CHAPTER 4

Migration, Skills And The Labour Market

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1 Introduction

Mass emigration from Serbia, and especially the exodus of the 'best and brightest' is widely perceived as one of the most pressing problems that Serbian society and economy are facing, getting worse year by year. Alongside the natural decline of population it is a source of deep concern for the future of the nation.

Facts and arguments most frequently used to illustrate and support this dismal perception can be stylized as follows. First, the number of Serbian residents who leave the country is very high relative to the population and is rapidly increasing. For example, it is claimed, based on the OECD statistics, that in the past 15 years some 650,000 people, mostly young and well educated, left Serbia. Another common claim is that those who leave are better educated and more talented than those who stay. The Global Competitiveness Index of the World Economic Forum traditionally ranks Serbia among the countries with the least capacity in the world to retain talents. For example, on a scale of 1 to 7 (1= all talented people leaving the country; 7= all talented people staying in the country), Serbia scored 1.8 in 2013 and 2.31 in 2019, far below median values for this indicator and far below Serbia's general ranking in GCI and its gross national income level. Third, migration intentions surveys show that a majority – two thirds or more – of students and young people want to leave the country. Fourth, there are well publicized estimates that emigration outflows cost Serbia around a billion dollars in terms of money spent on emigrants' education and lost GDP – each year! Fifth, by making demographic decline worse and depriving the country of mostly young, educated and entrepreneurial people, emigration undermines its chances of escaping the 'middle income trap' (World Bank, 2019).

While almost none of the above points are technically untrue, some of them are in essence half-truths. This is what will be shown in this chapter. The quoted number of people who left Serbia refers to gross emigration; the majority of these emigrants returned to Serbia after relatively short spells abroad; they might go again, be counted again as emigrants, and return again. Also, estimates of immigration are ignored in these statements. Furthermore, the reported educational structure of emigrant stock and flows is actually very similar to that of the resident population of Serbia. Surveys of migration intentions are very useful in understanding sources of frustration, but are of little use in predicting actual emigration rates. Finally, the calculation of costs of education of people leaving Serbia (deeply erroneous in its own right) is the most disturbing of all because it treats new emigrants as if they are already dead, as if many of them would not be unemployed or underemployed if they remained at home, and as if most of them would not take care of their families while working abroad and return, most with some new skills.

Thus, the presented distorted pieces of information or pure anecdotal impressions (often reflecting urban upper-middle class bias) have been turned into widely shared 'common knowledge' by self-reinforcing repetition.

This dominantly alarmist tone has also significantly influenced the government's policies toward migration. Catastrophic discourse eventually translates into policy thinking that something radical has to be done fast, before it is too late. For example, in 2019 the first draft version of the Strategy on economic migration (adopted eventually in 2020 as a more balanced document) focused almost entirely on ways to prevent and reverse the brain drain – without really establishing the facts on its extent or characteristics. In late 2019, even before the adoption of the Strategy, specific measures were legislated providing very generous tax reductions for high-skilled high-earning returnees. In the same fashion, a new measure of waiving the payment of Annual Personal Income Tax (levied at very modest rates on some 1% of top income earners) for those under the age of 40 was marketed as a brain drain prevention measure.

Most of the pieces of migration diagnostics floating in the public sphere are superficial and often misleading. This does not mean that there is no reason to worry about emigration. But it is important to get the facts right, and as one digs more into migration statistics, murky and incomplete as they are, a more ambiguous and extremely complex picture gradually emerges. This chapter in the first place attempts to make sense of the data.

We focus on the analysis of emigrant stocks and (gross) outflows from Serbia, with the descriptive quantitative analysis covering primarily European destination countries for which there is available harmonized Eurostat statistics. They comprise at least two thirds of total Serbian emigration and are by far the most important source of remittances.

However, our analysis only starts with this statistical exercise. By using some simple concepts, instruments and various eclectic and some- times innovative sources, we try to answer substantial questions on the nature of Serbian emigration and whether it has substantially changed in recent years. The two main direct diagnostic questions arising from the data and descriptive quantitative analysis are the following:

1. Are most Serbian emigrants permanent (settlement) or temporary (short-term or circular) migrants?
2. Are leavers significantly better educated than stayers? In other words, is there a (technically defined) brain drain from Serbia and how severe is it?

These questions are dealt with in Sections 3 and 4, respectively. In Section 5, the imbalances in the Serbian labour market are discussed as push factors for emigration. In Section 6 we conclude and provide some cautious recommendations.

2 Migration trends

2.1 Measuring emigrant stocks and flows

Most discussions on migration start with numbers. Producing reliable numbers, however, is an extremely complex task; understanding and interpreting these numbers is often even more difficult. Definitions, concepts and administrative and survey practices related to migrant stocks and flows vary across countries in ways that make full international harmonization impossible. Because we live in the world of sovereign states, it is easier for a country to account for immigrants residing within its borders than for its own current or former citizens beyond its reach. Thus, sending countries face more difficulties in tracking their emigrants than destination countries in counting their immigrants. To make matters worse, statistical capacity in typically low or middle income emigration countries is lower than in high income countries where most immigrants go. For these reasons, the best strategy for an emigration country is to collect data on its own emigrants from the immigration statistics of destination countries. Unfortunately, due to historical factors and its geographical position, Serbia is among the countries with the highest dispersion of its emigrants, which complicates the task of assembling the data from all important destination countries.

Countries use different concepts, definitions and data collection methodologies to compile statistics on migration flows. Definitions of who counts as an international migrant vary over time in the same country and across countries. The United Nations Recommendations on Statistics of International Migration defines an 'international migrant' as any person who has changed his or her country of usual residence (UN DESA, 2012), distinguishing between 'short-term migrants' (those who have changed their countries of usual residence for at least three months, but less than one year) and 'long-term migrants' (those who have done so for at least one year). However, some countries use different criteria to identify international migrants. Differences in concepts and definitions, as well as data collection methodologies, hinder full international comparability. An implicit assumption is that they do not systematically change over time.

[51] UN DESA (Odeljenje Ujedinjenih nacija za ekonomska i socijalna pitanja), 2012.

In contrast to estimates of migration stocks data[50], estimates on migration inflows and outflows by country of destination or origin are not available at the global level. Countries may calculate migration flows based on information from administrative sources, such as data derived from issuance of temporary or permanent residence permits and population registries, or they may use sample survey data. OECD and Eurostat data on migration inflows allow us to distinguish between different types of migration flows including work, family reunion, education, humanitarian migration (refugees, asylum seekers and the like) and other (such as retirees).

2.2 Evolution of emigration from Serbia

Serbia has traditionally been an emigration country. Since World War II, it has gone through several waves of intensified emigration. The first significant wave of emigration mainly for economic reasons started in the 1960s, with intensive emigration of mostly unskilled temporary workers to West Germany regulated by a bilateral agreement, soon to be followed by significant but still somewhat less intensive emigration to other Western European countries. This early wave of emigration also remains very relevant for the present migration outcome, through two main mechanisms.

The first of these mechanisms is the establishment of long standing diaspora networks that tend to cluster the members of the Serbian diaspora around certain centres in destination countries. The diaspora networks are potentially self-sustainable dynamic mechanisms which over a certain period facilitate permanent or temporary migration. The second is, in a way, the mirror image of the first. Some regions in Serbia traditionally maintained high levels of emigration following the early 'guest worker' wave, in particular Eastern Serbia. At some later point, Eastern Serbia was joined by another relatively poor region in South-Western Serbia – Sandžak (Penev and Predojević-Despić, 2012) To this day, this early wave of emigration has a considerable impact on the flows of returnees - pensioners, and on the stability of a part of remittances (more precisely, personal transfers) stemming from pensions in foreign currency.

The political and economic factors concomitant to the disintegration of the former Yugoslavia, trigerred the next large wave of emigration. This emigration wave included a shift toward long-distance overseas destinations, primarily Anglo-Saxon countries, from Canada to Australia and New Zealand, whose immigration rules favoured the admission of highly educated immigrants. On the other hand, Serbia's overall migration balance remained relatively stable during the 1990s due to an equally intensive inflow of ethnic Serb population from other parts of the former Yugoslavia.

The political changes in the early 2000s offered the promise of the economic and political integration of the country into the European Union, and temporarily slowed down emigration. Demand factors also played the role – at that time, the EU was concerned with the impact of Eastern Enlargement and hesitated even with visa liberalisation for Serbia. Still, emigration flows continued into the first decade of the 21st century and intensified with the post-2008-crisis recovery of the EU, particularly between 2015 and 2019. The Covid-19 lockdowns in 2020 suspended emigration flows abruptly, although not completely, and partly reversed the net emigration flows through the return (or inability to leave Serbia) of many short-term or temporary migrants.

As a result of multiple waves and the geographic dispersion of migration from Serbia, members of the Serbian diaspora can be found all over the world. The Serbian diaspora in the broadest sense is made up of different generations of migrants with different levels of ties with the kin-country.

According to the estimates of the United Nations, the total number of Serbian emigrants in 2019 was around 950,000[51], which accounts for about 14% of the resident population in the country (excluding Kosovo[52] and Metohija). In addition, one should bear in mind that, technically, in order for someone residing outside Serbia to be deemed a Serbian emigrant, they must be born in Serbia. An alternative criterion (in countries that do not keep statistics on residents by country of birth) is that emigrants must have Serbian citizenship. Since many Serbian-born citizens take the citizenship of the country they had emigrated to, the number of Serbian-born emigrants exceeds the number of Serbian citizens residing outside Serbia. We further discuss this issue in the following section.

2.3 Measuring emigration from Serbia — issues and purpose

In most domestic analyses, until recently, the standard approach to presenting data on emigration from Serbia was to use the Population Census as the main source or at least the starting point (e.g. Stanković 2014). As already explained, the origin-country statistics on emigrant stock are incomplete by definition and they always underestimate the true absolute number of emigrants. Moreover, such censuses distort relative distribution of emigrants across destination countries. Administrative annual outflow data (based on de-registration of residents) are even less helpful, since they heavily underestimate the true number of emigrants. The same is valid for return migration – if people do not de-register as residents, there is no need to re-register.

On the other hand, immigration is subject to much stricter regulations, with the process invariably involving residency visa application and registration with authorities in the destination country. Thus, a much better

[50] https://www.migrationdataportal.org/themes/international-migrant-stocks

[51] These estimates nominally include the emigrants from Kosovo and Metohija, since this province is treated as part of Serbia in the UN statistics. Most likely, the estimates only partially cover the international migrants originating from the Autonomous Province of Kosovo and Metohija, since all major destination countries treat Kosovo as a separate entity in their migration statistics. In any case, the estimate of 14% of Serbian citizens or natives abroad should be taken as an upper bound of 'true' share, since the denominator used is for the resident population in the territory of Serbia without Kosovo and Metohija.

[52] References to Kosovo shall be understood to be in the context of Security Council resolution 1244 (1999).

strategy is to look at the immigration statistics of destination countries and to look there for Serbian-born persons or Serbian nationals[53].

Applied to Serbia, throughout this chapter we define *emigrant stock* flexibly as 'the total number of Serbian migrants present outside of Serbia at a particular point in time'. 'Serbian migrants' might refer to either Serbian citizens or Serbian-born emigrants, depending on the available data in destination countries, but it excludes people of Serbian descent (either territorial or ethnic) who never held Serbian citizenship and were not born in Serbia. On the other hand, migration flows refer to the number of Serbian migrants entering or leaving a given country during a defined period of time.

Additional complications in measurement of migration, especially changes in emigrant stocks over time, are related to the changing status of Serbia as a polity. The state underwent four status changes between 1991 and 2006, and is still in an unresolved dispute over its sovereignty in its autonomous province of Kosovo and Metohija. Further complications arise from Serbian policy on dual citizenship. Like some other countries with a lot of people of their ethnicity outside its borders, Serbia as a rule allows dual citizenship. This is used mostly by Serbs from Bosnia and Herzegovina, Croatia and Montenegro – and they might reside either in their countries of origin, in Serbia, or elsewhere as immigrants. When people holding dual citizenship emigrate from Serbia, they might opt to register as immigrants from their countries of origin, which is particularly the case with Serbs born in Croatia and holding Croatian citizenship, who enjoy the privileges of EU citizenship in their access to work within the EU countries. For that reason, the destination countries' statistics on emigration of Serbian citizens may underestimate the true size of the emigration of resident nationals. On the other hand, although it is apparently a far less frequent phenomenon, some Kosovo Albanians take Serbian citizenship in order to travel and work in the European Union with fewer restrictions.

There is no easy fix for all these practical problems in capturing emigrant stock and migration flows, nor could there be. However, by combining various sources and pieces of information, we believe that it is still possible to get a reasonably accurate idea on the scope and trends in emigration from and immigration into Serbia.

2.4 Serbian emigrant stocks during the past decade

In this sub-section we look at the Eurostat data on the total number of residing Serbian citizens on December 31 each year by countries of destination. We use two concepts of emigrant stock – Concept 1 is simply the stock data by country as they are reported. By definition, Serbian citizens' immigrant stock in a destination country at the end of period *t* is equal to stock in the previous period *t*-1 increased by the new mechanical inflows in period t and newly born Serbian citizens in the destination country, and decreased by the outflows in period t that include admission into citizenship of the destination country (naturalization), returns to Serbia, migration to 3rd countries and deaths.

Concept 2 adds another component to inflows – Serbian citizens naturalized in period t. Note that Concept 2 is not the full stock of Serbian-born immigrants in a destination country, because Serbian-born emigrants naturalized before the period *t* remain unaccounted for. Instead, Concept 2 simply subtracts naturalized Serbian citizens in period *t* from the outflow component, realistically assuming that these people stay in their adopted country. What remains are returns to Serbia, migration to 3rd countries and deaths. For simplicity, one can assume that new births, migration to 3rd countries and deaths are all zero or nullifying each other. Thus, we can treat the difference between stocks in two periods as the billateral net migration balance.

Table 1 presents data on stocks of Serbian emigrants in 'Eurostat-Europe' at two end points of our analysis, 2010 and 2019 (or somewhat shorter period for 4 countries).[54]

Emigration stocks by countries of destination

Concept 1: Serbian citizens' immigrant stock at the end of year *t* = stock at the end of year / period *t*-1 + inflows in year / period *t* (immigration proxied by first time residence permits + new births) – outflows (returns to Serbia + migration to 3rd country + deaths)

Concept 2: Serbian citizens' immigrant stock at the end of year / period *t* = stock at the end of year *t*-1 + inflows in year / period *t* (immigration proxied by first time residence permits + new births + naturalized Serbian citizens) – outflows (returns to Serbia + migration to 3rd country + deaths)

[53] While annual publication of the Commissariat for Refugees and Migration 'Migration profile of the Republic of Serbia' presents such data, they are incomplete and overall inadequate. The consistent reliance on destination data to assess emigration size and flows was recently adopted by SORS, 2019, Arandarenko and Aleksić 2020, and Arandarenko, 2021.

[54] The data are all taken from the Eurostat database (https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Migration_and_migrant_population_statistics).

	2010	2019 (Concept 1 – recorded citizen stock)	2019 (Concept 2 – recorded stock + naturalization 2010-2019)	Emigrant stock balance 2010-19 Concept 1	Emigrant stock balance 2010-19 Concept 2
Germany	290,092	231,120	260,186	58,972	29,906
Italy	61,027	37,123	55,040	23,904	5,987
France	35,141	27,149	43,659	7,992	-8,518
Sweden	12,090	9,272	19,959	2,818	-7,869
Austria	111,708	107,369	114,522	4,339	-2,814
Slovenia	8,273	20,374	22,112	-12,101	-13,839
Belgium	3,270	4,433	6,358	-1,163	-3,088
Luxembourg	2,033	2,055	3,159	-22	-1,126
Netherlands	454	3,499	5,069	-3,045	-4,615
Hungary	18,080	9,349	14,002	8,731	4,078
Spain	2,848	3,274	3,791	-426	-943
Bulgaria	466	2,243	2,855	-1,777	-2,389
Malta	502	6,481	6,732	-5,979	-6,230
Greece	3,771	3,720	4,336	51	-565
Czech Republic	1,933	5,592	5,951	-3,659	-4,018
Finland	1,377	807	1,315	570	62
Slovakia	3,826	15,842	16,315	-12,016	-12,489
Cyprus	882	386	584	496	298
Poland	701	1,015	1,150	-314	-449
Portugal	219	219	321	0	-102
Ireland	300	359	659	-59	-359
Iceland	219	259	413	-40	-194
Estonia	12	48	48	-36	-36
Latvia	14	40	40	-26	-26
Lithuania	13	60	60	-47	-47
Romania	1,599	2,121	2,220	-522	-621
UK (‘12 & ‘18)	1,496	1,541	4,085	-45	-2,589
	2010/2012	2019 (Concept 1)	2019 (Concept 2)	Emigrant stock balance 2010-19 Concept 1	Emigrant stock balance 2010-19 Concept 2
Norway ‘10	1,228	5,706	6,731	-4,478	-5,503
Switzerland ‘12	94,979	60,595	87,057	34,384	7,922
	2013	2019 (Concept 1)	2019 (Concept 2)	Emigrant stock balance 2010-19 Concept 1	Emigrant stock balance 2010-19 Concept 2
Croatia	1,509	10,193	12,308	-8,684	-10,799
Liechtenstein	279	236	263	43	16

Table 1. Stock of Serbian emigrants in Eurostat-Europe, 2010 and 2019, Concept 1 and Concept 2

Source: Eurostat

Table 1 offers a lot of important and interesting insights. In general, contrary to global trends, we see further deconcentration of Serbian emigrant stock in Europe, especially according to Concept 1 (without naturalization). Among only a few countries in which, according to Concept 2, the number of Serbian migrants declined or remained roughly unchanged (coloured green or yellow in Table 1; while cells with an increase in Serbian migration stock are colored red) are those with the largest Serbian immigrant stock – Germany, Austria, Switzerland and Italy. On the other hand, there are some booming destinations. Among those destinations which at least doubled their stock of Serbian migrants between 2010 and 2019 or over a somewhat shorter time span are Slovenia, Slovakia, Croatia, Norway, Malta, Netherlands, United Kingdom and Czechia. However, those destinations started from a much lower base and, by 2019, the stock of Serbian immigrants in Slovenia, the country with the largest stock in this fast growing group, was only 35% of Italian and 8% of German stock. These destinations are dominated by new member states, with the exception of Norway (not in the EU) and United Kingdom and Netherlands.

Cumulative naturalization rate (expressed as a ratio or relative difference between Concept 2 and Concept 1 stocks in 2019) also varies widely. It is highest for the United Kingdom, Sweden, Switzerland, France, Italy, Hungary, Netherlands and Belgium. On the other hand, it is quite low or negligible in most new member states. The difference between new and old member states (OMS and NMS hereafter) in this regard can be explained by several factors. First, OMS are mature and well established migrant destinations where the average duration of stay is much longer, and for individual migrants to be able to apply for citizenship, there is usually a minimum residence period requirement. Second, the bar (criteria) for naturalization set by most NMS might be generally higher than of OMS. Third, the demand of Serbian immigrants for citizenship of old and richer EU MS is stronger than for that of new and poorer EU MS (except in those MS with significant ethnic minorities in Serbia, such as Hungary). Fourth, the structure and characteristics of Serbian immigrants may systematically differ from one country to another.

The summation of cumulative net flows in the period 2010-2019 (or somewhat shorter in several cases) for all countries for which the data are available on Eurostat – EU MS excluding Denmark, but including Switzerland and Norway – yields widely different results with different signs depending on which concept is used. While according to Concept 1, the net outflow of Serbian immigrants from this 'Eurostat universe' is around 88,000, according to Concept 2 there was net immigrant inflow (that is negative net migration from Serbia) of around 41,000. Spread over 10 years, the Concept 2, estimate would imply average annual outflow to the 'Eurostat universe' of around 4,100 Serbian citizens.

Our 'Eurostat-Europe' net emigration estimates appear to be overall lower than the estimates of SORS (2019), with sometimes wide variation across individual countries.[55]

The cumulative Serbian overall net migration balance for the period 2011-2018 estimated by SORS was around -97,000, implying average annual net outflow of some 13,000 people with an increasing negative trend reaching 22,000 in 2018 and projected to get close to 30,000 in 2020. According to SORS, the estimated net negative migration for countries of our 'Eurostat-Europe' in the period 2011-2018 was roughly similar to the global number, since Serbia has significant net immigration from Bosnia and Herzegovina and Montenegro, which is enough to keep in check relatively mild net outflow to the rest of the world. However, the main discrepancy between the two estimates arose from two important European destinations. The case of Croatia is interesting – according to our calculation and based on stock and naturalization data from Eurostat, there was a strong net inflow of Serbian citizens into Croatia (by over 10,000 between 2013-2019), while SORS estimates are completely different implying net immigration into Serbia of some 15,000 persons between 2011-2018. The possible reason for these opposing estimates, both based on files from the Eurostat database, lies in different citizenship regimes in two countries – while Croatia does not allow double citizenship (although informally tolerates it), Serbia does. This potentially causes overcounting and asimmetry in billateral and by extension global accounting of migration flows and stocks, and is just an illustration of the many migration statistics challenges.

On the other hand, by far the largest difference between the two estimates regards the most important destination country – Germany. While according to the harmonized Eurostat database which we used, Concept 2 the stock of Serbians dropped by some 30,000 persons (2010-2019), according to the SORS estimates and based on German statistical data, there was net inflow into Germany of almost 50,000 people in the period 2011-2018. However, this apparent net inflow is most likely a statistical artefact as a result of gradual attrition of the categories 'former Yugoslavia' and 'Serbia and Montenegro' as countries of origin which last appeared in German stock statistics in 2016. Simply put, former Yugoslav citizens already in Germany were reclassified into Serbian citizens during this period.

Assuming that the migration balance with the rest of the world outside 'Eurostat-Europe' is about neutral, annual net outflow of Serbian citizens in the past decade would be in the range 4-13,000 persons, based on the two presented estimation exercises for Eurostat-Europe. This wide band can be trimmed from both sides. If we assume that the 'true' migration balance with Germany is about neutral, this would put the net outflow estimates in the past decade at somewhere between 50-70,000 persons – that is, some 5-7,000 per year. We shall further deal with these problems in the context of migration flow analysis in Section 3.

[55] This is no surprise, since SORS used a set of varied sources depending on data availability and responses to its questionnaire aimed at national statistical offices, diverse calculation methods including modelling exercises and imputations and somewhat different definitions. The main purpose of the SORS exercise was to get the net migration balance to be used in the calculation of total population dynamics for the period 2011-2018 and population projections from 2019 onwards.

3 People or workers?

3.1 Evolving migration flows from Serbia

Referring to the influx of guest workers into Western Europe during the 1960s and 1970s, Swiss playwright Max Frisch famously quipped through one of his characters – 'We wanted workers; but the people arrived'. Inevitably, the features of work capabilities and skills come in a package with other human dimensions, as Frisch aptly formulated. Interactions between locals and guest workers could not be limited only to workplaces and only for a defined period of time. Many foreign workers managed to stay despite formal limitations and to settle in West Germany and other Western European countries.

Workers from SFRY (including Serbia) were part and parcel of the large post-war inflow of temporary migrants, many of whom remained in Western Europe throughout their working careers, until retirement and beyond.

Migration flows slowed down in the 1970s and 1980s – mostly due to receiving – country restrictions imposed as a consequence of the rise in unemployment due to economic crisis and reduction in labour demand.

The 1990s brought about a large turnaround in migration trends caused by the violent dissolution of SFRY. Due to economic collapse and general political insecurity there had been a large emigration of both 'workers' and 'people' throughout the decade – with often intertwined economic, family and humanitarian motivations. This wave was dominantly supply (push) driven. Wages in Serbia dropped the most for highly educated middle class urban workers. Consequently, new faraway destinations such as Canada and Australia gained in importance because their point immigration system favoured high-skilled emigrants.

At the same time, people were immigrating to Serbia in large numbers – mostly ethnic Serbs from Croatia and Bosnia and Herzegovina, where humanitarian and family reasons dominated. After 1999, many internally displaced persons from Kosovo and Metohija (especially outside of the northern part) became residents of Central Serbia and Vojvodina, further balancing mechanical losses due to emigration. In the 2000s emigration continued at a somewhat slower pace, driven by a combination of economic and family reasons, and the EU again regained full dominance as the main destination area, while overseas Anglo-Saxon countries lost in importance. Some new minor destinations emerged, such as rich Middle Eastern countries and China, but migration data on them are scarce.

In the rest of this section, after a brief detour into economic theories of migration, which will provide us with a useful framework for analysis, we look closer at the most recent trends regarding the outflows of Serbian mi- grants to the EU.

3.2 Economic theories of migration and their operationalization

Among many, mostly complementary, theories of migration (neoclassical, new economics, mobility transition, institutional, systems and networks, segmented labour markets, world systems, conflict etc.) the first two are especially useful in providing a simple dynamic framework to understand the features and the evolution of migration from Serbia.

The neoclassical theory of migration (NTM assumes that economies and labour markets converge in the long run through trade and migration). Migrants act as rational actors driven by economic motives. They move from poorer countries where labour is abundant and wages are low, to richer countries where labour is scarce and wages are high. Within this framework, migration is implicitly seen as a permanent, typically life-long decision on the part of the individual migrant, based on a pre-calculated positive net present value of migration.

Basically, NTM is the theory of human capital investment applied to migration decisions (Sjaastad, 1962). One practical consequence of interest is that the permanent migrants' ties with the home country tend to weaken with the passage of time.

The second approach is the so-called new economics of labour migration (NELM) as developed by Lucas and Stark (1985) and Stark and Bloom (1985). This approach views individual migration as part of a household utility maximization strategy and as a typically temporary or circular phenomenon. The household in a way sends the migrant abroad as a part of its risk-optimization ('hedging') strategy. At around the time this theory was developed, short-haul, shorter-term migration (e.g. Mexicans to the US; Southern Europeans to Western Europe etc.) were gaining in importance.

In our simplified re-interpretation, the neoclassical migration theory is about the migration of people, while the new economics of labour migration is about the migration of workers. Of course, individual migrants do not have to decide and know in advance for how long they would migrate and whether they would return or not; life often takes an unexpected course and would-be temporary workers become 'people' in the process, and vice versa. However, the reasons for migration are of interest for policy, and variation over time in the distribution of migration by category and country may in part explain differences in Serbian emigrants' economic and social outcomes and the macro-economic, labour market and demographic impact of emigration.

3.3 Flows

Having an idea about the ratio between the migrant stock and gross migration flows should provide some insights into which one of the two above-sketched economic theories of migration could be consid-

Country	Flow		Stock		Flow as % of stock	
	2010	2019	2010	2019	2010	2019
EU 28	22,818	62,190	560,631	504,143	4.1%	12.3%
Czech Republic	199	3,609	1,933	5,592	10.3%	64.5%
Germany	3,327	21,619	290,092	231,120	1.1%	9.4%
France	1,116	1,196	35,141	27,149	3.2%	4.4%
Croatia		10,644		10,193		104.4%
Italy	6,631	1,119	61,027	37,123	10.9%	3.0%
Hungary	1,226	3,162	18,080	9,349	6.8%	33.8%
Malta	86	1,840	502	6,481	17.1%	28.4%
Austria	3,577	3,764	111,708	107,369	3.2%	3.5%
Poland	114	730	701	1,015	16.3%	71.9%
Slovenia	1,040	5,105	8,273	20,374	12.6%	25.1%
Slovakia	483	4,290	3,826	15,842	12.6%	27.1%
Sweden	1,228	1,436	12,090	9,272	10.2%	15.5%
Switzerland		1,053		60,595		1.7%

Table 2. Inflows / Stocks (Concept 1) 2010-2019 *Legend: Flow as % of stock: Yellow – less than 9%; light green – 9-25%, green – 25% and more*

Source: Eurostat

ered to better reflect the reality and whether their relative importance in explaining migration trends have changed in recent years.

Table 2 below compares the flow and stock data for the twelve most important destination countries within 'Eurostat-Europe' in 2010 and 2019. Six of these countries are traditional destinations (5 OMS – Germany, France, Italy, Austria, Sweden; and Switzerland), while seven are new destinations (Czech Republic, Slovakia, Croatia, Slovenia, Malta, Hungary and Poland). The full data for years 2010-2019 are presented in Annex, Table A1.

The annual gross inflows of Serbian immigrants to the EU-28 as a whole almost tripled between 2010 and 2019, while at the same time the immigrant stock decreased according to Concept 1, or remained essentially unchanged (increased by less than 10%) according to Concept 2. As a consequence, the flow-to-stock ratio exactly (Concept 1) or al- most (Concept 2) tripled.

While all OMS in Table 2 have single-digit flow-to-stock ratios, and all of them, except for Germany, have a ratio below 5%, all NMS have these ratios above 25%, and in the extreme case of Croatia the ratio is 104%, suggesting that Serbian immigrants to Croatia registered for the first time in 2019 had an expected average duration of migration spell of less than a year.

In most countries, except Italy and Switzerland, the flow to stock ratio increased between 2010 and 2019, implying the shortening of the expected duration of migration spell of new migrants. However, the magnitude of change was very different. While in OMS, except for Germany, on the positive and Italy on the negative side the change was moderate, in NMS the flow to stock ratios were two to six times larger.

These trends partially reflect the maturity of destinations – old destinations have larger stocks and lower flow to stocks ratios, while the opposite is true for new destinations. However, much faster growth of flow to stock ratios in NMS (except for Germany where the ratio grew the most) suggests that the dominant reasons for migration to NMS and Germany might be different compared with OMS.

This hypothesis can be checked by looking at country statistics on the reasons for the issuance of residence permits for first-time migrants from Serbia, available at Eurostat, as presented in Table 3.

Reason	2010	2015	2016	2017	2018	2019
Total	22,818	27,195	31,289	40,350	51,942	62,190
Family reunion	9,699	13,140	12,799	13,681	15,448	15,667
Education	2,129	2,384	2,381	2,478	2,477	2,340
Remunerated activities	6,719	6,496	9,358	17,333	27,383	32,639
Other	4,271	5,175	6,751	6,858	6,634	11,544

Table 3. Reasons for the issuance of first-time residence permits to Serbian nationals in the EU-28

Source: Eurostat

The most dynamic growth was recorded for remunerated activities (Table 3). For most of the period between 2010 and 2019, family reunion was the most frequent reason (until 2017). While it constituted almost 43% of total permits given in 2010, it was reduced to 25% in 2019. Family reunion visas do not preclude migrants from working and also represent a track for possible naturalisation but they do imply lower activity rates. On the other hand, migrations for work more than tripled between 2016 and 2019 and in 2019 they represented 52.5% of all first residence permits issued (up from 29% in 2010), and were more than twice as large as first-time residence visas issued for family reunions.

Table 4 focuses on the evolution of ratios of work to family reunion reasons for issuing first-time visas by destination countries. Switzerland is also included.

The issuance of work permits is far more frequent in the NMS, while family-related residence visas are the dominant category for Serbian migrants in the OMS (Table 4). Overall, the OMS destinations show stagnating or mildly declining gross inflows and their work/family ratio is well below 1, meaning that family reunion reasons dominate.

Germany again appears to be the single most important exception from the rule, with a strong rise in the first-time work permits issued since 2015. The ratio of work to family residence permits roughly

Country	2010	2015	2016	2017	2018	2019
EU 28	0.69	0.49	0.73	1.27	1.77	2.08
Czech Republic	0.58	2.59	3.05	3.84	11.31	15.63
Germany	0.27	0.15	0.53	0.83	0.74	0.62
France	0.34	0.24	0.21	0.26	0.29	0.34
Croatia	no data	0.36	1.13	3.01	20.48	22.54
Italy	1.68	0.45	0.41	0.28	0.42	0.48
Hungary	1.82	4.26	5.64	19.4	19.56	35.81
Malta	4.25	4	5.5	9.42	7.44	8.45
Austria	0.06	0.09	0.09	0.08	0.11	0.14
Poland*	6.5	no data	39.18	76	19.13	9.14
Slovenia	2.85	3.73	4.94	5.52	6.79	5.70
Slovakia	2	2.01	2.33	9.59	9.74	12.90
Sweden	0.2	0.31	0.23	0.28	0.37	0.33
Switzerland	no data	0.17	0.21	0.24	0.26	0.00

Table 4. First-time visa issuance in EU-28 and Switzerland: Work / family reunion ratio

**Family permits barely double-digit in Poland.*
Source: Eurostat.

	Number of years in Germany								
Year	**Total**	**Below 1**	**1-4**	**4-6**	**0 - 6**	**30 - 35**	**35 – 40**	**40 +**	**30 +**
2019	237755	12490	31685	17555	61730	11165	6405	41830	59400
2018	231230	12190	29930	16390	58510	8375	7235	41400	57010
2017	225535	11595	29045	14075	54715	6055	8355	40825	55235
2016	223100	10990	31350	11600	53940	5545	9040	40095	54680
2015	230427	17658	32943	11456	62.057	6041	9366	39480	54887

Table 5. Serbian immigrant stock in Germany by migration spell distribution in the period 2015-2019

Based on German migration statistics

tripled between 2010 and 2017 and reached 0.83 in 2017 but then dropped to 0.62 in 2019. This rapid increase coincided with the introduction of German Western Balkan regulation, which simplified the procedure for Western Balkan migrants without professional qualifications to work in Germany. However, this ratio is still less than half the EU average of 2.08 in 2019.

With the rapidly growing flow of migrants and the largest Serbian diaspora, Germany looks desirable as a settlement destination for many new migrants, even though the Serbian emigrant stock has apparently been rather stagnant or declining in the past decade. The declining stock may simply be the net effect of large groups of long-term migrants retiring and returning to Serbia and new, somewhat smaller groups of potentially permanent migrants taking their place.

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Total	18,508	12,590	14,197	10,362	9,608	9,496	10,614	9,644	9,489	11,153
Total EU	11,157	10,179	12,585	9,156	8,944	8,801	10,776	9,109	8,778	10,353
Old EU	94.6%	77.5%	85.6%	87.9%	90.1%	92.5%	87.1%	92.9%	93.4%	93.4%
New EU*	5.4%	22.5%	14.4%	12.1%	9.9%	7.5%	12.9%	7.1%	6.6%	6.6%
Top 10 destinations										
Germany	3297	2,885	5,974	2,589	2,228	1,945	2,599	1,949	2,480	3,120
Italy	1080	1,103	1,076	1,342	2,066	2,648	2,280	1,721	2,040	2,561
Switzerland	6859	4,261	3,362	2,529	1,839	1,655	1,582	1,514	1,440	1,421
France	4517	2,110	1,162	1,327	1,328	938	1,624	1,466	894	1,144
Sweden	338	793	1,144	965	921	1,172	1,236	1,808	1,273	1,037
Austria	828	548	709	823	671	633	751	557	625	1,008
Slovenia	211	169	139	184	155	127	159	153	179	262
Belgium	164	117	188	234	141	194	184	259	202	242
Luxembourg	194	81	68	49	79	55	55	97	225	201
UK	465	523	375	320	180	129	144	120	131	157

Table 6. Acquisition of citizenship in Eurostat-Europe by Serbian citizens, 2010-2019

**Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia, Bulgaria, Romania and Croatia*
Source: Eurostat.

However, a closer look at the structure of Serbian immigrants in Germany, according to the duration of stay in Table 5, reveals the stagnant stocks of those who are less than four years in Germany since 2015. Thus, the increased first-time inflows into Germany are not translating into growing stocks of short-term migrants staying for less than 4 years.

The German statistics on Serbian migrant flows contain one special type of temporary migrants – asylum seekers, who are most often very poor people attracted by otherwise meagre pocket money benefits available to migrants as well as the possibility to work informally while waiting for the processing of their asylum applications that almost invariably end up being rejected. For Serbian migrants in Germany, asylum seeking is usually the most frequent reason within the 'other reasons' heading. A paper analysing asylum migrants around 2015 found that about 4,000 Serbian illegal asylum seekers resident in Germany at the time waited for their application to be processed for 15 months, on average. Besides, they were educationally clearly negatively selected (Guichard, 2020).

This analysis shows that rapidly increased flows in the 2016-2019 period did not translate into growing stock of recent Serbian immigrants. While the annual inflow increased from 10,263 in 2016 to 21,619 in 2019, the stock of those with residence shorter than 4 years increased by less than 2,000, or less than 10% of cumulative increase in flows over the same period. Still, the bulk of that modest increase happened between 2018 and 2019. Thus, one cannot exclude the possibility of a reversal of the relatively favourable trend of predominantly temporary migration into Germany.

Despite the manifold increase in flows and stocks during the last decade, the permanent migration potential of NMS remains very limited. The NMS do not actively follow a policy of permanent migration / naturalization, except for foreign nationals who belong to their own ethnicity. Besides, the NMS are largely not recognized as desirable permanent or long-term destinations for potential Serbian migrants, with the partial exception of Slovenia.

Table 6 provides empirical confirmation for these points. Overall, there has been a declining trend in acquisition of EU citizenship by Serbian citizens since 2010. Over the entire period, the NMS granted less than 10% of total citizenships granted by the EU countries to Serbians, with the lion's share going to Hungary, Croatia and Slovenia. On the other hand, over the last decade, the naturalization of Serbians sharply dropped in Switzerland, France and the United Kingdom, was flat in Germany and Austria, and strongly increased in Italy and Sweden.

Different annual naturalization rates (defined as share of naturalized Serbian nationals in the total stock of Serbian nationals in the destination country) also reflect the naturalization policies of the recipient countries, especially their attitudes toward dual citizenship. The most important destinations for Serbian migrants - Germany, Austria and Switzerland - are restrictive in that regard and stick to the principle of 'avoidance of multiple nationalities'. This results in low rates of naturalization. For example, the average naturalization rate for Germany in the last decade was less than 1.5% annually. On the other hand, the average naturalization rate for Sweden is about 7%.

The data for Hungary apparently refer to resident citizenships only, since the number of citizenships granted to Serbian citizens of Hungarian ethnic extraction after 2011 when Hungary introduced a new permissive law on citizenship exceeds 90,000. As a further complication, if these Serbian residents with dual Hungarian citizenship migrate elsewhere in the EU they will invariably be recorded as Hungarians because of employment and residence privileges they enjoy as citizens of an EU member state.

4 Demand (pull) and supply (push) factors of work migrations

In this section, we attempt to provide reasonable explanations for the overall and structural migration outcomes in the past decade observed and presented in the previous section, by connecting them to features of the Serbian labour market and labour force that could most plausibly have influenced these outcomes.

Migration decisions are also heavily influenced by the availability of migration options in the destination countries, for potential migrants overall and for certain groups among them. Thus, we also try to infer from the available data whether the size and structure of recent emigration from Serbia was primarily influenced by so-called push factors (the most important among them being the probability of employment and expected earnings in the origin country) or by pull factors (expected earnings and probability of employment in the potential destination country, as well as the ease of migration determined by the destination country's immigration policy).

On the demand (pull) side in receiving countries, the full recovery of the economy from the Great Recession occurred only in 2013, which after a long low tide pushed the demand for labour, most strongly in Germany as the economic engine of the EU. The recovery, facilitating the expansion of demand for labour, coincided with the retirement of large baby-boom cohorts, which in turn increased the replacement demand for labour.

In January 2016, faced with critical workforce shortages, Germany introduced the so called 'Western Balkans Regulations'. These give citizens of the Western Balkan countries, including Serbia, the chance to take up employment in Germany, provided that they have a binding job offer and the approval of the Federal Employment Agency (BA). Even be- fore that, medical workers were arriving through via organized channels through the 'Triple win' programme based on a 2013 bilateral agreement between German and Serbian employment services. The major novelty of the new regulation was that, unlike in other third countries, there were no requirements regarding the workers' professional qualifications. This regulation, initially valid until the end of 2020, was extended to the end of 2023.

The labour market integration of those working in Germany on the basis of the Western Balkans regulation was evaluated as a success in terms of employment stability and earnings, compared to both other groups of migrants and German job entrants. The proportion of those who are unemployed and those receiving benefits in Germany is lower than that of all other groups of migrants (IAB, 2020).

The Great Recession was felt somewhat less strongly in Central Europe. Still, with the recovery in Western Europe, work migration flows from NMS to OMS intensified again, creating severe labour shortages in sending countries. Unlike the OMS which manage to neutralize their natural population decline with a positive migration balance (which through the higher fertility rate of migrants tends to additionally improve the population balance), in most NMS, natural population declines and negative emigration balance goes hand in hand.

In the second half of the past decade, more advanced NMS managed to slow down or reverse the negative migration balance, pursuing more aggressively the policy of importing temporary labour, especially from Ukraine, but also from the Western Balkans and other low-wage regions. The crude rate of net migration (the ratio of net migration including statistical adjustment during the year to the average population in that year per 1,000 persons) for the region as a whole turned positive in 2018.

Thus, the demand for foreign labour in NMS can, in part, be explained by the hydraulic mechanism of labour migrations. Workers move from Central and Eastern European NMS to OMS in Western Europe; then their place is filled by third country nationals – from Ukraine, the Western Balkans, and further afield.

These movements within the EU can also help explain the growing divide between the nature of Serbian emigration into OMS (except Germany) and NMS. OMS experience slower growth and their expansion and replacement demands are mostly met by the immigrants from NMS because they face no restrictions in access to jobs. This does not mean that the doors are closed for new immigration of Serbian workers into OMS; but this is largely possible due to the long-standing Serbian diaspora and thus Serbian migrants increasingly use family visa channels rather than work visas. Austria, the second most important destination for Serbian migrants among OMS, is a paradigmatic example – the total number of first-time visas issued declined from 5,288 in 2015 to 3,764 in 2019, with the share of family visas in total fist-time visas growing from 55% to 61% over the same period.

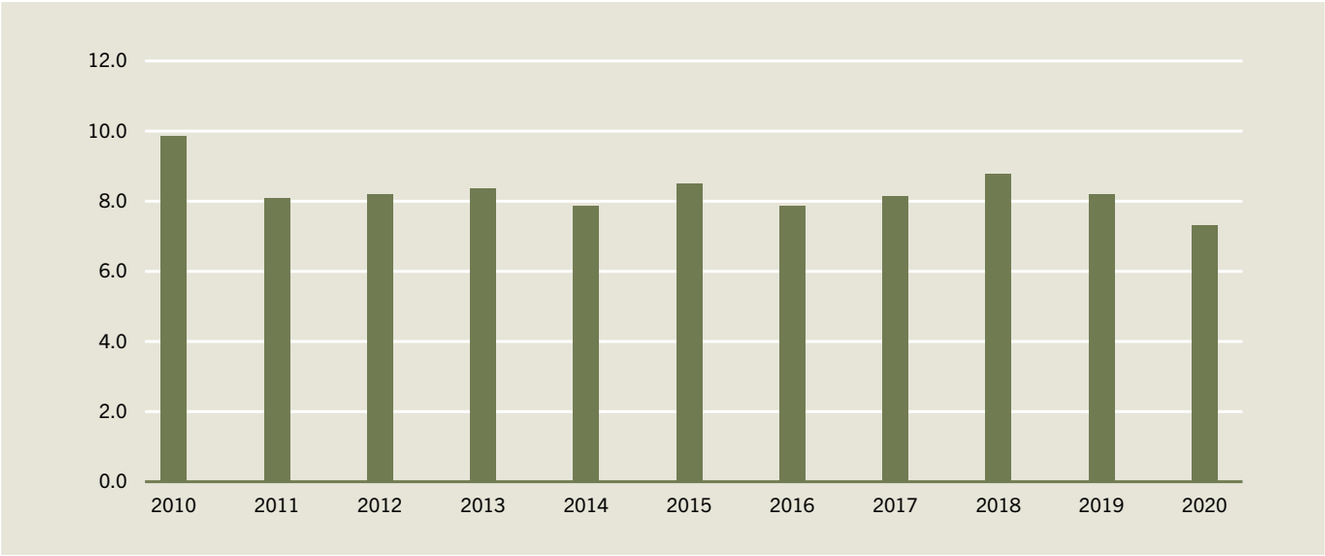
5 Remittance-intensive emigration

Remittances are a complex phenomena, often difficult to demarcate from other sources of private income. In international statistics, workers' remittances are defined as transfers made by migrants employed and resident in the compiling economy to their relatives in their country of origin. Workers' remittances include household to household transfers in cash and in kind. In everyday but also in expert usage in Serbia this narrow definition is often confused with the broader statistical concepts of personal and total remittances.[56]

Remittances are especially important for low-income countries and on average account for nearly 4 percent of their GDP, compared with about 1.5 percent of GDP for middle-income countries. However, as presented in Graph 1 below, the remittance inflow expressed as a percentage of GDP in Serbia, which is an upper-middle-income country, was over 8% on average during the last decade.

Unlike, for example, FDI inflow, which oscillated within the wide corridor between some 2.5% and 8% of GDP, remittance inflows showed remarkable stability during the past decade (graph 1). Even in the pandemic 2020, a steady and strong stream of remittances continued, showing strong resilience amid the unprecedented global obstacles to movement of people. The share of total remittances in GDP flowing into Serbia is more than five times the average for middle-income countries. On the other hand, the share of Serbian-born population living outside the borders of Serbia is somewhere between three and four times above the world average of 3.5%.

[56] According to the Balance of Payments Manual (IMF 2008) 'personal remittances' include 'personal transfers' which comprise workers 'remittances' and compensation of employees, that is net income being generated through employment in other economies, either as seasonal or border worker, or as resident with non-resident entities (e.g. international institutions domiciled in the resident's home economy).



Graph 1. Volume of remittances compared with the GDP, 2010-2020

Source: World Bank

Putting the share of the emigrant population in the resident population in relation to the share of remittances in GDP can be interpreted intuitively as the share of the local population that needs to be 'sent' abroad to get remittance inflow of 1% of GDP. We can call this compound expression the 'remittance intensity ratio'. The lower the ratio, the more efficient the migrant population is in 'producing' remittances. Some of the factors influencing the remittance intensity ratio are: the age structure of emigrants; their employment rate; employment-weighted earnings differentials between the destination countries and sending country; share of the resident population receiving other components of total remittances such as personal income transfers and pensions, for example telemigrants and retirees. This all points in the same direction - the larger the share of work migrants (of the NELM type) and non-migrants receiving work-related total remittances, the larger the share of intensity of remittances.

The remittance intensity ratio for Serbia is below 2 and is thus the most favourable among the Western Balkan countries and among the most favourable globally. This further strengthens our finding that a large and growing part of the Serbian emigration is of NELM-type. Serbs migrate more often as workers than as people.

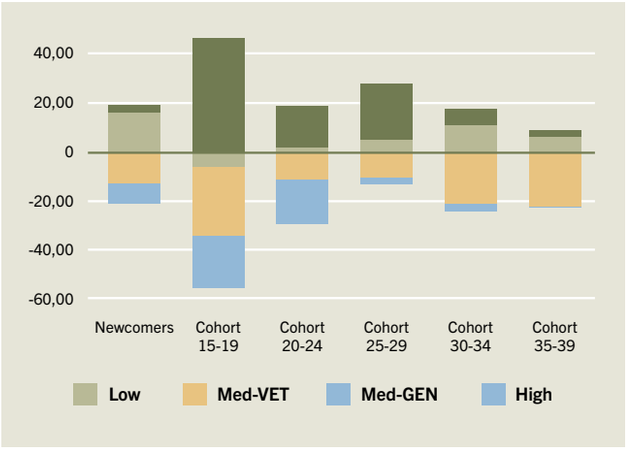
6 Skill structure of Serbian emigrants: dissecting the brain drain narrative

The brain drain, an ugly expression that has unfortunately entered scientific jargon on migration, in conventional use, means simply the emigration of highly trained or qualified people from a particular country. More technically, the brain drain happens only if the educational structure of emigrants ('movers') is better than the educational structure of 'stayers' (inclusive of returnees and immigrants). Comparisons can be made in shares of three broad educational groups (low-skill, medium-skill and high-skill) or in average years of schooling.

However, there are no directly available data to assess what happened with these relationships for Serbian movers and stayers in the past 10 years. Standard annual statistics do not provide information on the educational structure of immigrants. There is a special brain drain database created by the German Institute for Employment Research (IAB), comprising data on immigrants by nationality based on population censuses in 20 leading OECD countries, but the latest data in it are from 2010.

In 2010, despite some modest evidence of the over-representation of high-skilled emigrants, Serbia fared better in that regard than most other sending countries in the database. The emigration rate of Serbian high-skilled workers was well below average for its size and income group (Kerr, 2016). Nevertheless, this database did not attract the attention of migration researchers in Serbia even when it was up-to- date, and the adopted view of Serbia as one of the countries with the highest brain drain was never challenged on those grounds.

It is possible to adopt at least two different strategies to indirectly assess what happened with the skills structure of Serbian net migration since



Graph 2. Cumulative net-migration flows by age cohort and educational attainment level, 2015–2019

Source: Leitner (2021), calculations based on the LFS data of Serbia (ETF-wiiw, 2021).

2010. The first is based on national labour force statistics, and the second on international migration statistics. We draw on the work of Leitner and Arandarenko to present these complementary yet methodologically completely different approaches (Leitner, 2021a; Arandareko, 2021).

The former strategy, adopted by Leitner (2021), presented also in Arandarenko (2021) involves approximating the net migration calculating the size and skill structure of age cohorts over time using the data from consecutive Serbian Labour Force Surveys. The idea is that both changes in size as well as in educational structure of the migration-prone age cohorts 15-39 years of age can be ascribed to net migration, assuming that the mortality rates for these age groups are negligible.

Leitner's analysis starts in 2015, looking at the cohorts who were 15- 39 years of age in 2010, pooled in 5-year brackets to get more stable estimates. In 2015, the first year of the analysis, each cohort has al- ready aged by 5 years and aged by another 4 years by 2019. Educational levels are divided into four categories: low (primary or lower secondary education), medium general (upper secondary general education/gymnasium), medium VET (upper secondary vocational education and training), and high (tertiary education), based on ISCED.

Expectedly, the overall net migration balance for working-age people be- low 40 within the given time frame is negative. The net emigration is highest among the three youngest age cohorts; cohort 25-29 has high net immigration, and that reverts again into high net emigration among the two oldest age cohorts. The cumulative net emigration total between 2015 and 2019 within the 15–39 age group (as of 2010, inclusive of those reaching 15 years of age in the meantime) is estimated at -37,400 people. This estimate appears to be lower than expected but is still within a plausible range.

However, the most important finding of Leitner's statistical analysis is that, contrary to intuition and widespread perceptions, over the observed period there has been net immigration of the highly educated, i.e. those with college and university degrees. On the other hand, the analysis finds high net-emigration flows of those with Med-VET and Med-GEN skills. Second, as the largest country in the Western Balkans, Serbia has universities that attract a sizeable share of Serbian-speaking students from neighbouring countries, notably Bosnia and Herzegovina and Montenegro, but also from elsewhere. It is very plausible that the retention rates of high-skilled student immigrants from Bosnia and Herzegovina and Montenegro are higher than corresponding rates for Serbian students elsewhere, with an overall positive net migration balance.

Leitner found that net emigration was mainly driven by those with a medium level of education leaving the country (Graph 3), especially among Med-VETs, which is the largest group among Serbia's medium-educated, representing almost three quarters of all medium-skilled in 2018. Nevertheless, because the net emigration rates are relatively modest, in relative terms, the loss of people with Med- VET as their highest level of educational attainment was relatively small. Furthermore, there was non-negligible net emigration of Med- GENs, much smaller in absolute but sizeable in relative terms.

It is interesting to note that these skill-differentiated emigration patterns in the period 2015-2019 identified by the cohort approach outlined above are exactly the opposite to those identified on the basis of destination country statistics up to 2010 contained in the IAB's brain-drain database. This could mean that the V-pattern of Serbian emigration stock by skill levels has flattened, and together with the finding of a net immigration of high-skilled might indicate a significant improvement in comparison with the already relatively favourable skill structure of Serbian emigration in 2010.

As mentioned, another recent research paper (Arandarenko, 2021) also questioned this dominant narrative on brain drain as the main worrisome aspect of Serbian emigration. In this study, the main destination countries were divided into those mostly receiving high-skilled Serbian immigrants, and others, taking mostly medium- and low- skill immigrants. Assuming no major changes in relative skill structure of Serbian immigrants by countries, a more dynamic increase in the stock of Serbian immigrants in 'brain-drain' countries would, due to the composition effect, suggest the worsening of the skill balance of Serbian emigrants, and vice versa.

Anglo-Saxon countries are world leaders in attracting 'global talents', that is, high-skilled immigrants. They have flexible labour markets open to outsiders and high returns to education and skills. Canada and Australia in particular actively encourage high-skill immigration with their points-based systems. Traditionally, the United States and the United Kingdom also attract many high-skilled immigrants from Serbia. Outside of that group, the Netherlands has introduced a tax-relief scheme for young talents that makes it especially attractive for young university graduates. The data from the Serbian population censuses, however incomplete, (e.g Stanković, 2014) and some comprehensive case studies (e.g. Despić, 2015) fully confirm that high-skill emigrants dominate or at least comprise about half of the total emigrant stock in Canada and the United States, and certainly make up an above-average percentage of Serbian emigrants in other Anglo-Saxon countries.

Data on inflows to Anglo-Saxon countries available in the OECD database or obtained by SORS via bilateral exchange reveal modest and essentially stagnant annual flows from Serbia. For example, between

2010 and 2018, the annual gross flow of Serbian migrants to Australia was between 200 and 300, and to Canada between 250 and 500, without a clear trend. Only the numbers of those migrating to the USA increased – to around 1,000 annually after 2015 (SORS, 2019). Basically, neither of these countries would enter the list of top ten gross emigration flow destinations presented in Section 3. Thus, despite the natural tendency of high-skilled migrants to emigrate to Anglo-Saxon countries, and the relatively significant migrant stock there especially due to large inflow in the 1990s, it seems that Serbia has successfully kept this tendency in check for the past two decades (Arandarenko, 2021).

The recent available data on Serbian immigrants in Germany, however, require close attention, given that both the emigrant stock and flows to Germany make up around a third of the total stock and flow of Serbian emigrant numbers in the EU. In particular, the Serbian public has become very alarmed by the apparent drain of doctors and medical staff in general, as well as engineers and IT professionals.

Fortunately, some important new analyses as well as the data from German immigration statistics can be used to attempt an assessment of whether the up- ward skill shift has really happened. The first analysis is the IAB study (Bruecker et al. 2021) on the effects of the Western Balkan Regulation.

Since this regulation eases the employment of workers without professional qualifications if they have a binding agreement with a German employer, its expected impact is not in the direction of a higher share of high-skill migrants. This is confirmed by the study's main findings. For example, over 40% of those who benefitted from the regulation found employment in the construction sector. Furthermore, the average earnings of immigrants admitted under the scheme are only some 20% higher than minimum wage. It is also indicative that German statistics identify ten occupational groups as the most frequent among employees, only one of them high-skilled (that is, health associate professionals), six in medium-skilled, and three in low-skilled, as follows: Labourers in mining, construction, manufacturing and transport; Extraction and building trades workers; Cleaners and helpers; Health associate professionals; Sales workers; Personal and protective services workers; Drivers and mobile-plant operators; Metal, machinery and related trades workers; Personal care workers; Food preparation assistants.

The structure of all emigrants from Serbia in Germany was dominated by medium-skilled occupations both in 2015 and 2019, with some increase in the share of high-skilled emigrants over that period, but it remained worse than that in Serbia. Roughly, while the structure of the Serbian resident labour force in 2019 was 20% low-skill, 55% medium-skill and 25% high-skill, in Germany low-skilled workers comprised 25% and high-skilled 20% of labour force (Wiiw-ETF, 2021).

Another recent piece of research focused on the emigration of health professionals to Germany which is the most popular destination for Serbian health professionals, with Slovenia far below in second place (World Bank, 2020). According to wiiw-ETF (2021) more than 16% of health workers from WB6 in Germany are 'health professionals', mainly rep- resented by medical doctors (by more than 70%). The rest consists of associate health professionals of which the majority are nurses. Al- though there has been a steady increase in the applications for health degree recognition in Germany, the success rate is only two thirds, pointing to problems with the quality of health education in Serbia. By 2017, there were 1,236 Serbian-trained physicians in Germany, and by 2020 the number of health professionals surpassed 1,500.

Although these numbers are high and growing, and are undoubtedly a reason for concern, they should be looked at in conjunction with the data on the labour force in the health sector residing in Serbia. The number of employed physicians was slightly below or around 30,000 in the late 2010s, while the number of unemployed physicians hovered above 2,000 and often close to 3,000 for most of that period. The number of unemployed dropped below 1,000 only after the Covid-19 outbreak. A similar trend was recorded for nurses. In other words, up until 2020, emigration of health workers did not interfere with the (excess) availability of health workforce at home.

It is also worth recalling that the number of Serbians migrating into the EU for educational reasons stagnated between 2,000 and 2,500 throughout the past decade, meaning the share of total first-time residence permits issued for this reason steadily declined. Furthermore, according to UNESCO statistics, the total number of Serbian students abroad was around 15,000 and was pretty stable over the 2013- 2018 period (Wiiw-ETF, 2021). For comparison, this number was about the same as for Bosnia and Herzegovina and Albania, despite Serbia having at least double the number of inhabitants.

7 Labour market outcomes and emigration behaviour

The concept of the brain drain implies that it is good if the 'best and bright- est' do not leave their home country, and few would oppose that understanding. However, if the brain drain is largely absent where it is expected, as the data discussed in Section 4 suggest, what might it tell us about the Serbian labour market? If low- and medium-skilled workers are leaving Serbia in proportionally larger numbers, why is this so?

Factors on the demand (pull) side are important. There is a composition effect at least, with the rapidly growing NMS destinations in need of medium-VET skills. Gravity also helps, with countries pursuing high-skill immigration policy being mostly situated faraway in overseas destinations. The distance increases financial and psychological migration costs for potential high-skilled Serbian migrants. Still, since the immigration rules in these 'brain-importing' countries have not changed significantly, apparently there are other reasons behind the slow-down in the flow of Serbian immigrants into them soon after 2000?

Some answers were already provided in previous sections, but here we attempt to offer more explicit and coherent arguments. As already mentioned, Serbia has its migrant diaspora spread over almost the

entire world, from Alaska to Australia, as the popular song line goes. Thus the question of migrant selectivity – that is, who would leave the country and who wouldn't, as well as destination selectivity – that is, where will those who leave go, should be better answered by turning to the supply (push) side, which appears to be more interesting and salient for this type of analysis.

The Roy model applied to migration analysis is a particularly useful framework (Roy, 1951). It implies that the selectivity of migrants and their sorting across destinations depends on cross-country differences in the returns to education. Simply put, if a sending country has lower income inequality, compressed wage distribution and low returns to education (all highly but not deterministically correlated), the emigration rates for high-skilled will be higher than for low-skilled workers, and vice versa. Those high-skilled workers who leave the country will tend to cluster in countries with high returns to skill, while the low- skilled will seek the countries with compressed wage distribution, relatively high minimum wages and more generous welfare benefits.

For a European country, Serbia has very high income inequality. While its government, since early 2000s collects and spends well over 40% of the country's GDP, for most of that period its Gini coefficient was hovering only slightly below 40 points (Krstić, 2016). In Central European countries with similar levels of government revenue and expenditure, such as the Czech Republic, Slovakia and Slovenia, the Gini coefficient has been well below 30 points. Perhaps not coincidentally, these were the three countries that did not experience mass exodus of their population after the EU accession and were also the first to become net immigration countries among the NMS.

After 2000, comprehensive market and welfare reforms quickly increased income inequality in Serbia. Far-reaching changes in the system of labour taxation and the reduction in welfare entitlements, part of which were realized in workplaces, directly affected low-wage and younger workers, workers with larger families, those working in labour-intensive sectors and living in poorer regions (Arandarenko and Vukojević, 2008). According to the most comprehensive calculations based on a comprehensive novel methodology developed by researchers from the Paris School of Economics using the World Inequality Database, the share of national income going to the bottom half of the population dropped from approximately 24% in 2000 to only around 15% by 2015 (Blanchet, Chancel, & Gethin, 2020).

As part of the process of transition to a market economy and the described strong pro-inequality policy turn, returns to education significantly increased compared with the 1990s. For example, the World Bank, in 2018, estimated the rate of return to additional year of education at a 'healthy' 11.7%[57], while Vuksanović et al. (2018) found that this rate for youth was 9.3%, both results being quite high internationally. Apart from the intensification of market forces, decompression of wage distribution was facilitated by regressive reforms in labour taxation that included abolition of tax-free lump-sum fringe benefits, such as meal allowance and vacation allowance, which for low-wage workers reached up to one-third of job-related earnings by the late 1990s. Furthermore, instead of bringing a penalty, as was the case during the 1990s (Jovanovnić and Lokshin, 2001) employment in the public sector, comprising a much higher proportion of high-skilled workers than the private sec- tor, started bringing a sizeable premium, taking into account education level and other relevant factors (Vladisavljević, 2019).

Market reforms included the reduction in welfare entitlements. Most importantly, child benefits instead of quasi-universal became means tested, covering only around 25% of all children. In practice that means that a family of four with two children becomes ineligible for child allowance if it has a total income some 20% above the minimum wage or if it owns 2 hectares of agricultural land. The total expenditures on child allowance were reduced from 0.5% at the beginning of 2000s to some 0.3% of GDP by 2010 and remained at about that level by the end of the 2010s (CLDS, 2014). Child benefits were limited to three, and later to four children per mother, as part of a 'responsible parenting' policy. According to some interpretations (Drezgić, 2008) such an approach was part of a thinly veiled discriminatory population policy, attempting to discourage what was considered the 'excess' fertility of certain ethnic minorities such as Albanians, Moslems (Bosniaks) and Roma.

At the lower end of the migration spectrum, the temporary migration of the poorest strata of the population in search of welfare benefits as asylum seekers to Western Europe, most notably to Germany, increased by an order of magnitude by 2010 and remained elevated until recently. Diminutive amounts of social assistance and restrictions in access to child benefits have certainly been push factors for the poor, especially Roma from Southern Serbia, to engage in repeated asylum seeking migrations. This is only one aspect of the miserable situation of the Roma people, who are almost invariably excluded from access to the formal labour market and exposed to various forms of discrimination and general neglect. As a synthetic illustration, the Roma life expectancy shortfall was estimated at 12.4 years compared with the general population (Raković, 2015). Recent research on substandard settlements documents the absence of basic services such as electricity, clean running water and sewerage (SIPRU, 2020).

It is less obvious but nonetheless straightforward from Roy's model, that parsimonious child benefits in Serbia, if one is able to obtain them at all, compared with most often fully universal and far more generous child benefits in most Western European countries[58], widen the total earnings gap between staying in Serbia and moving abroad and translate into even greater incentives to emigrate from Serbia with children, not only for Roma, but for much wider groups of low- and medium-skilled migrant workers. Furthermore, targeted child benefits in Serbia act as a deterrent to joining the formal labour force; this undesirable effect would be eliminated if child benefits were fully universal or only affluence-tested.

During the past decade, until recently, minimum wages were kept at the level of 40-45% of average gross wages, neither low nor high in international comparisons. However, because of regressive labour taxation and an excessively high tax wedge at the level of the minimum wage, its net amount was comparatively less, reducing disproportionally the take-home pay of Serbian low-wage workers, while

[57] https://www.worldbank.org/en/publication/human-capital

[58] Benefit amounts in Austria and Germany are around 100 EUR per child, without limits to the number of eligible children.

the total labour cost of minimum wage (gross wage plus employer contributions) was higher, negatively impacting the competitiveness of employers in low-wage firms. This in turn discouraged investment in labour-intensive industries, creating a vicious circle in which the relative position of people with lower educational attainment was further worsened because of reduced demand for their services.

What makes manufacturing jobs in countries like Slovakia, Czech, Hungary or Poland, typically paying a monthly wage of below or around EUR 1,000, so attractive to temporary, mostly medium-skilled VET migrants from Serbia? First, the average and median real-wage levels in most NMS increased steadily throughout most of this decade, while in Serbia they remained rather flat throughout the whole period. Second, as a practical example of Roy's model, while skill-adjusted public-sector wages in Serbia are much higher than those in the private sector, the opposite is true in most, if not all, NMS. While the salary of a Slovak teacher might be around 50% higher than that of their counterpart in Serbia, a worker in a Slovak car plant can make around twice as much as a similar worker in Serbia. Further- more, the labour taxation system in Serbia, when comparing labour tax wedges, is less favourable to low- and medium-wage labour com- pared with these systems in the NMS.

A recent paper explored the key policy intervention designed to 'repair' the deficiencies of labour demand – generous subsidies for (mostly) foreign direct investment aiming to attract investors to low-wage sectors and low-wage regions by offering relatively generous subsidies per job created, further differentiated by offering more generous subsidies to investors located in less developed regions (Arandarenko, Aleksić and Lončar, 2021). Such policy has contributed to overall sectoral rebalancing of the labour market by increasing the demand for manufacturing jobs. It has also contributed to regional labour market rebalancing, most notably in improving the quality of employment in less developed regions and in stabilizing the shares of regional wage funds. Nonetheless, labour market, educational and infrastructure cleavages between regions remain very large.

Serbian migration dynamics in terms of gross flows and distribution of migrants by destination countries neatly fits the simple framework of Roy's model. During the 1990s, absolute wage differentials between Serbia and the rest of the world increased a lot because Serbian GDP and real wages collapsed, causing a general increase in emigration flows from Serbia. However, income inequality did not increase much (Blanchet at al. 2021), and wages were further compressed, which affected the high-skilled workers more. This resulted in their higher emigration rates, further confirmed by the disproportional increase in the Serbian immigrant flows to Anglo-Saxon countries, as well as in the emergence of some new minor high-skill faraway destinations, such as United Arab Emirates, Singapore, South Africa etc.

On the supply side of labour migration, Serbia during the Great Recession experienced extremely strong labour market contraction, since the negative impact of prolonged transitional restructuring on employment coincided with the impact of the Great Recession. Between 2009 and 2012, GDP cumulatively fell by around 4%, while employment loss was over 12%. The rapidly increasing migration flows to the EU in the 2015–2019 period coincided with employment and GDP growth in Serbia, however, due to fiscal consolidation, wages were kept stagnant and wage differentials in relation to the EU further widened.

The largest decrease in real wages was recorded in 2015 and it can be related in the first place to fiscal consolidation measures, but also to changes in the Labour Law in 2014 which reduced many monetary and non-monetary rights of employees. One of the fiscal consolidation measures was a 10% reduction in salaries higher than 25,000 dinars in the public sector. Given the number of employees in the public sector and the fact that wages in the public sector are higher than in the private sector, the introduction of a kind of solidarity tax has contributed to a real decline in wages of almost 2.5%. Similarly, it was estimated that reduction or abolition of certain monetary rights (such as mandatory seniority premium, shift work premium, annual number of paid days off etc.) had an additional effect of a 2-3% reduction in average wage (Arandarenko and Aleksić, 2016). Furthermore, the nominal minimum wage, a very significant anchor in Serbia, was kept unchanged for three years until 2017. Thus, real wages remained depressed until 2017, at the time when they increased throughout Europe, increasing wage differentials and making new destinations, including those in Central and Eastern Europe, more attractive for Serbian workers.

Behind the fairly rapidly improving employment statistics, the problem of low-quality jobs remained throughout the period, especially outside of the public sector. As a share of total employment, informal employment stands at around 18%, and low work intensity and underemployment in various forms are widespread. There is a pronounced duality in the labour market. Large portions of the working-age population are engaged in low-paid and less protected jobs. Access to the more stable jobs in the primary labour market is limited (even more so, since the onset of the fiscal consolidation programme in 2015), and long-term career-planning is hampered by the precariousness of jobs in the secondary labour market, those in the latter are eager to switch jobs and a significant proportion of these workers is migration-ready. Thus, the lack of availability of good jobs is a stronger determinant of migration readiness among members of the Serbian labour force than the general unemployment rate and an individuals' own employment status. While it is true that youth employment has been increasing since 2013, the average quality of youth jobs, both in terms of job security and wages, was not enough to reduce emigration impulses.

The revision of the adopted narrative of enormous emigration of highly educated 'talents' and the shift of focus to the accelerated departure of middle-educated young people are important because they point to the need to explore neglected and insufficiently illuminated sources of frustration among 'ordinary' graduates. These different sources of frustration come from one common source - the lack of intergenerational solidarity at the expense of children and young people. This manifests in many ways. Public expenditures on education are very low, and some important groups of poor, especially minority and rural youth do not have a fair chance at a successful start in life. The transition from education to labour market is not sufficiently supported by active labour market policy (Aleksić et al., 2020). Overly flexibilized labour legislation and employment practices direct young people to the secondary labour market and precarious jobs, leading to widespread exploitation of youth and student work. As explained, low wages carry a high fiscal burden, affecting more young workers. Concerning the pension insurance system, the entire burden of solidarity is shifted to intergenerational solidarity while intra-generational solidarity among retirees and old people is all but non-existent.

On the other hand, Serbia is emerging as the ICT hub in the region thanks to favourable tax treatment of the ICT sector, generous investment and start-up subsidies, high investment in human capital in ICT and higher integration into global values chains. The annual numbers of graduates in ICT are above 2.5 thousand and Serbia has demonstrated itself to be quite successful at attracting and retaining ICT professionals. Young and highly educated people with university degrees in economics, design, marketing, architecture, and engineering make up the majority of digital workers in Serbia. The contribution of ICT exports is estimated at 2.5% of GDP in 2018 and in 2020 – a pandemic year – the contribution of the sector rose to 5.4 %. 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. There is a growing community of telemigrants who live in Serbia but work online for foreign clients, and this has become their primary source of income (Arandarenko, 2021).

Against this briefly sketched background, the apparent but publicly largely unrecognized success of Serbia to keep high-skill emigration in check has its serious downside in the fact that it has been achieved not primarily as a result of a successfully coordinated economic, labour market, social and migration policy, but rather as a side effect of a sub- optimal tax and transfer policy configuration that has been highly discriminatory toward low- and medium-skilled labour force members, young people, the working poor, large families, people in rural and declining areas, Roma and other vulnerable and underprivileged groups.

8 Migration and labour market: Concluding remarks, prospects and challenges ahead

Serbia's migration balance over the past decade has been clearly negative, but far from catastrophic or excessive as is often claimed. If it were not an ageing and demographically declining country, Serbia could be assessed as a very efficient and successful exporter of labour. For an emigration country, the share of its citizens living abroad is relatively moderate (around 14% of resident population), while the share of remittances is a sizeable 8% of the country's national income (excluding real estate purchases via foreign accounts which are statistically registered as FDI). This 'remittance intensity ratio' is very favourable globally and is the best among the Western Balkan countries. It indicates the dominance of temporary work migration motives among the migrants and their efficient choice of destinations.

From the Eurostat-Europe data on different dimensions of migration flows of Serbian citizens, we have concluded that there was a rapid increase in the gross outflow of emigrants from Serbia, especially in the second half of the past decade. This increase was manifested through two major changes in the structures and spatial distribution of emigrants from Serbia. First, migration for work has become the dominant category of migration flows. Second, this rapid growth of temporary work migrations was most pronounced towards Germany, on the one hand, and towards a larger number of new EU member states on the other - primarily Croatia, Slovakia, Slovenia, Malta, the Czech Republic, Hungary and Poland.

Serbia mostly exports workers, and much less people. The stock of Serbian emigrants in the European Union as the main destination zone was increasing only slowly, while the flows more than doubled in the 2015-2019 period. The flows of Serbs to NMS destinations multiplied, while all but few destinations in OMS, saw absolute decline in new inflows. Germany has been the most important exception, accepting a third (over 20,000) of all first-time Serbian migrants to the EU in 2019.

By and large, the education level of movers is similar to education level of stayers, which is good news. The downside is that this technical absence of the much-feared brain drain has been achieved as an unintended consequence of an institutional configuration that promotes duality in the labour market and works against various vulnerable and under-privileged groups such as low- and medium-skilled workers, young people, the working poor, workers with dependents and people in rural and declining areas. Thus, despite encouraging signs and relatively favourable current indicators, controlling and managing migration should indeed be among the top priorities of government in the decades to come.

Telemigration as a desirable substitute for physical emigration has flourished during the past decade. Telemigrants live in Serbia but work for foreign employers or one-time clients via the internet, often using online platforms like Upwork. Data provided by the Oxford Internet Institute indicate that platform work is absorbing 4.5% of the workforce, mainly in 'creative and multimedia' professions, 'software development and technology' and 'clerical and data entry'. According to rough estimates, in 2018, there were more than 20,000 tele-migrants in Serbia for whom foreign clients were their primary source of income, which placed the country at the top of the world rankings on a per capita basis and 11th in the world for absolute number of freelancers, with 3.52 freelancers per 1,000 inhabitants.[59]

Among external threats to the current unstable and sensitive balance probably the most important would be a more aggressive approach from destination countries, in the first place Germany, to selectively at- tract high-skilled professionals and young talents, instead of the current 'blanket' approach. More generally, Serbia should engage with the European Commission to make sure that the new EU Pact on Migration and Asylum, published in September 2020, lives up to its promise of 'comprehensive cooperation with partner countries to help boost mutually beneficial international mobility'.

Even if it manages to devise an optimal migration strategy, Serbia will, for the foreseeable future, remain vulnerable to the various un-

[59] https://analyticshelp.io/blog/global-internet-freelance-market-overview-2018/

desirable effects of being a labour-exporting country. The demand for foreign labour in host countries is procyclical, which means that, in good times, Serbian firms can face pronounced labour shortages across the full skills spectrum, while, in bad times, the country might lose a part of the remittance inflow just when it needs it most.

Still, if Serbia continues to record solid economic growth rates, becomes more successful in creation of good jobs and manages to reduce the wage gap with the EU, one can be reasonably optimistic that the emigration will not accelerate and become a major bottleneck for the future economic growth and demographic stabilization.

Actually, the emigration has its own 'lifecycle' (Hatton and Williamson 1994)60, also called 'mobility transition' or 'migration hump'. These theories predict an inverted-U (bell) shape in the relationship between rising average incomes and emigration. Starting from low levels of income, rising incomes and rising rates of emigration go hand in hand. After a certain turning point, however, further increases in income bring declining rates of emigration. Clemens (2020)61 found that on average emigration rises as GDP per capita initially grows in poor countries, slows after roughly US$5,000 at purchasing power parity, and reverses past $10,000. Serbia's current GDP per capita is around US$19,000. However, it is in close proximity to the EU which is one of the richest economic powerhouses in the world, and based on the experience of most NMS, it could be hypothesized that the turning point may be reached at the level of US$20-25,000 PPP, which may be achieved within only a couple of years. Again, the experience of Croatia suggests that another spike might come at the time of Serbia joining the EU, due to the free movement of workers and institutional shock, however, this prospect is far from imminent. There is enough time, in any case, to devise a comprehensive strategy to cushion the accession emigration blow. While stable and solid rates of economic growth and rising incomes should remain in the center of this strategy, it would also have to include a thorough reform of the tax and benefit system, as well as an overhaul in public expenditures, putting people first and thus providing higher levels of social protection and social investment.

9 Annex

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Germany	3297	2,885	5,974	2,589	2,228	1,945	2,599	1,949	2,480	3,120	29,066
Italy	1080	1,103	1,076	1,342	2,066	2,648	2,280	1,721	2,040	2,561	17,917
Switzerland	6859	4,261	3,362	2,529	1,839	1,655	1,582	1,514	1,440	1,421	26,462
France	4517	2,110	1,162	1,327	1,328	938	1,624	1,466	894	1,144	16,510
Sweden	338	793	1,144	965	921	1,172	1,236	1,808	1,273	1,037	10,687
Austria	828	548	709	823	671	633	751	557	625	1,008	7,153
Slovenia	211	169	139	184	155	127	159	153	179	262	1,738
Belgium	164	117	188	234	141	194	184	259	202	242	1,925
Luxembourg	194	81	68	49	79	55	55	97	225	201	1,104
UK	465	523	375	320	180	129	144	120	131	157	2,544
Netherlands	12	4	166	340	212	177	177	172	191	119	1,570
Croatia	225	294	175	159	107	138	734	96	76	111	2,115
Hungary	0	1,678	1,330	647	410	158	144	93	105	88	4,653
Spain	39	59	16	37	54	50	79	44	56	83	517
Bulgaria	62	46	62	44	40	88	90	53	56	71	612
Norway	24	61	75	93	174	179	124	154	85	56	1,025
Malta	8	7	21	18	16	14	38	31	45	53	251
Greece	20	73	46	66	59	42	123	86	59	42	616
Czech Rep.	1	9	9	24	55	69	76	47	30	39	359
Finland	13	26	71	103	65	59	53	60	24	34	508
Slovakia	57	53	55	9	5	8	94	124	42	26	473
Cyprus	16	9	1	10	16	36	19	38	30	23	198
Denmark	2	1	1	5	1	26	74	62	22	11	205
Poland	17	21	14	11	8	13	17	10	14	10	135
Portugal	0	19	11	15	11	6	11	13	8	8	102
Ireland	32	13	72	58	50	21	17	16	17	4	300
Iceland	27	34	27	21	7	15	13	5	2	3	154
Liechtenstein	0	0	2	1	8	1	2	8	2	3	27
Estonia	0	0	0	0	0	0	0	0	0	0	0
Latvia	0		0	0	0	0	0	0	0	0	0
Lithuania	0	0	0	0	0	0	0	0	0	0	0
Total	20,518	14,997	16,351	12,023	10,906	10,596	12,499	10,756	10,353	11,937	130,936

Table A1. Acquisition of citizenship in Europe by Serbian citizens and destination country, 2010-2019

Source: Eurostat

[60] Hatton, T. J. & Williamson, J. G. (1994). What Drove the Mass Migrations from Europe in the Late Nineteenth Century? Population and Development Review 20(3), 1-27.

[61] Clemens, M.A., 2020. The emigration life cycle: How development shapes emigration from poor countries. IZA discussion paper, Bonn.