmentation, and using all the advantages of geographic location, relatively good endowment of a skilled labour force and the accession perspective more proactively (i.e., financial, institutional, and technical support in pre- and post-accession). The WB6's integration into the EU programmes (to the point of mimicking the position of full membership in some areas) tailored to the needs of the countries will be vital for furthering the development prospects of the region.

Given the complexity of the triangular relationships between human capital, migration and labour deployment, and the many different topics covered in this report, a wide range of policy recommendations and actions could be considered by policy makers as well as by international organisations supporting the development of the region. Key policy recommendations already emerged from the individual country reports (see ETF, 2021a-f and [Table 9.1](#) at the end of this chapter). The key issue is the need for constant coordination and coherence among those policy fields at national, regional and international levels.

The main recommendations elaborated in this report take a regional perspective and are grouped under four policy areas (see below). While the first three recommendations primarily target national and regional policy makers in the WB6, the last one addresses the role of the EU and its Member States.

Recommendation 1. Narrowing the gap in economies and labour markets between the WB6 and the main destinations

A structural shift in the economy from labour to skill-intensive activities could counteract skilled emigration and retain a skilled labour force. Hence there is a **need for a sustained development strategy and expansion of economic activities that create more skilled jobs**. Economic development policies emphasising the upgrading of industrial structures through increasing attractiveness for FDI, the support given to the domestic business sector and integrating into global value chains will change the demand for skills. The latter should include integration into the next stage of digital skills-based international production networks. The integration of the WB6 economies into industrial policy efforts at the EU level (in the context of ‘smart specialisation’ regional programmes and the New Green Deal) could help to accelerate the delayed catching-up processes of the region, thus emulating what has already been achieved by the EU-CEE economies.

Addressing the gap in economic prospects between urban and rural areas should be a priority. Improving attractiveness of peripheral regions via infrastructural connectivity, governance, business support, facilities for health and educational/training needs and closing the urban/rural development gap through investments and incentives are necessary for sustainable economic activities aligned with the region’s resources, – particularly emphasised in Montenegro. But other countries should also embrace such policy actions and programmes which address the challenge of depopulation of certain regions and rural areas.

Attracting FDI should continue to be a major emphasis for the WB6 as it has played an important role in the catching-up processes of the EU-CEE economies. This can go beyond the strong specialisation in manufacturing which characterised the EU-CEE countries. Bringing down further trade restrictions, entry barriers for business activity across the region and encouraging the integration of the WB6 businesses in regional and cross-border European production networks and cooperation between domestic and foreign companies to facilitate technological spillovers should remain a high priority. However, as emphasised in many studies, a situation should be prevented in which the WB6 get stuck in a ‘functional specialisation trap’ as firms in the region become mainly engaged and remain stuck in the low value-added functions of global value chains.

A convincing strategy for getting out of this trap is a **strong push towards digitalisation and future technologies**. Employment opportunities emerging with digitalisation will require certain sets of skills, further investment in human capital and a rising supply of ICT professionals. Such transformations can boost employment among young people – allowing them to work for foreign companies without migrating – but also attracting more companies to invest in the region. This was particularly emphasised in Albania, Bosnia and Herzegovina, and Serbia. However, it is also worth highlighting that the level of digitalisation differs among the WB6. Therefore, regional initiatives which foster regional cooperation and the development of a common strategy on digitalisation could assist the countries in the region to develop their agenda in a more coordinated and integrated way.

Economic leapfrogging through ‘near-shoring’ should be promoted. In the light of recent economic developments due to the pandemic, further actions should be taken to tackle some of the structural challenges affecting the region. Recent studies showed that economic leapfrogging for the

region's economies can indeed be achieved in parts through 'near-shoring'. Recently observed trends among EU companies suggest that several of them have been transferring part of their supply chains to geographically closer locations. The WB6 economies might have some comparative advantage, not only because of their geographical position or cheap labour, but also due to 'soft' factors such as cultural proximity and the reputation of their workers as skilled and hard-working. The study suggests that greater focus should be put on skilled labour.

Recommendation 2. Adjusting employment and skills development policies to create a highly productive workforce for functional labour markets

Regular labour market monitoring is needed in the WB6 regarding labour and skill shortages and/or surpluses. This may require systematic enterprise surveys for their skills needs, systematic analyses of LFS datasets over time, especially at sector level, and checking excess/shortage supply of certain educational groups. Furthermore, new monitoring measures could be introduced to upgrade workers' skills in primary economic sectors – including lifelong learning – primarily in response to domestic labour market needs, but also to aim towards harmonisation of skill development also prevalent in international markets. Given the ageing population, it is necessary to develop accessible lifelong learning systems for upskilling and reskilling adults, and upgrading the skills of older age cohorts as well.

In line with the economic policies under the first recommendation, coordination efforts are needed to **upgrade labour and skills supply according to current and future demand for skills, both domestically and internationally.** The country studies suggested several policy actions to improve the supply of skills – implementing strong activation policies (especially for women and the low-skilled), active labour market policies and better job intermediation. Resources devoted to active labour market policies should be increased as these would contribute to raising employment prospects, labour productivity and thereby earnings levels. **Digital and green skills, ICT skills and online work platforms should be promoted more.** Currently firms in the region become mainly engaged in the low value-added functions (such as assembly operations), and more skilled workforce is necessary for moving towards higher value-added functions. This requires a strong push towards digital and green skills.

A sharper focus on addressing youth employment is needed to facilitate a smooth transition from school to work, since young people need clear prospects if countries are to diminish the number of those who see emigration as 'the only solution'. The **Youth Guarantee scheme** – planned to be funded by the Instrument for Pre-accession Assistance (IPA) III – would offer a unique opportunity for young people under 30 to access employment, continued education or apprenticeship within a period of four months of becoming unemployed or leaving formal education.

The country studies for Albania, Kosovo, and Montenegro especially have demonstrated the importance of **supporting new business start-ups as a source of employment.** Incentives should focus on the development of selected economic sectors with high potential and easy start-up conditions. Improving employment conditions and earnings prospects in important sectors could be the first step. The gap in employment conditions between the privileged position of the public sector and other sectors of the economy should be closed in part through policies directed at supporting dynamic segments of the private sector and in part by dealing with corrupt and non-meritocratic recruitment practices in the public sector – although clientelism also features in the private sector and corruption characterises the interlinkages between the private and public sectors.

Integrating education and labour market policies into an overall industrial strategy is vital to achieve a better matching and upgrading of the labour supply in the future. A scenario analysis for labour supply and demand for different skill groups up to 2030 found that labour supply-demand mismatches (showing excess supply for certain educational groups, and shortages for others) strongly depend on the overall trajectories that the WB6 economies will take. Economic development policies change the demand for skills and hence would require a reform of educational and training structures. Furthermore, increasing the participation rates of sections of the potential labour force is imperative given the low activity rates amongst important segments of the labour force.

Work on qualifications and qualifications systems, including recognition processes, must continue to facilitate mobility and integration into the labour market, whether this is towards the EU, or return to the home country. Improving the level of professional qualifications and allowing adjustments in wage structures to support jobs can incentivise young people and the highly educated to remain in their home countries, especially in those occupational categories where shortages emerge in structurally evolving labour markets.

Investment in education/training should be further enhanced to improve quality and relevance, aligning better with the skill needs of the private sector, adapting curricula and training requirements to new trends in both domestic and international markets, and improving the quality of VET systems through more investment in infrastructure, training programmes and work-based learning. A skilled and adaptable workforce is one of the factors that attract foreign investors. The countries could also develop special cooperation with the education and VET institutions of main destination countries on a larger scale (e.g., twinning, dual certification programmes, common curricula, student exchanges, international traineeships).

Recommendation 3. Proactively managing migration and tapping the potential of emigrants/the diaspora

A cross-institutional approach is required for managing migration. All the country studies have pointed out the importance of applying a cross-institutional approach including all stakeholders (public, private, non-governmental) in dealing with migration governance. Different stakeholders should be involved in designing a migration governance strategy and all interested parties should have a voice in such issues. The stakeholders – governments, business partners and non-governmental organisations (NGOs) – should coordinate such efforts and work together to find solutions to better manage migration.

The statistical data infrastructure should be improved, connecting migration, human capital and employment. More structured databases for a more systematic data collection and analysis on the types of labour migration, periodic investigation of labour deployment, vacancies, bottleneck occupations at sector and occupational levels, should be created through data infrastructure, and labour market monitoring tools should be updated on a regular basis. Furthermore, regular and periodic monitoring of mobility flows, especially emigration by educational levels and occupational categories, is necessary, as is monitoring the shortage and surplus occupations and skill-job mismatches by the government and the business community.

Higher engagement of the diaspora and promotion of the return – also ‘virtual’ – of migrants abroad and the diaspora should be strongly supported. Improving the policy framework for the reintegration of returnees (short-term migrants, permanent migrants and diaspora) is a policy action recommended by all six country reports. The Albanian report emphasised the idea of fostering

cooperation with EU universities and with members of the scientific diaspora. Other country reports (e.g., Montenegro) also pointed out the important role that the diaspora might play in economic development, and further efforts have been made to raise their engagement through investment, business development and the transferability of know-how.

A proactive role for the WB6 to strengthen cooperation with main destination countries – particularly Germany and the new EU Member States – should be promoted further. The country experts highlighted several policy actions to strengthen cooperation with destination countries. Governments in the sending countries should take on a more proactive role to boost the beneficial aspects of mobility for all actors involved. Particularly, initiating a bilateral and regional dialogue with the EU and especially Germany (but also other destination countries that can learn from schemes already in place with Germany), to assist the mobility of workers from the region can offset the negative effects of migration and boost the positive ones.

Negotiating bilateral agreements to support migrants abroad and favouring temporary mobility and exchange schemes could be promoted. Country studies emphasised the role of bilateral agreements to facilitate circular migration, for joint skills development, both in the destination and sending country and orientation of training and education programmes towards those occupations that are currently in demand. Kosovo – the only country in the region for which the EU has not applied, so far, the regime of free visas – emphasises the importance of having bilateral agreements with the main destination countries to accelerate migration procedures. The Serbian and Albanian country reports turned the focus onto bilateral agreements to manage temporary mobility of the highly skilled.

Recommendation 4. Securing EU support to the WB6 to extend the skills pool and further human capital accumulation

The WB6 are inextricably linked to the EU through current and future economic and political developments, and EU support mechanisms and pre-accession assistance will remain vital for the development trajectory of the region. The EU is the main destination of migrants from the region, and its migration and enlargement agenda (with all the mechanisms of pre-accession and exchanges) largely shape the mobility patterns and skills pool in the WB6.

All country studies underlined the **importance of cooperating with the EU and expanding dramatically the WB6's participation in EU programmes in the pre-accession stage**. The low educational expenditure in the WB6 compared to the EU Member States, and the high levels of graduates' migration to the EU, contribute to preventing the region from accumulating sufficient human capital. Thus, the EU can provide more support to the WB6 to increase their human capital accumulation by further strengthening funding mechanisms in support of education and training – including research and development – but also by developing targeted new innovative instruments which follow the systematic approach of a cost and benefit analysis.

Increased EU support for brain circulation and the return of students/researchers and academics is essential. The EU exchange programmes have created enormous opportunities for the young generation, though some students are reluctant to return home. Hence, the EU should increase the number of such mobility schemes in combination with some new instruments and mechanisms which motivate and encourage the return of students/researchers, scientists and academics afterwards and thus promote 'brain circulation'.

Promoting mobility both ways and encouraging an inflow (even if temporary) of academic and scientific staff from the EU27 to the WB6 could help transfer their know-how and experience to a larger domestic audience of researchers and academics in the WB6. Certainly, implementing such programmes in the region requires further investment and upgrading of the research infrastructure – which is also important for innovation. The EU’s investment and financial support could assist the countries in this respect and help them to further develop their capacities and means for upgrading their educational facilities, e.g., scientific laboratories, opening of new regional centres of excellence which would boost collaboration between science, technology and industry, as well as providing access to existing but also to new platforms for education and research to young scientists and engineers from both sides.

EU Talent Partnerships can also be a game changer if the WB6 and the EU Member States embrace it. The initiative envisages the development of cooperation to combine different labour mobility schemes with skills development and capacity-building schemes – e.g., further training/skill acquisition both in the sending country of potential migrants and in the destination country. The purpose is to address current and future labour market needs in the destination country in cooperation with the sending country in a balanced way for both sides. The capacity-building schemes are envisaged to contribute to skills acquisition and further investment in skill development in the origin country through EU funding schemes. These schemes would be highly beneficial as they would extend the skills pool among potential migrants, both to those who would move abroad and to those who would gain from training opportunities but would not migrate.

The EU Member States could **develop transnational skills partnerships and joint investment in skills development** in sectors with high labour mobility with the WB6. Also, it is envisaged to provide more support to origin countries for the recruitment of workers with the necessary skills and to improve the mechanisms of reintegration for returning migrants. Such initiatives can assist the WB6 to tackle the phenomenon of brain drain in a more balanced way and transform it to brain gain by combining labour mobility with capacity-building schemes.

TABLE 9.1 POLICY ACTIONS AND RECOMMENDATIONS FOR BETTER MANAGEMENT OF THE TRIANGULAR RELATIONSHIPS BETWEEN HUMAN CAPITAL, LABOUR MARKET AND MIGRATION

[The colour shading identifies those countries that supported the respective listed recommendations.]

Policy area	Recommendations	AL	BA	XK	ME	MK	RS
Migration governance	Policy actions for an integrated mobility management scheme – Migration management should be such that it maximises/minimises positive/negative effects for individuals/sending/receiving countries						
	Proactive engagement with the EU Talent Partnerships initiative						
	Bilateral dialogue with Germany: joint investment in skills development, in the country of origin and in the destination country, re-importing skills acquired in Germany Such schemes could also be extended to other EU countries, particularly to Western Balkan neighbouring EU member countries						
	Bilateral labour agreements to be signed with the main destination countries to facilitate circular migration						
	Bilateral labour agreements to be signed with the main destination countries to ensure fast and predictable migration procedures						
	Bilateral agreements to be signed with the main key destination countries on managing skilled migration, offering VET for potential migrants and non-migrants in the country of origin						
	Bilateral migration dialogues and agreements with neighbouring countries to facilitate and improve mobility schemes and the conditions for short-term seasonal work						
	Improve legislation to assure flexibility and regulate the import of labour and immigration of high-skilled workers from extra-EU countries (Blue Card Directive application)						
	Enhance the capacity of the public employment service to assist with information and guidance for jobseekers considering working abroad following the EU acquis requirements with regard to the 'freedom of movement for workers'						
	Providing proactive support for (potential) returnees						
	Fostering cooperation with EU universities, especially with members of the scientific diaspora						
	Cross-institutional approach for managing economic migration Raising awareness on all aspects of migration by engaging government, stakeholders, business partners and NGOs and working together to find solutions						
	Improving statistics on migration and labour mobility	Improve statistics on migration flows, the characteristics of migrants and potential migrants					
Add a migration module to the LFS every few years							
Strengthen cooperation and synchronisation between the databases of the main institutions in charge of emigration							
Statistical database and monitoring of skills in demand and supply, of occupational shortages/surpluses and better coordination of information on employment opportunities at home and abroad (e.g., job vacancies monitoring tools), also among countries in the region and the EU							

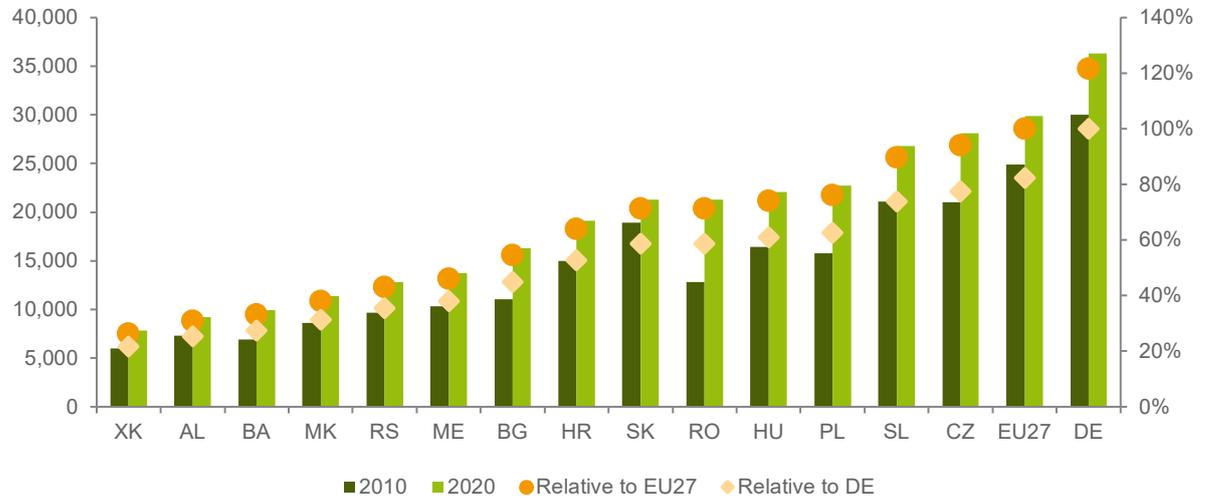
TABLE 9.1 CONTINUED

Policy area	Recommendations	AL	BA	XK	ME	MK	RS
Human capital investment	Further investment in the quality of education and skills improvements: raising educational expenditure on career development, skills and professional education, VET, updating existing training schemes, investment in infrastructure, research and development						
	VET system, dual education systems should be strongly supported, and engagement of business companies should be promoted Undertake concrete steps to better align education with the country's labour market needs						
	Policies on the acquisition of human capital and skills should be strengthened, also outside the formal education system						
Domestic labour market	Introducing new mechanisms which prevent informal employment and stimulate regular employment, such as tax incentives/tax exemptions The fight against undeclared work should be strengthened further and the benefits of regular employment and social rights of workers should be promoted and properly addressed						
	Improving the employability of the domestic labour force through active employment policy measures (e.g., through adult education and training programmes, and on-the-job training), and increasing employment opportunities for vulnerable groups						
	Transparent recruitment procedures, better access to information and employment opportunities and the fight against nepotism and corrupt hiring processes should be promoted and supported						
Human capital – labour market	Introduce active labour market programmes which offer training, re-qualification and acquisition of new skills, including improving the skill profile of the unemployed						
Labour market – migration	Further policy actions should be initiated to improve employment conditions and earnings prospects: create new employment opportunities which contribute to raising labour productivity, earnings levels, efficiency of wage policy, job stability and professional qualifications and close the gap of employment prospects for other sectors in comparison with public sector employment						
	Ensure political stability, greater institutional efficiency						
	Further policy actions should particularly focus on those employment policies affecting medium- to high-skilled workers who have a higher propensity to emigrate						
Migration – human capital	Brain drain: emigration of health professionals has to be tackled by improving earnings prospects and working conditions for health professionals and through bilateral agreements with the main destination countries to better manage the mobility of this category of workers						
	Good practices with German partners should be expanded – skills development not only of potential migrants but also of non-migrants, encourage investment in training institutions and improving education and training curricula						
Human capital – migration – labour market	Disincentives for emigration: more active engagement of the government for new business start-ups that generate jobs in particular for younger age cohorts						
	Youth Guarantee schemes that support young people to get into employment while having access to continued education or an apprenticeship within a period of four months of becoming unemployed or leaving formal education						
	Digital and green skills, IT skills should be promoted and improved further as an opportunity to work remotely, especially among youth						
	Improve the economic perspective both for rural and urban areas and close the urban/rural development gap through investments in infrastructure and incentives for sustainable economic activities, aligned with the region's resources						

Source: Own elaboration based on individual country reports.

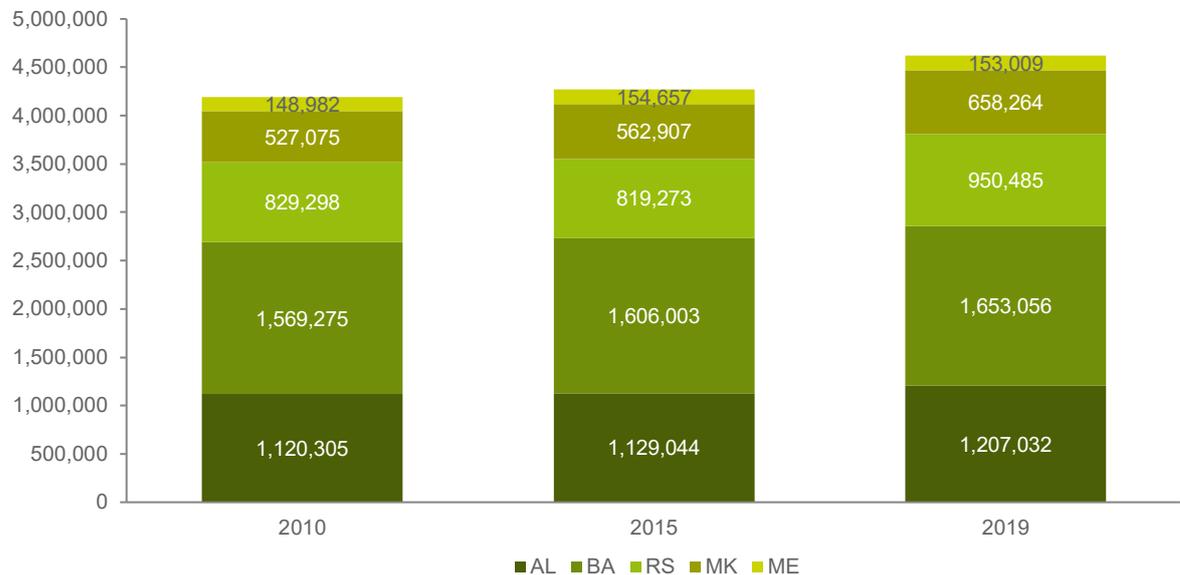
STATISTICAL ANNEX

FIGURE A1 GDP PER CAPITA, 2010 AND 2020



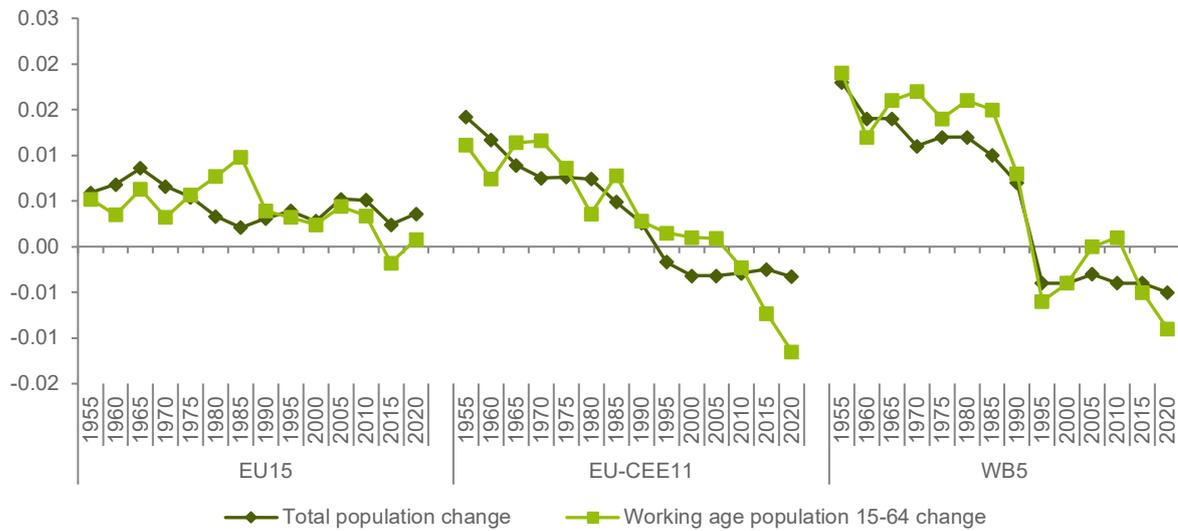
Source: Eurostat Last update 09.09.21, Extracted on 13.09.21) (Main GDP aggregates per capita [nama_10_pc]). The data source for 2020 for Kosovo and Montenegro has been obtained from the wiiw annual database. Current prices, purchasing power standard (EUR in PPS, EU27 from 2020) per capita, Gross domestic product at market prices.

FIGURE A2 STOCK OF MIGRANTS ABROAD BY COUNTRY OF ORIGIN, 2010–19



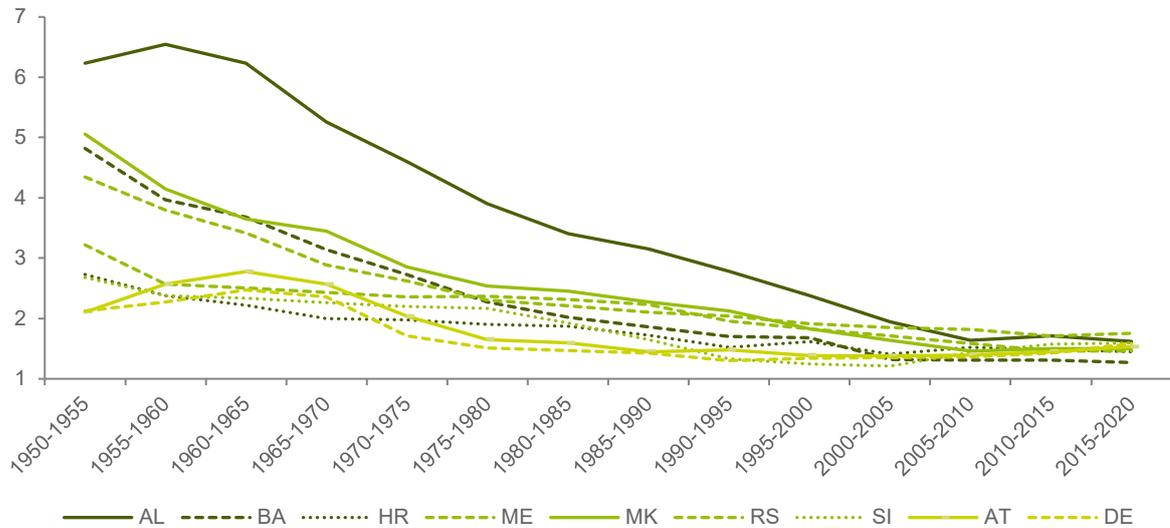
Source: United Nations, Department of Economic and Social Affairs, Population Division (2019). International Migrant Stock 2019 (United Nations database, POP/DB/MIG/Stock/Rev.2019). Serbia includes Kosovo.

FIGURE A3 POPULATION CHANGE DYNAMICS, TOTAL AND WORKING AGE POPULATION ANNUAL CHANGE, IN %, 1955–20



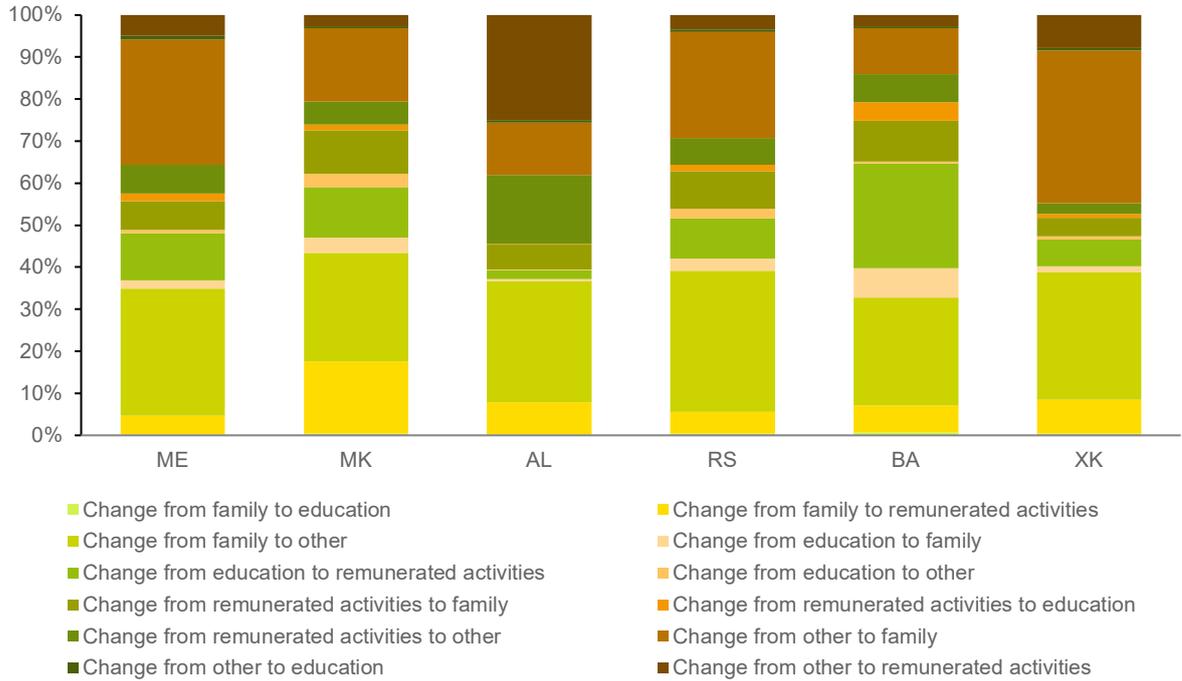
Source: Own elaboration based on UN statistics (United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision, DVD Edition).

FIGURE A4 FERTILITY RATE (LIVE BIRTHS PER WOMAN)



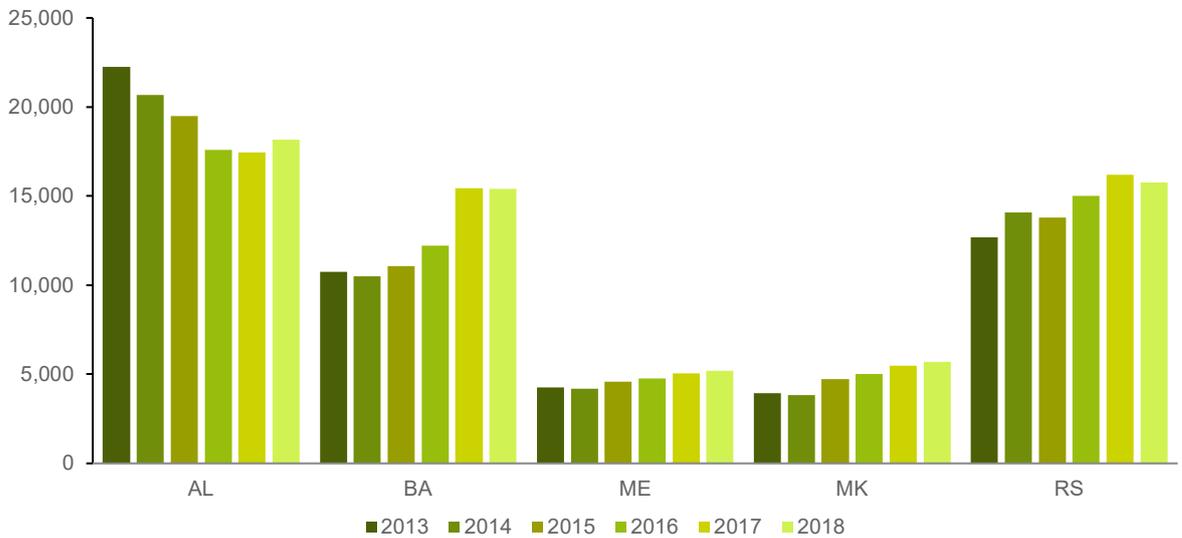
Source: United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019, Online Edition. Rev. 1.

FIGURE A5 CHANGE OF RESIDENCE PERMITS IN EU BY PURPOSE, 2010–19



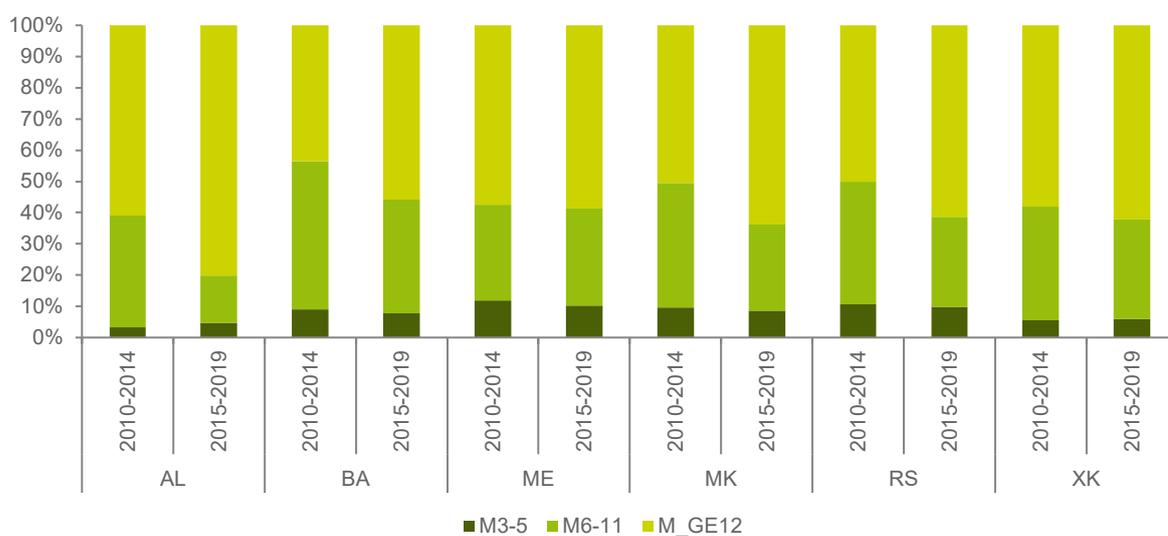
Source: Eurostat, Change of immigration status permits by reason and citizenship [migr_reschange].

FIGURE A6 TERTIARY STUDENTS ENROLLED ABROAD, ABSOLUTE NUMBERS



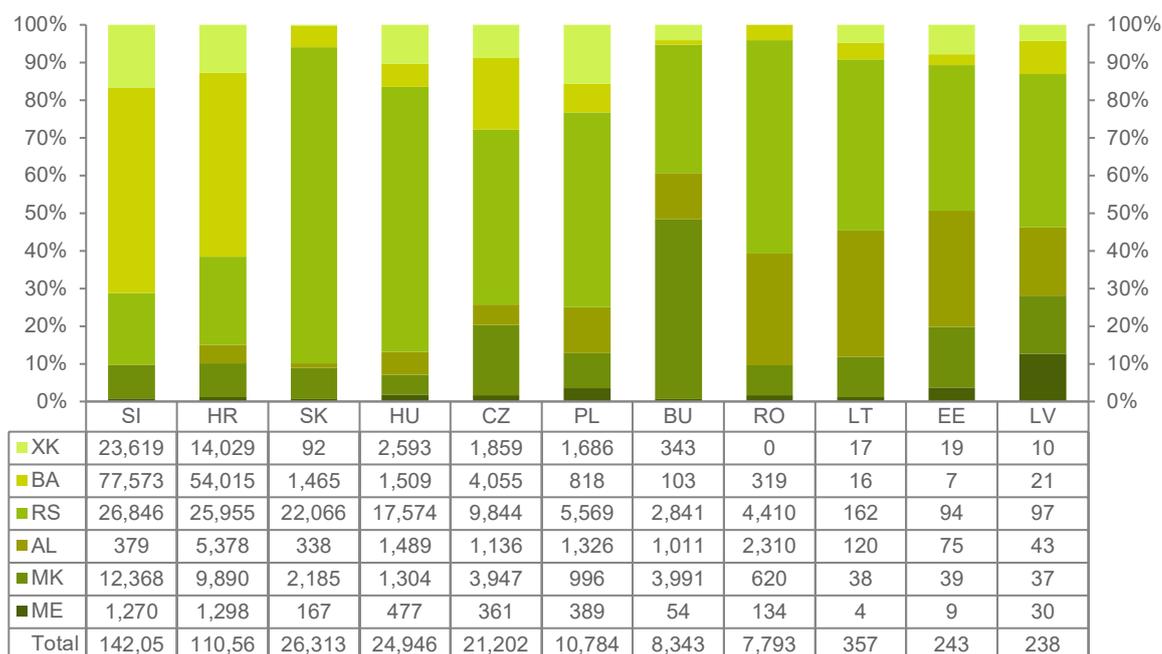
Source: UNESCO Institute for Statistics, data extracted from UIS.Stat on 20 April 2020.

FIGURE A7 FIRST RESIDENCE PERMITS OBTAINED IN EU BY DURATION, 2010–14 AND 2015–19



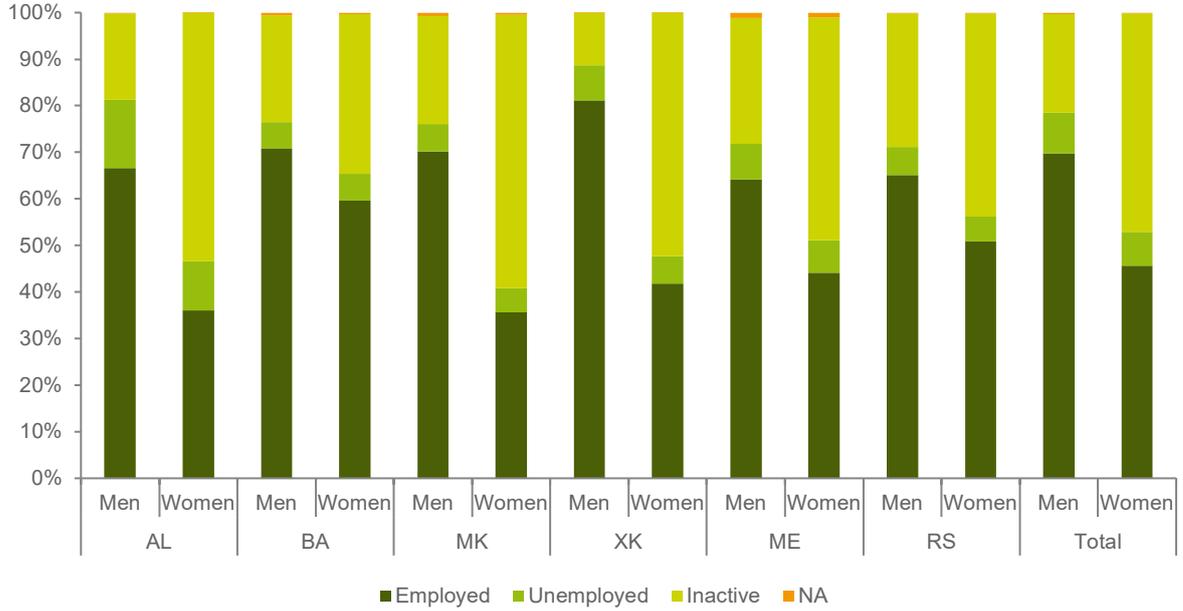
Note: M3–5 stands for 3 to 5 months; M6–11 for 6 to 11 months and M_GE12 for 12 months or over.
Source: Eurostat, First permits by reason [migr_resfirst].

FIGURE A8 FIRST RESIDENCE PERMITS OF THE WB6 IN EU-CEE, 2010–20, CUMULATIVE



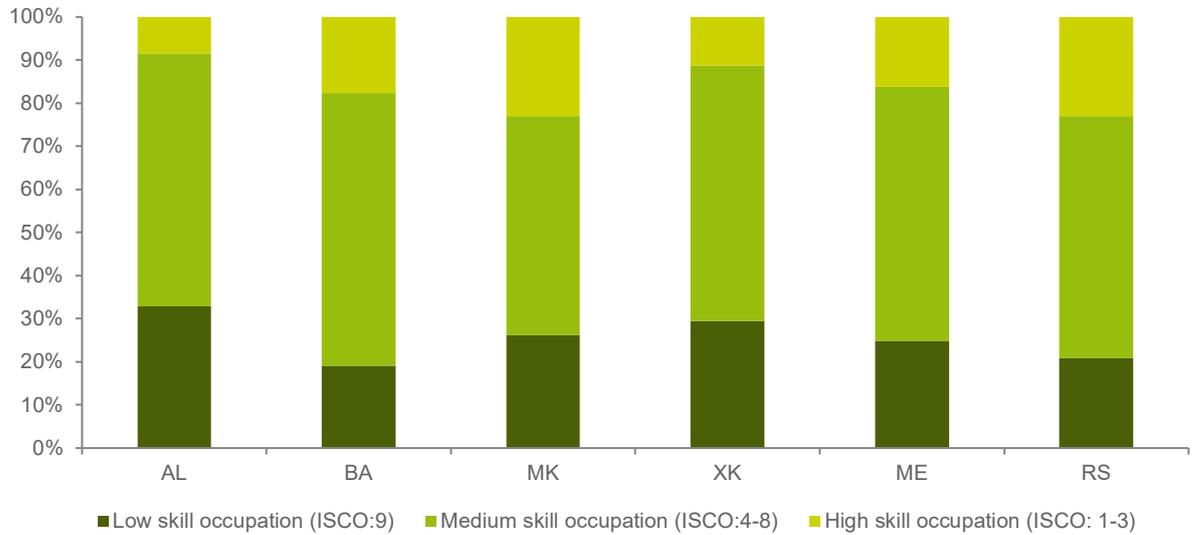
Source: Eurostat First permits [migr_resfirst].

FIGURE A9 EMPLOYMENT STATUS OF MIGRANTS BY GENDER, 2011



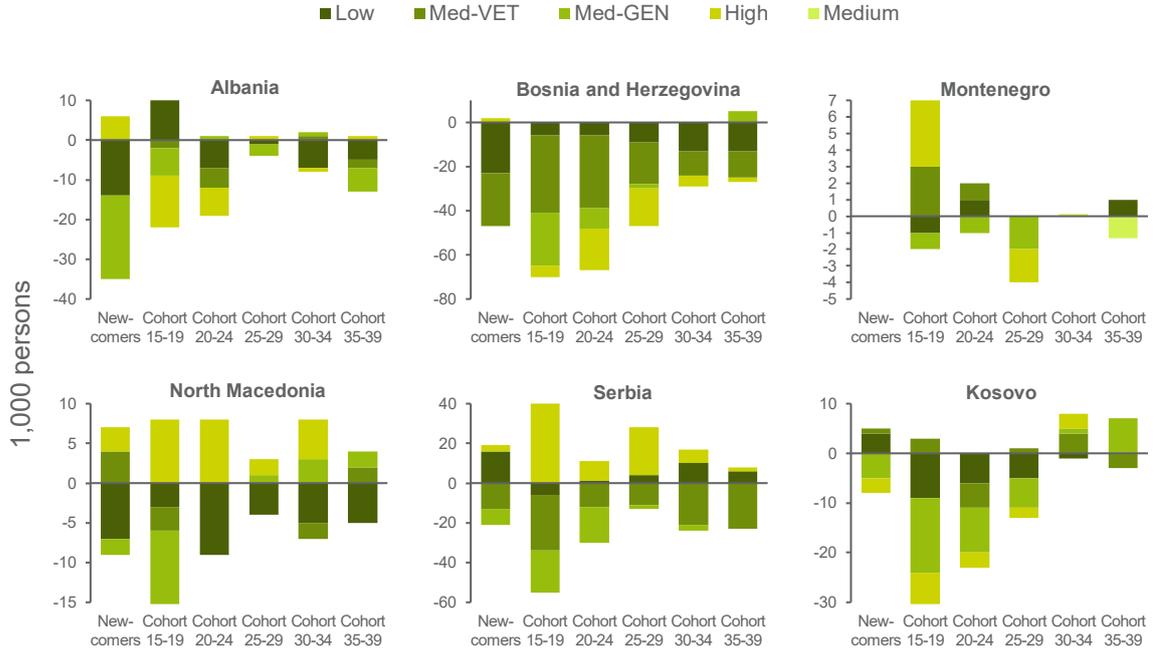
Source: OECD DIOC database.

FIGURE A10 OCCUPATIONAL GROUPS OF MIGRANTS, 2011



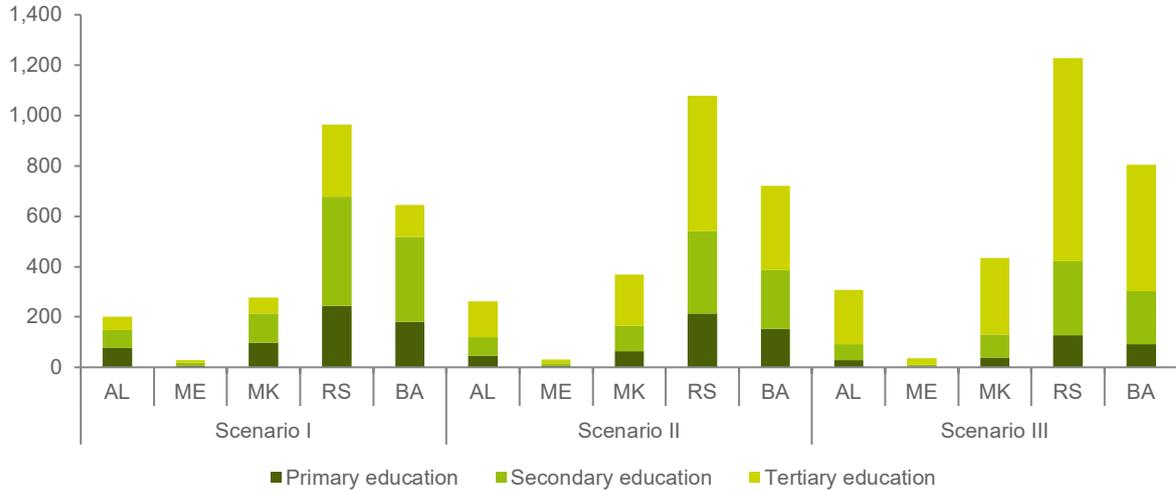
Source: OECD DIOC database.

FIGURE A11 CUMULATIVE NET MIGRATION FLOWS BY AGE GROUP, 2015–19



Source: Leitner, 2021a.

FIGURE A12 FINANCIAL COST OF MIGRATION: EDUCATION COSTS GENERATED DUE TO EMIGRATION COUNTING FOR EDUCATION STRUCTURE OF MIGRANTS (EUR MILLION)



Note: Migration 2012–16, AL=43,000; ME=3,600; MK=23,000; RS=49,000; Migration 2013–17, BA=36,800.

Scenario 1 assumes an educational structure for migrants similar to the working people (who work abroad) who are older than 15 according to the 2011 census.

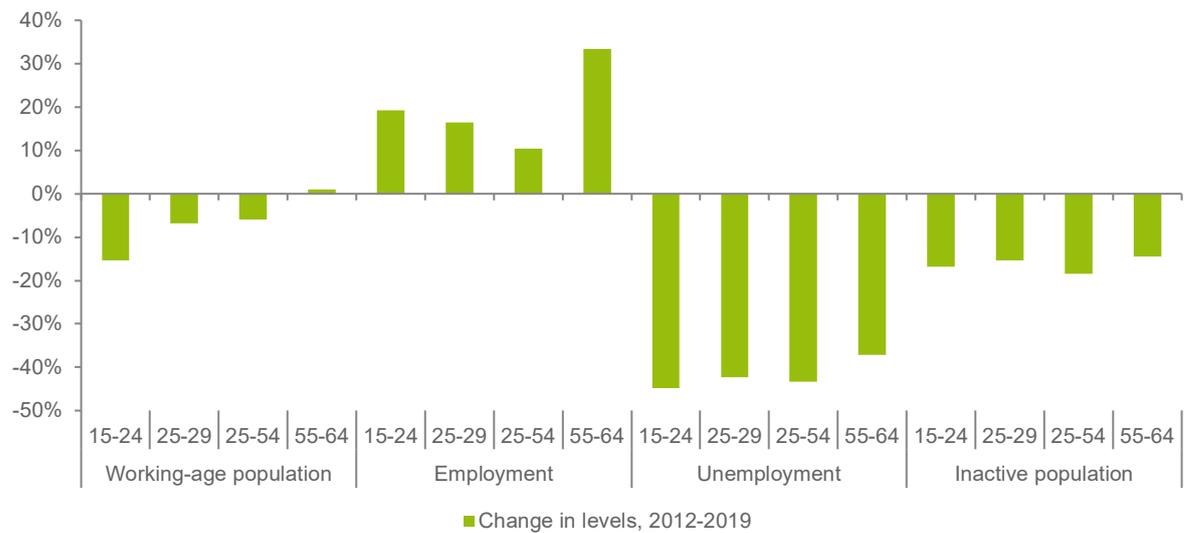
Scenario 2 assumes that participation in migration of all three education levels is equal.

Scenario 3 assumes that half of migrants are highly educated people.

Data for Kosovo are not available.

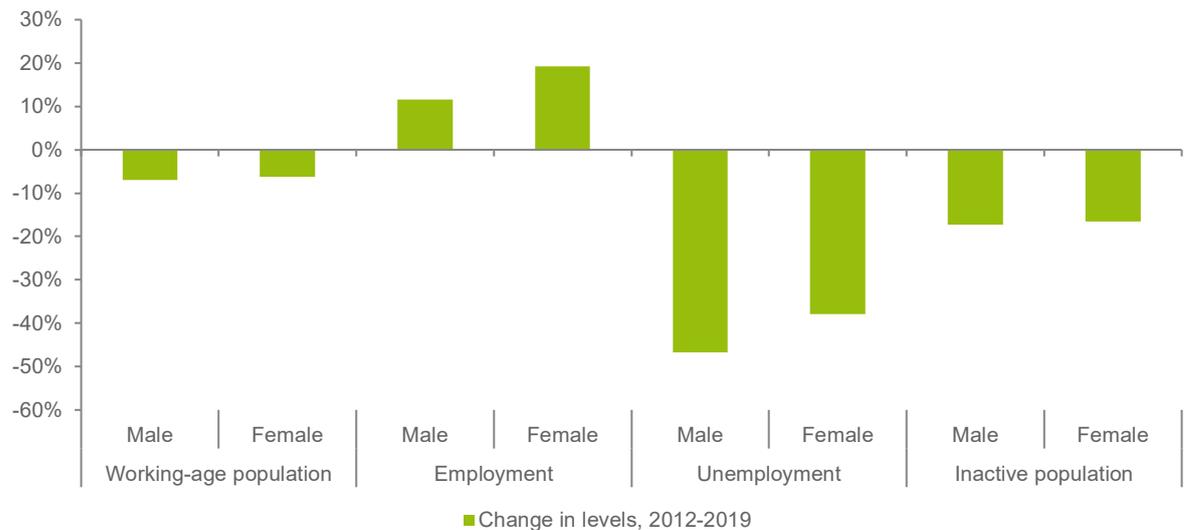
Source: Own elaboration using WFD (2020) findings.

FIGURE A13 CHANGE IN EMPLOYMENT, UNEMPLOYMENT AND INACTIVITY, 2012–19 BY AGE GROUP (% OF TOTAL)



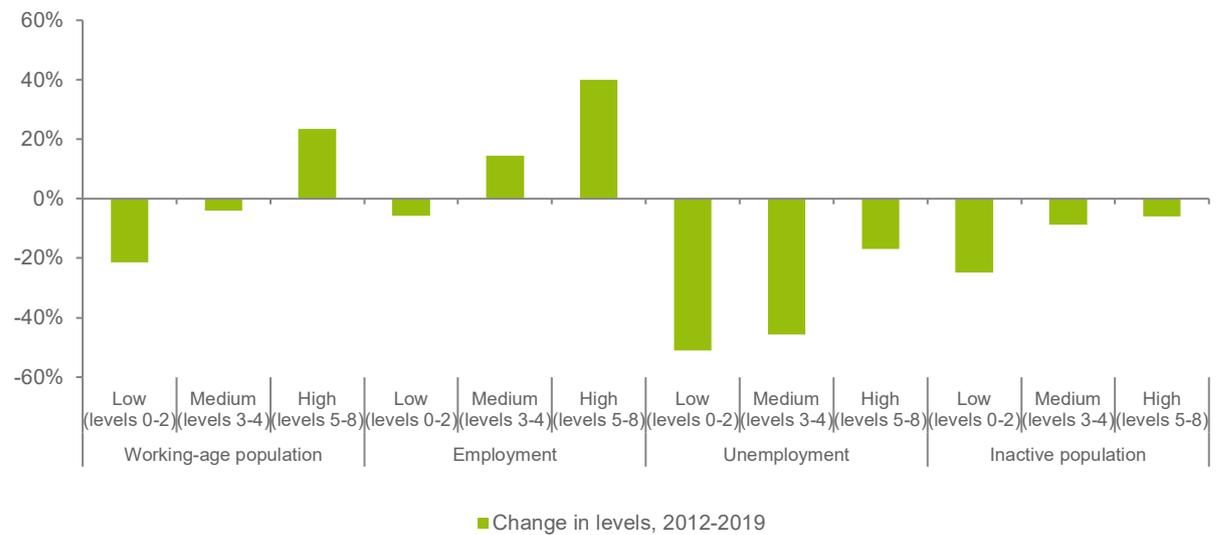
Source: Own elaboration based on SEE Jobs Gateway Database.

FIGURE A14 CHANGE IN EMPLOYMENT, UNEMPLOYMENT AND INACTIVITY, 2012–19 BY GENDER (% OF TOTAL)



Source: Own elaboration based on SEE Jobs Gateway Database.

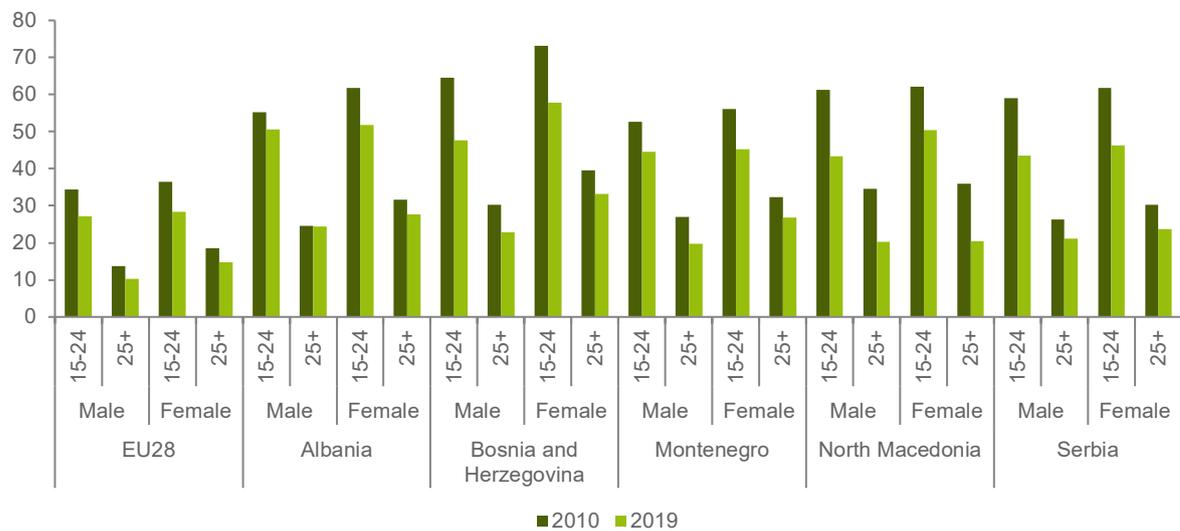
FIGURE A15 CHANGE IN EMPLOYMENT, UNEMPLOYMENT AND INACTIVITY BY EDUCATION (15–64), 2012 AND 2019 (% OF TOTAL)



Note: The educational structure refers to ISCED 2011 – levels 0–2: early childhood education and primary education; levels 3–4: lower secondary education and upper secondary education and post-secondary non-tertiary education; levels 5–8: short-cycle tertiary education, bachelor or equivalent, master or equivalent, doctoral or equivalent.

Source: Own elaboration based on SEE Jobs Gateway Database.

FIGURE A16 LABOUR UNDERUTILISATION BY GENDER AND AGE GROUPS (15–24, 25+) (%)



Note: The composite rate of labour underutilisation represents the share of the extended labour force that are in unemployment, time-related underemployment or the potential labour force. For further details, see <https://ilostat.ilo.org/resources/methods/forms-of-work/#underutilization>. Data for Kosovo are not available.

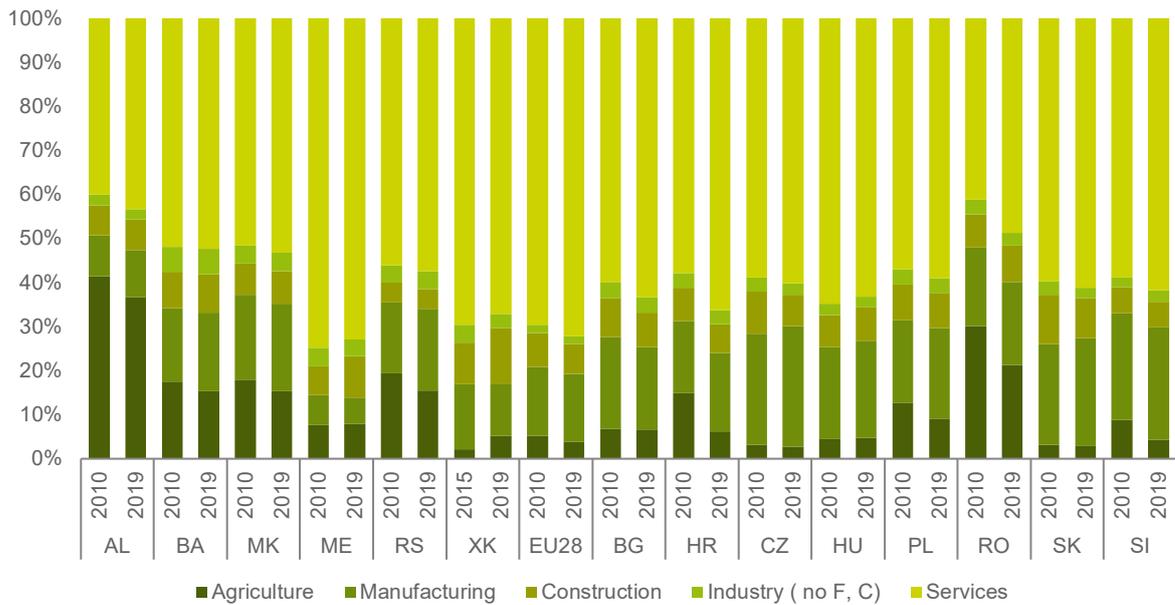
Source: ILO.

FIGURE A17 NEETS (15–24 NOT IN EMPLOYMENT, EDUCATION OR TRAINING) (%)



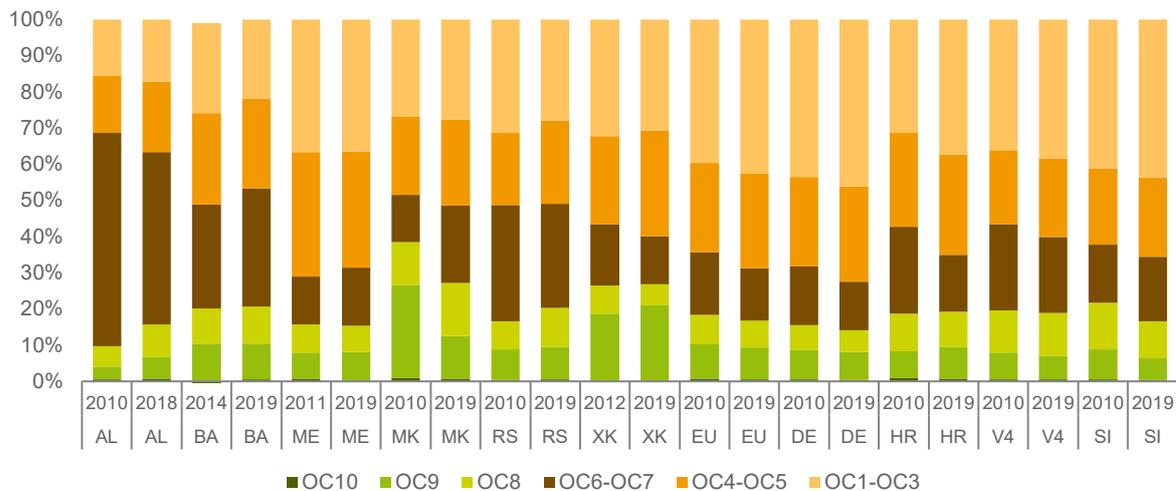
Source: SEE Jobs Gateway Database.

FIGURE A18 EMPLOYMENT BY MAIN ECONOMIC ACTIVITY



Source: ILO and wiiw annual database.

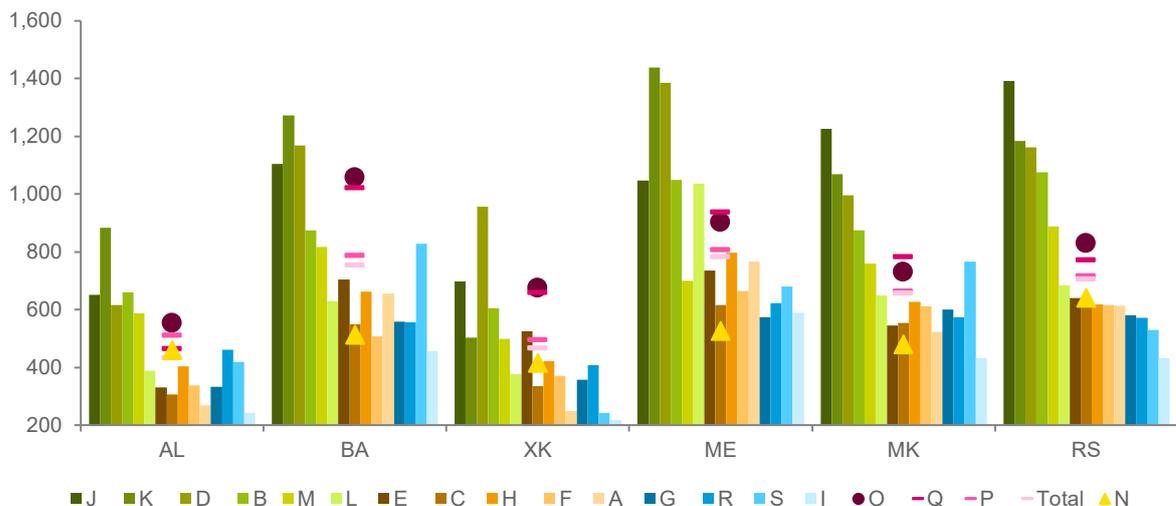
FIGURE A19 EMPLOYMENT BY OCCUPATIONAL GROUPS



Note: OC1–3 – Managers, professionals and technicians; OC4–5 – Clerical, service and sales workers; OC6–7 – Skilled agricultural and trades workers; OC8 – Plant and machine operators and assemblers; OC9 – Elementary occupations; OC10 – Armed forces.

Source: Eurostat, Employment by occupation and economic activity (from 2008 onwards, NACE Rev. 2) – 1,000 [fsa_eish2]. wiiw annual database for AL and XK.

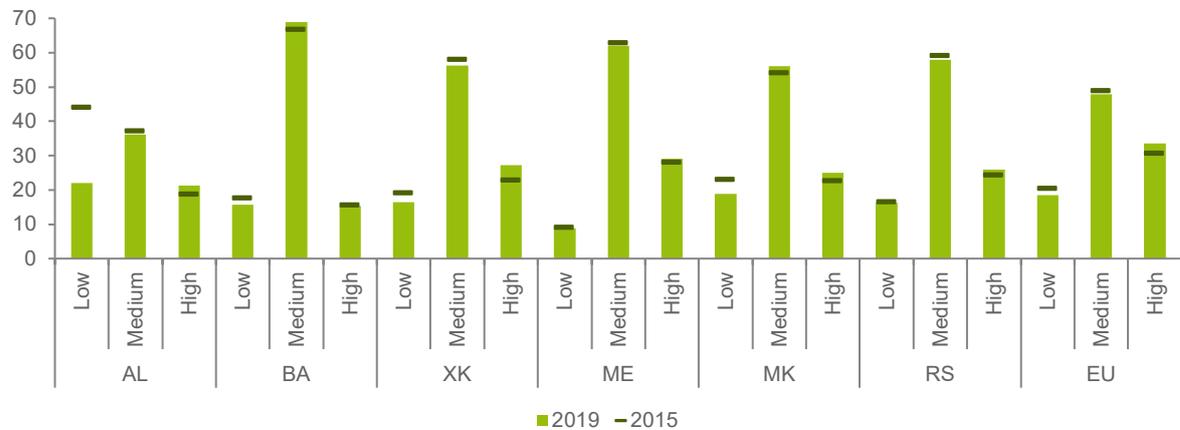
FIGURE A20 WAGES BY WORKING SECTOR, 2019



Note: A – Agriculture, forestry and fishing; B – Mining and quarrying; C – Manufacturing; D – Electricity, gas, steam, air conditioning supply; E – Water supply, sewerage, waste management, remediation; F – Construction; G – Wholesale, retail trade, repair of motor vehicles etc.; H – Transportation and storage; I – Accommodation and food service activities; J – Information and communication; K – Financial and insurance activities; L – Real estate activities; M – Professional, scientific and technical activities; N – Administrative and support service activities; O – Public administration, defence, compulsory social security; P – Education; Q – Human health and social work activities; R – Arts, entertainment and recreation.

Source: wiiw annual database.

FIGURE A21 EDUCATIONAL ATTAINMENT (BROAD LEVELS) OF THE LABOUR FORCE (15+), 2015 AND 2019 (%)



Source: Own elaboration based on KIESE, ETF database 2020⁷⁸.

FIGURE A22 GLOBAL TALENT COMPETITIVENESS INDEX (GTCI)⁷⁹



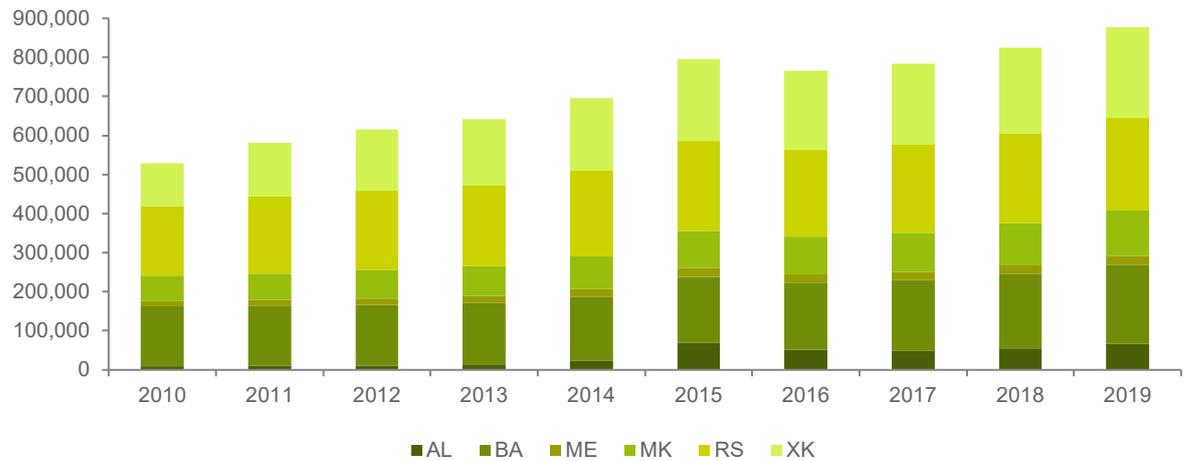
Source: The Adecco Group, <https://gtcistudy.com/the-gtci-index/#gtci-historical-view>

⁷⁸ www.etf.europa.eu/en/news-and-events/news/key-indicators-education-skills-and-employment

⁷⁹ The GTCI is a composite index, relying on a simple but robust input-output model, composed of six pillars, four on the input side and two on the output side. The GTCI generates three main indices that are the most visible focus for analysis:

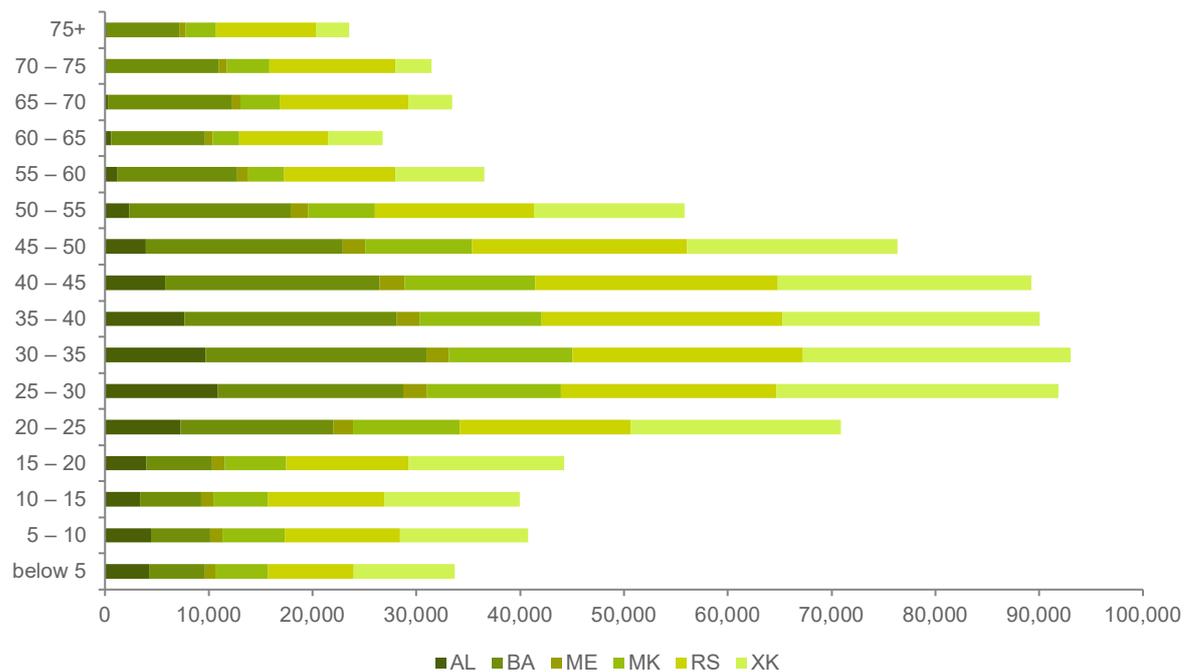
1. The talent competitiveness input sub-index, which is composed of four pillars describing the policies, resources, and efforts that a particular country can harness to foster its talent competitiveness. 'Enable' (Pillar 1) reflects the extent to which the regulatory, market, and business environments create a favourable climate for talent to develop and thrive. The other three pillars describe the three levers of talent competitiveness, which focus respectively on what countries are doing to 'attract' (Pillar 2), 'grow' (Pillar 3), and 'retain' (Pillar 4) talent. The input sub-index is the simple arithmetic average of the scores registered on these four pillars.
2. The talent competitiveness output sub-index, which aims to describe and measure the quality of talent in a country that results from the above policies, resources, and efforts. It is composed of two pillars, describing the current situation of a particular country in terms of vocational and technical skills (Pillar 5) and global knowledge skills (Pillar 6). The output sub-index is the simple arithmetic average of the scores obtained on these two pillars.
3. The GTCI, which is computed as the simple arithmetic average of the scores registered on each of the six pillars described above.

FIGURE A23 STOCK OF MIGRANTS FROM THE WESTERN BALKANS TO GERMANY BY CITIZENSHIP



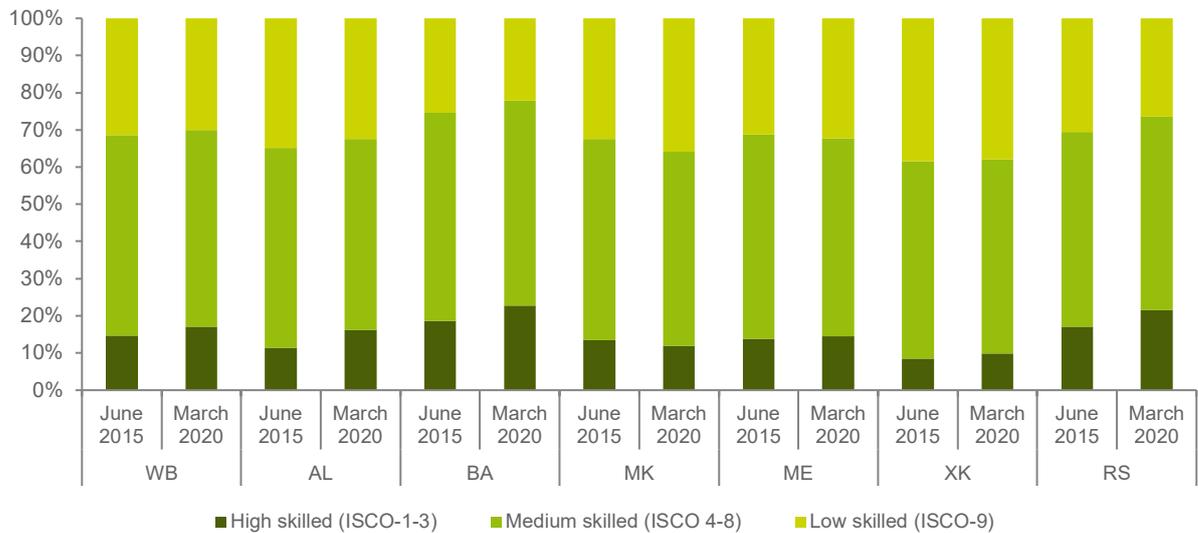
Source: Ausländische Bevölkerung, Statistisches Bundesamt, www.destatis.de

FIGURE A24 STOCK OF MIGRANTS FROM THE WESTERN BALKANS IN GERMANY BY AGE GROUP, 2019



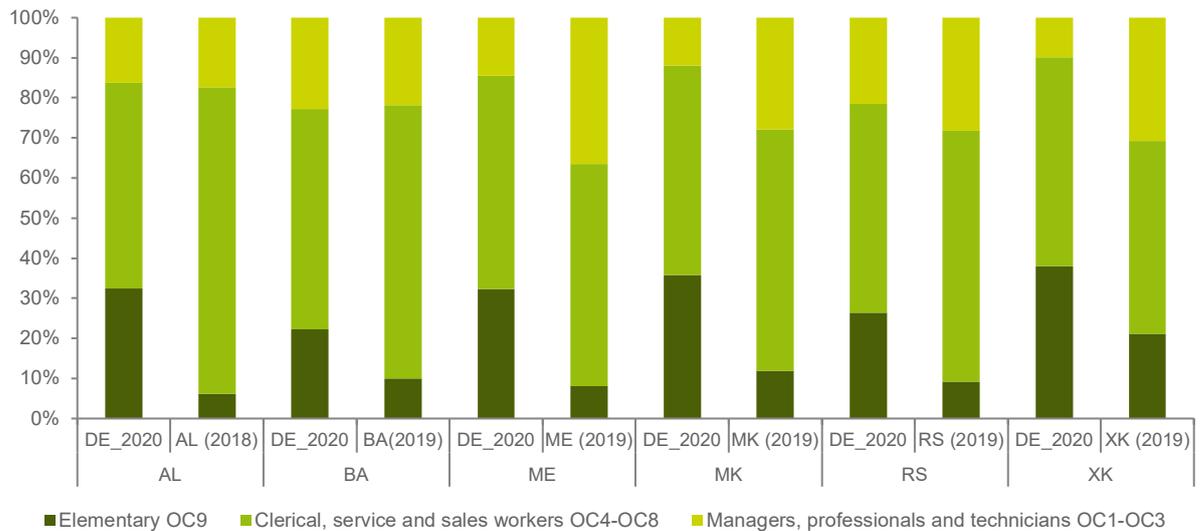
Source: Ausländische Bevölkerung, Statistisches Bundesamt, www.destatis.de

FIGURE A25 OCCUPATIONAL STRUCTURE OF EMIGRANTS FROM THE WESTERN BALKANS IN GERMANY



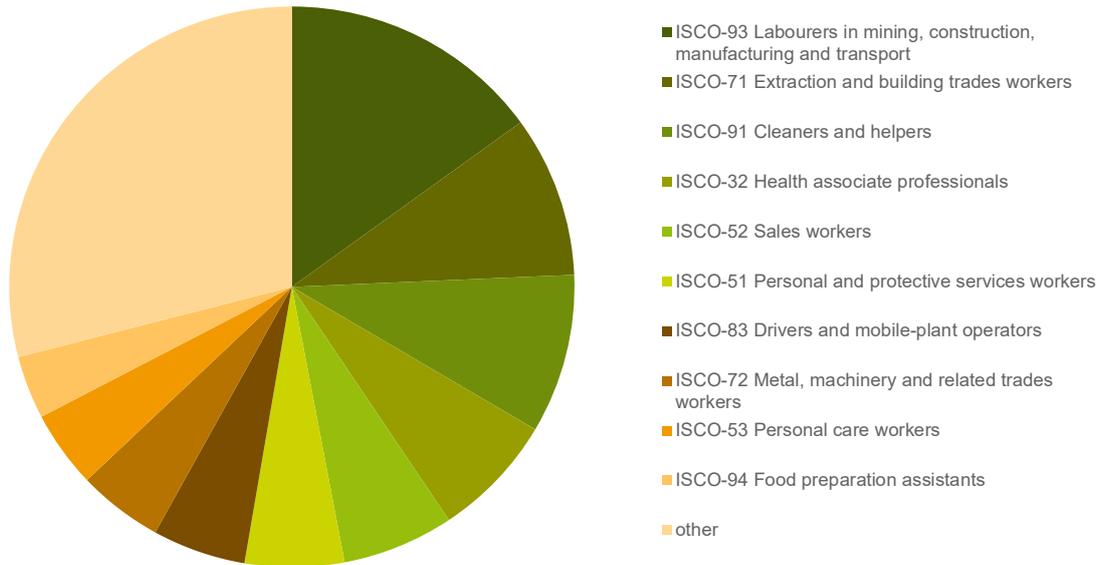
Source: <https://statistik.arbeitsagentur.de>

FIGURE A26 OCCUPATIONAL STRUCTURE OF THE WORKFORCE AT HOME AND MIGRANTS IN GERMANY



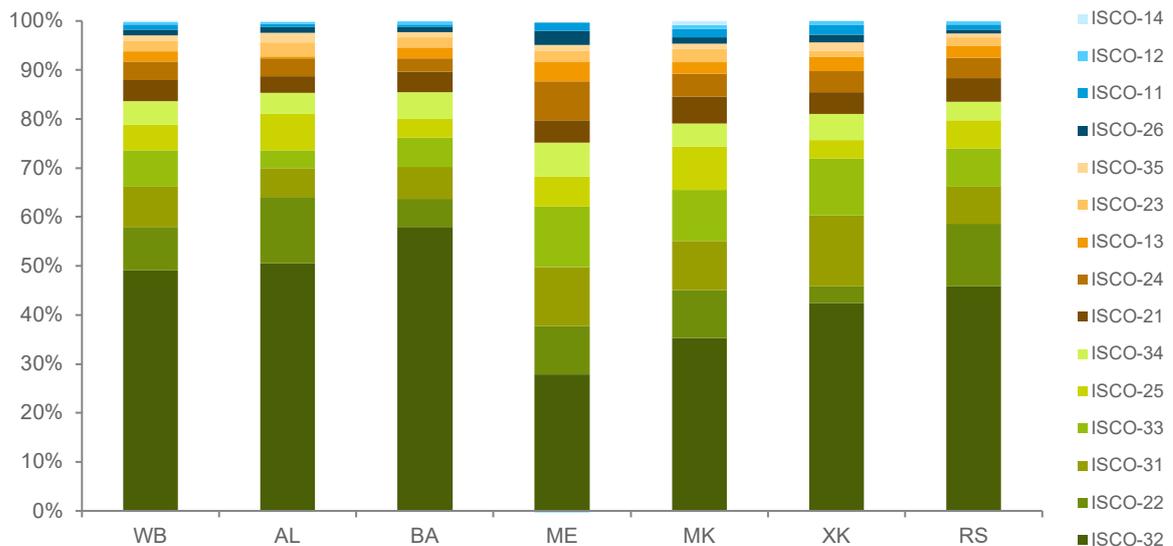
Source: <https://statistik.arbeitsagentur.de>, wiiw.

FIGURE A27 TOP 10 OCCUPATIONS OF WB EMIGRANTS IN GERMANY, 2020



Source: <https://statistik.arbeitsagentur.de>

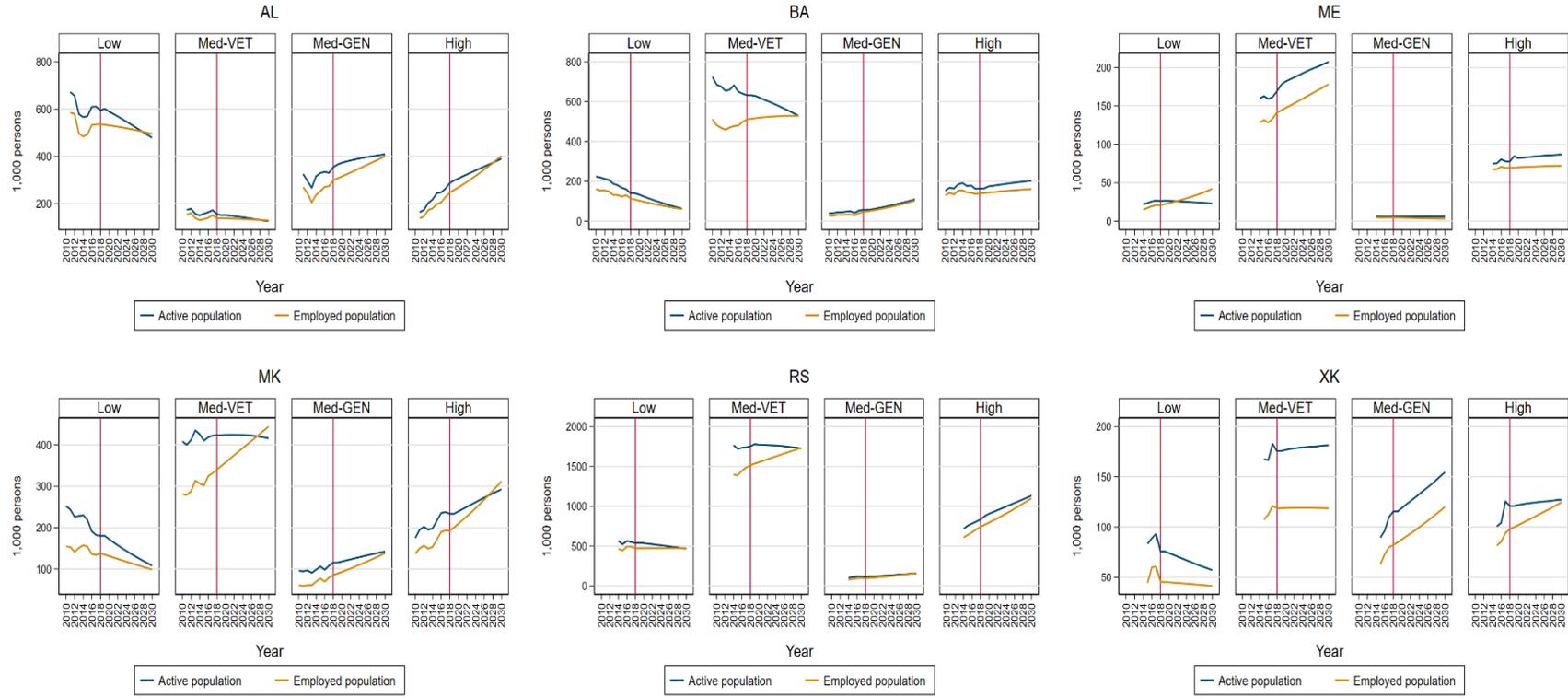
FIGURE A28 HIGH SKILLED OCCUPATIONAL CHOICE OF EMIGRANTS FROM WB TO GERMANY, 2015–20 (MARCH)



Note: **Managers:** ISCO-11 Chief executives, senior officials and legislators; ISCO-12 Administrative and commercial managers; ISCO-13 Production and specialised services managers; ISCO-14 Hospitality, retail and other services managers; **Professionals:** ISCO-21 Science and engineering professionals; ISCO-22 Health professionals; ISCO-23 Teaching professionals; ISCO-24 Business and administration professionals; ISCO-25 Information and communications technology professionals; ISCO-26 Legal, social and cultural professionals; **Technicians and associate professionals:** ISCO-31 Science and engineering associate professionals; ISCO-32 Health associate professionals; ISCO-33 Business and administration associate professionals; ISCO-34 Legal, social, cultural and related associate professionals; ISCO-35 Information and communications technicians.

Source: <https://statistik.arbeitsagentur.de>

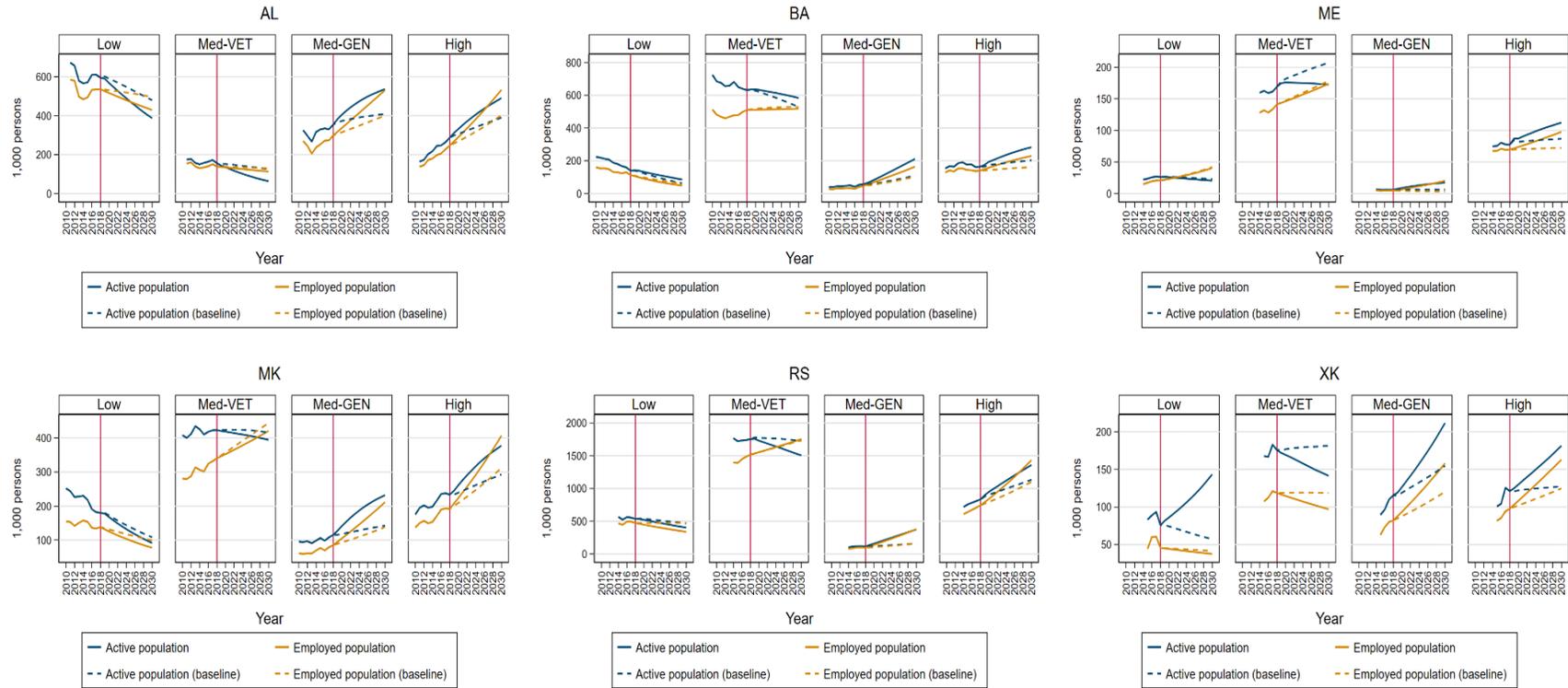
FIGURE A29 LABOUR SUPPLY AND LABOUR DEMAND – BASELINE SCENARIO



Note: Active population refers to labour supply; employed population refers to labour demand. Educational levels are divided into four categories: low (primary or lower secondary education), medium-general (upper secondary general education/gymnasium), medium-VET (upper secondary VET), and high (tertiary education), based on ISCED. Projections start in 2019.

Source: LFS for Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia and Kosovo; own calculations (for details see Leitner, 2021b).

FIGURE A30 LABOUR SUPPLY AND LABOUR DEMAND – DEVELOPMENT SCENARIO COMPARED WITH BASE SCENARIO



Note: Active population refers to labour supply, employed population refers to labour demand, and employed population (baseline) refers to labour demand under the baseline scenario. Educational levels are divided into four categories: low (primary or lower secondary education), medium-general (upper secondary general education/gymnasium), medium-VET (upper secondary VET), and high (tertiary education), based on ISCED. Projections start in 2019.

Source: LFS for Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia and Kosovo; own calculations (for details see Leitner, 2021b).

TABLE A1 CHARACTERISTICS OF POTENTIAL MIGRANTS FROM THE WESTERN BALKAN REGION, 2019 (%)

		AL		BA		XK		MK		ME		RS	
		Intentions to leave	Actions to leave										
Total sample	Yes	49.15	9.2	47.66	5.5	44.06	10.4	37.8	7.5	49.41	4.6	35.36	2.2
	No/don't know	50.85	91.8	52.34	94.5	55.95	89.6	62.2	92.5	50.59	95.6	64.63	97.8
	Total	1,001	1,001	1,005	1,001	1,001	1,001	1,000	1,001	1,012	1,001	1,001	1,001
Disaggregation of potential migrants by age, education and employment status													
Gender	Male	53.5	50	47.4	63.6	55.8	61.5	56.1	65.3	45.4	44.7	54.8	72.7
Region	Urban	61	56.5	47.6	43.6	43.8	37.5	57.7	53.3	67	51.1	62.4	63.6
Age	18–24	26.02	23.9	28.81	36.42	29.71	29.9	20.11	18.6	17.2	12.8	22.03	18.2
	25–34	26.02	33.7	30.27	34.68	34.47	36.5	29.37	34.7	27.4	34	25.14	45.5
	35–44	24.59	26.1	18.16	14.45	18.82	22.1	28.57	28	21.6	21.3	21.93	4.6
	45–54	14.63	10.9	11.9	8.09	10.2	9.6	14.55	13.3	20.8	17	18.93	18.2
	55–64	6.5	3.3	7.52	4.62	5.9	4.8	6.35	1.3	11.4	12.8	8.47	13.6
	65+	2.24	2.2	3.34	1.73	0.9		1.06	4	1.6	2.1	4.24	
	Total	492	92	476	55	441	104	378	75	500	47	354	22
Education	No education/primary school	12.6	10.9	7.72	3.6	11.34	9.6	10.58	5.3	4.2	12.8	2.26	9.1
	High school (directed or high school)	57.1	59.8	65.97	70.9	44.9	43.3	55.29	46.7	74.6	59.6	62.43	63.6
	College/university	26.42	22.8	23.17	21.8	41.72	47.1	32.28	45.3	20.6	27.6	34.18	27.3
	Master's degree/doctorate	3.86	6.5	3.13	3.6	2.04		1.85	2.7	0.6		1.13	
	Total	492	92	476	55	441	104	378	75	500	47	354	22
Employment status	Employed	37.4	34.8	45.3	40	30.61	26	52.38	52	50.8	40.4	57.06	40.9
	Self-employed	20.53	14.1	2.09		14.06	12.5	5.56	2.7	6.6	8.5	4.8	4.6
	Unemployed	24.8	35.8	27.35	41.8	29.02	45.2	28.84	34.7	25.8	29.8	20.06	45.5
	Housewife	0.81		5.22	1.8	8.84	5.8	2.38	1.3	5.2	10.6	1.98	4.6
	Retired	3.05	2.2	5.22	3.6	0.68		2.12	4	5.5	8.5	4.52	
	Student/pupil	13.41	13	14.82	12.7	16.78	9.6	8.73	5.3	6.2	2.1	11.58	4.6
	Total	492	92	476	55	441	104	378	75	500	47	354	22

Source: Own elaboration using BB-PO (2020).

TABLE A2 EMPLOYER ASSESSMENT ABOUT THE SKILLS OF THE WORKFORCE, BALKAN BAROMETER, 2020

	AL	BA	XK	MK	ME	RS
Would you agree with the following statement: The skills taught in the educational system meet the needs of your company?						
Disagree/fully disagree	13%	44%	23%	16%	24%	8%
Do you take concrete measures to improve the digital skills of your employees?						
Yes, through on-the-job training or internal training	45%	41%	48%	31%	58%	45%
Yes, through online courses or webinars	10%	7%	9%	7%	11%	4%
Yes, through workshops, seminars or conferences	12%	17%	9%	11%	11%	10%
I06 Did you have vacancies over the past 12 months that have proved hard to fill?						
Yes	14%	58%	28%	25%	36%	20%
No	86%	42%	70%	75%	64%	79%
I06a Why do you think this is the case?						
Applicants lack skills	79%	64%	59%	61%	85%	56%
Salary and compensation offered by the company is not competitive	14%	8%	9%	18%	7%	20%
Other (specify)	4%	23%	16%	18%	4%	17%
Total	28	119	56	51	73	41
I07 Over the past 12 months, has your business funded or arranged any training and development for staff in the organisation, including any informal on-the-job training, except training required by the law?						
Total	203	206	200	200	205	201
Yes	17%	49%	22%	22%	36%	21%
No	82%	49%	76%	78%	63%	77%
I08 Thinking about skills requirements, does your company regularly review the skill and training needs of individual employees?						
Yes	22%	44%	16%	16%	38%	24%
No	50%	30%	51%	54%	33%	48%
Partly (e.g., only for some employee groups)	26%	24%	31%	28%	29%	27%
How would you assess the readiness of employees in your company to acquire additional qualifications in order to advance and get promoted?						
They are not interested in acquiring additional qualifications at all	2%	4%	8%	7%	4%	0%
They are not interested in acquiring additional qualifications	10%	11%	10%	7%	5%	8%
Neither interested nor disinterested	30%	33%	24%	31%	26%	33%
They are interested in acquiring additional qualifications	45%	39%	35%	40%	49%	49%
They are very interested in acquiring additional qualifications	9%	12%	12%	9%	13%	5%

contd.

TABLE A2 CONTINUED

	AL	BA	XK	MK	ME	RS
Availability of labour						
Significantly worsened	9%	29%	2%	15%	13%	7%
Somewhat worsened	17%	38%	24%	32%	20%	20%
Stayed the same	43%	23%	35%	36%	35%	46%
Somewhat improved	28%	7%	33%	16%	19%	23%
Significantly improved	3%	2%	5%	0%	11%	3%
How problematic are these different factors for the operation and growth of your business? Please rate each (All respondents – N=1215, scores are on a scale of 1 to 4 where 1 means major obstacle, 2 moderate obstacle, 3 minor obstacle and 4 no obstacle, mean)						
C01_6 Availability of labour						
Major obstacle	17%	34%	4%	16%	16%	10%
Moderate obstacle	16%	27%	31%	20%	31%	20%
Minor obstacle	23%	21%	46%	38%	22%	39%
No obstacle	44%	17%	17%	25%	28%	29%
Migration crisis						
Major obstacle	22%	7%	11%	4%	2%	4%
Moderate obstacle	31%	8%	33%	6%	11%	8%
Minor obstacle	24%	18%	37%	17%	23%	13%
No obstacle	23%	62%	16%	68%	53%	65%
C01_7 Skills and education of available workers						
Major obstacle	11%	30%	5%	13%	18%	8%
Moderate obstacle	24%	26%	28%	17%	26%	15%
Minor obstacle	28%	23%	43%	31%	23%	41%
No obstacle	37%	20%	22%	39%	29%	33%
C04_5 Talent and skill of labour pool						
Significantly worsened	3%	19%	2%	6%	13%	6%
Somewhat worsened	25%	34%	22%	18%	19%	10%
Stayed the same	45%	34%	37%	57%	32%	51%
Somewhat improved	24%	9%	29%	17%	25%	31%
Significantly improved	3%	3%	8%	1%	9%	1%
Total	203	206	200	200	205	201

Source: Own elaboration using BB-BO (2020).

TABLE A3 ERASMUS+ PROGRAMMES AND BENEFICIARIES FROM THE WESTERN BALKANS, 2014–20

		Proposals received involving the respective WB country	Projects selected involving the respective WB country	Students and staff moving to Europe	Students and staff moving to the respective WB country	Percentage of regional budget to WB6	Scholarship winners from the respective WB country
Albania	International Credit Mobility	1,131	937	8,005	4,890	37.19	
	Erasmus Mundus Joint Master's Degrees	5	1				80
	Capacity Building for Higher Education	278	45				
	Jean Monnet activities	62	16				
Bosnia and Herzegovina	International Credit Mobility	1,216	948	9,168	5,140	34.07	
	Erasmus Mundus Joint Master's Degrees	17	6				49
	Capacity Building for Higher Education	302	46				
	Jean Monnet activities	37	6				
Kosovo	International Credit Mobility	655	508	3,880	2,074	15.68	
	Erasmus Mundus Joint Master's Degrees	5	2				26
	Capacity Building for Higher Education	182	38				
	Jean Monnet activities	15	2				
Montenegro	International Credit Mobility	578	475	2,944	1,801	13.06	
	Erasmus Mundus Joint Master's Degrees	6	4				30
	Capacity Building for Higher Education	207	35				
	Jean Monnet activities	18	4				
North Macedonia	International Credit Mobility	52	30	79	34	0.02	
	Erasmus Mundus Joint Master's Degrees	10					52
	Capacity Building for Higher Education	76	13				
	Jean Monnet activities	18	2				
Serbia	International Credit Mobility	1,142	849	7,034	4,430		
	Erasmus Mundus Joint Master's Degrees	36	9				161
	Capacity Building for Higher Education	379	53				
	Jean Monnet activities	85	20				

TABLE A4 INTERNATIONAL MIGRATION POLICIES

Does the government have any of the following institutions, policies or strategies to govern immigration or emigration?

	A dedicated government agency to implement national migration policy	A national policy or strategy for regular migration pathways, including labour migration	A national policy or strategy to promote the inclusion or integration of immigrants	A national policy or strategy on the emigration of its citizens	A dedicated government unit, department or ministry for diaspora engagement, citizens abroad or overseas employment	Formal mechanisms to ensure that the migration policy is gender responsive	An annual national report on migration that includes migration data collected by the government and/or other sources
AL	Yes	Yes	Yes	Yes	Yes	Yes	Yes
BA	—	—	—	—	—	—	—
ME	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MK	No	Yes	Yes	Yes	Yes	Yes	Yes
RS	Yes	Yes	Yes	Yes	Yes	Yes	Yes

What is the policy of the government concerning the annual level of the following categories of migration?

	Immigration through regular channels	Immigration of highly-skilled workers	Immigration for family reunification	Emigration of its citizens	Emigration of highly-skilled workers	Return of its citizens living abroad	Return of migrants to their countries of origin
AL	Raise	Raise	Raise	Raise	Raise	Raise	Lower
BA	—	—	—	—	—	—	—
ME	Raise	Maintain at current levels	Maintain at current levels	Maintain at current levels	Maintain at current levels	Lower	
MK	No official policy	No official policy	No official policy	Lower	Lower	Raise	
RS	Lower	Maintain at current levels	Lower	Maintain at current levels	Maintain at current levels	Maintain at current levels	Raise

Source: United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Policies 2019: International Migration Policies.

TABLE A5 MIGRATION GOVERNANCE

Please specify the major underlying reasons for setting current emigration policies

	Counter long-term population decline	Address population ageing	Meet labour demands in certain sectors of the economy	Safeguard employment opportunities for nationals	Retain specific categories of workers
AL	..	..	..	..	..
BA	—	—	—	—	—
ME	..	..	..	..	..
MK	Yes	Yes	Yes	..	Yes
RS	Yes	Yes	..	Yes	Yes

Does the government take any of the following measures to foster cooperation among countries and encourage stakeholder inclusion and participation in migration policy?

	An inter-ministerial coordination mechanism on migration	Bilateral agreements on migration, including labour migration	Regional agreements promoting mobility	Agreements for cooperation with other countries on return and readmission	Formal mechanisms to engage civil society and the private sector in the formulation and implementation of migration policy
AL	Yes	Yes	Yes	Yes	Yes
BA	—	—	—	—	—
ME	Yes	Yes	..	Yes	Yes
MK	Yes	Yes	No	Yes	Yes
RS	Yes	Yes	Yes	Yes	Yes

Source: United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Policies 2019: International Migration Policies.

TABLE A6 MIGRATION AND DEVELOPMENT

Does the government take any of the following measures to maximise the positive development/impact of migration and the socioeconomic well-being of migrants?

	Align, through periodic assessments, labour migration policies with actual and projected labour market needs	Facilitate the portability of social security benefits	Facilitate the recognition of skills and qualifications acquired abroad	Facilitate or promote the flow of remittances	Promote fair and ethical recruitment of migrant workers
AL	No	Yes	Yes	Yes	Yes
BA	—	—	—	—	—
ME	Yes	..	..	..	..
MK	Yes	Yes	Yes	Yes	Yes
RS	No	Yes	No	No	No

What other policy measures has the government adopted to encourage or facilitate diaspora investment or return of citizens?

	Tax exemptions or other financial incentives	Preferential treatment in providing credit	Preferential treatment in allotment of permits and licenses	Transferability of financial assets	Streamlined bureaucratic procedures
AL	No	No	No	Yes	Yes
BA	—	—	—	—	—
ME	..	..	..	..	..
MK	No	No	No	No	No
RS	No	No	No	No	No

Source: United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Policies 2019: International Migration Policies.

TABLE A7 POLICY CHANGES IN EU28 TARGETING MIGRANTS FROM WESTERN BALKAN COUNTRIES BETWEEN 2013 AND 2019

Country	Summary	Year	Description	Magnitude of change	Policy area	Policy tool	Target group	Specific nationalities	Restrictiveness
Belgium	Expanded safe country list	2016	List of safe countries expanded to include Albania	Mid-level change	Legal entry and stay	Entry visa/stay permit	Refugees, asylum seekers and other vulnerable people	Albania	More restrictive
Germany	Added countries to safe list with stricter asylum treatment	2014	Expanding the list of safe origins for Albania, Kosovo, Montenegro, Serbia, North Macedonia and Bosnia and Herzegovina	Fine-tuning change	Legal entry and stay	Entry visa/stay permit	Refugees, asylum seekers and other vulnerable people	Those from the Western Balkans	More restrictive
	Labour market access for the Western Balkans	2015	Nationals from the Western Balkans allowed to work under certain conditions regardless of the qualification level of their job offer	Mid-level change	Legal entry and stay	Work visa/permit	All migrant workers	Those from the Western Balkans	Less restrictive
Hungary	Eased work permit for Ukrainian and Serbian nationals in shortage occupations	2016	Eased recruitment of Serbian nationalities in shortage occupations identified by the Ministry of National Economy (currently including computer scientists, engineers, drivers, nurses and carpenters) They are exempt from labour market testing Work permits for <90 days are not required	Mid-level change	Legal entry and stay	Work visa/ permit	All migrant workers	Ukraine Serbia	Less restrictive
Romania	Social security agreement with Serbia	2016	It regulates the recognition of social insurance, applicability of legislation for migrant workers and equal treatment	Major change	Legal entry and stay	Access to social benefits and socioeconomic rights	All migrants	Serbia	Less restrictive
Slovenia	Yugoslavia Scheme ended	2013	In July 2013, a scheme ended that allowed citizens of the former Yugoslavia to regularise and obtain a permanent residence permit. Permanent residence may still be requested on an individual basis.	Mid-level change	Legal entry and stay	Access to permanent residency	All migrants	Former Yugoslavia	More restrictive
	Bilateral agreement with Bosnia and Herzegovina as regards employment	2014	The two countries will cooperate, with Bosnia and Herzegovina reserving the possibility to suspend placement of workers whose departure might have negative effects on the labour market.	Mid-level change	Legal entry and stay	Work visa/permit	All migrant workers	Bosnia and Herzegovina	Less restrictive
	Bilateral agreement with Bosnia and Herzegovina	2017	In 2017, the Act on Amendments to the Agreement on the Employment of Citizens of Bosnia and Herzegovina in Slovenia began to apply. This Act facilitates the employment of citizens of Bosnia and Herzegovina by eliminating the previous 30-day application period and by simplifying any change of employer after the end of a contract in the first year of employment.	Minor change	Legal entry and stay	Work visa/permit	All migrant workers	Bosnia and Herzegovina	Less restrictive
	Bilateral agreement with Serbia on employment	2018	In February 2018, a new Bilateral Agreement on the Employment of Citizens of the Republic of Serbia in the Republic of Slovenia was signed, setting new conditions facilitating the labour market integration of Serbian and Slovenian workers in the other country and their reintegration on return.	Mid-level change	Legal entry and stay	Work visa/permit	All migrant workers	Serbia	Less restrictive

Source: wiiw-POLMIG database.

LIST OF ABBREVIATIONS AND ACRONYMS

AL	Albania
BA	Bosnia and Herzegovina
CZ	Czechia
EFTA	European Free Trade Association
EHEA	European Higher Education Area
ENIC	European Network of Information Centres
EQF	European Qualifications Framework
ETF	European Training Foundation
EU	European Union
EU-CEE	11 EU Member States in Central and Eastern Europe (Bulgaria, Croatia, Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia)
EUR	Euro (currency)
FDI	Foreign direct investment
GDP	Gross domestic product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German International Development Agency)
GTCI	Global Talent Competitiveness Index
HR	Croatia
HU	Hungary
IAB	Institute for Employment Research, Germany
ICM	International Credit Mobility
ICT	Information and communication technology
ILO	International Labour Organisation
IPA	Instrument for Pre-accession Assistance
ISCED	International Standard Classification of Education
IT	Information technology
KIESE	Key indicators on education, skills and employment
LFS	Labour force survey
ME	Montenegro
MK	North Macedonia
NEET	(Young people) not in employment, education or training
NGOs	Non-governmental organisations

NMS	New Member States
NQF	National qualifications framework
OECD	Organisation for Economic Cooperation and Development
PISA	Programme for International Student Assessment (OECD)
PL	Poland
PPS	Purchasing power standard
RS	Serbia
SI	Slovenia
SK	Slovakia
SMEs	Small and medium-sized enterprises
UN	United Nations
UN DESA	United Nations' Department of Economic and Social Affairs
UNESCO	United Nations Educational, Scientific and Cultural Organisation
VET	Vocational education and training
VNFIL	Validation of non-formal and informal learning
WB	Western Balkans
WB6	The six Western Balkan countries (Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia and Serbia)
wiiw	The Vienna Institute for International Economic Studies
XK*	Kosovo (*provisional code used by Eurostat)

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