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Abstract

This paper examines higher education institutions as a factor facilitating international labour migration. Drawing on the notion of the education-migration nexus, it explores the role of higher education institutions as channels of labour migration in Slovenia and Bosnia and Herzegovina within the transnational labour migration regime. Our research data, obtained through the compilation of statistics, contextual factors, and interviews, show that educational institutions have resolved internal contradictions, such as declining enrolment in Slovenia and the lack of labour market absorption capacity in Bosnia and Herzegovina, by aligning with migration policies. These linkages have led to international students being exploited as a workforce for sweatshops in Slovenia and to a workforce being produced for foreign labour markets in Bosnia and Herzegovina. This paper provides both a theoretical contribution and new empirical insights into the education-migration nexus from the perspectives of two Western periphery countries that have been largely neglected in the existing literature.

Keywords: Education-migration nexus, transnational migration, internationalisation of education, Slovenia, Bosnia and Herzegovina

Introduction

An emerging scholarship reveals that international education policies and university recruitment practices are increasingly entangled with migration management, often turning education into a tactical backdoor to the labour market. This has profound implications for how states, institutions, and students navigate between learning, working, and belonging in globalised contexts. The paper examines how educational institutions in semi-peripheral and peripheral countries respond to adverse incentives that generate unintended consequences. For instance, competitive pressure to internationalise higher education can turn these institutions into a “backdoor to the labour market,” attracting labour migrants rather than international students who intend to return to their countries of origin upon completion of their studies. This may pave the way for harmful labour conditions for student workers and may not contribute to the quality of education. Similarly, in sending countries, educational institutions may adapt their curricula to train job-ready migrants for the global labour market, reducing the matching of such curricula with the local labour-market needs. This, in addition to facilitating brain drain, also leads to increased skills mismatches at the local labour market. By comparing the contrasting cases of Slovenia as a migrant-receiving semi-peripheral country, and Bosnia and Herzegovina (BiH) as a migrant-sending peripheral

country (Arrighi and Drangler 1986; Vieira 2018), this paper makes a theoretical and empirical contribution to this discussion. As such, it extends the focus of the literature on the education-migration nexus, previously focused on the impact of internationalisation of education, but neglecting unintended consequences resulting from the adverse response of educational institutions. It also provides new perspectives and fresh insights into two countries of the Western periphery that have hitherto been neglected in the literature. Moreover, a comparison of two countries that were once part of the same Yugoslav federation and share certain similarities in their educational systems, yet differ in migration trends, provides a well-suited pair of case studies. This approach offers a unique perspective on how varying migration patterns shape the responses of educational institutions within a broadly similar historical and institutional context. However, it should be noted that the paper does not focus on migration between these two countries but examines the two case studies as contrasting examples.

This article contrasts the internationalisation of higher education in two countries within the broader post-socialist and semi-peripheral space of Southeast Europe: Slovenia, a semi-peripheral receiving country, and BiH, a peripheral sending country. In this regional context, the educational institutions adapt differently to global migration aspirations depending on their country's position. These adaptations have different yet complementary effects: educational institutions in the semi-peripheral country attract a supply of precarious labour, while those in the peripheral country disrupt the domestic labour market. The case study of the receiving country thus focuses on the experiences of student-workers who enter Slovenia on a student visa in the hope of eventually obtaining a work visa. Conversely, the study conducted in the peripheral sending country focuses on the labour market implications of aligning educational institutions in BiH with migration opportunities.

The article is structured as follows. The next section reviews the literature on the education-migration nexus. This is followed by our conceptual framework, methodology, and an overview of the educational context in the two countries, focusing on adaptation to migration demands. Two case studies illustrate these adaptations: international student employment in Slovenia and labour market mismatches in BiH. The conclusion highlights further questions and avenues for research.

Literature Review

Existing research has already looked at the intersection of educational institutions and global migration, referred to as the "migration-education nexus" (Robertson, 2011, 2013; Maury, 2017; Sabzalieva et al., 2022; Cerna and Chou, 2022; Schinnerl and Ellermann, 2023) or 'edugration' (Brunner, 2022; Coustere, Brunner and Shokirova, 2024). The nexus becomes even more important with the rise of the new "capabilities-aspirations" framework for the analysis of migration, as education influences both capabilities for and aspirations to migrate (de Haas, 2021). However, previous research has focused primarily on capitalist core countries (USA, UK, Australia, Canada, Germany, France, etc.), which have developed the market for higher education services since the 1990s when they transformed themselves from global producers of goods to global providers of services (Robertson and Komljenovic, 2016). Higher education services have served the needs of upper- and middle-class populations, which have grown alongside the industrialisation of countries in the Global South and the deindustrialisation of the Global North. The provision of prestigious

universities was a response to the desire of the new affluent global classes to send their children to foreign universities and secure them good jobs through international experience and prestigious degrees. The global affluent classes could afford the high tuition fees, thus supporting the booming higher education market in the countries of the centre.

The competitive global market for higher education services has prompted countries in the centre to make their markets more appealing in line with local labour demands. Alongside education at Western universities, these countries have granted access to their labour markets. Thus, the opportunity to study abroad has evolved to include the right to work during studies and after graduation, as well as the prospect of obtaining permanent residency and citizenship. In the 1990s, Australia pioneered the provision of permanent residency to international students upon completion of their studies, a development that was subsequently emulated by others (Sabzalieva et al., 2022: 182; Robertson, 2013). This has proven to be a pivotal factor in attracting international students. As Schinnerl and Ellermann (2023) illustrate, changes in these entitlements can significantly impact the influx of international students. Therefore, the interaction between education and migration policies is essential for the success of the education industry, as the desire to study abroad often stems from the aspiration to migrate temporarily or permanently to wealthier and safer countries—a phenomenon described as “backdoor migration” (Robertson, 2011). This is further supported by data indicating that, on average, one-third of international students choose to live and work in the country where they studied after graduation (Sabzalieva et al., 2022: 181).

Robertson (2013) framed international students not merely as learners but as actors embedded in complex regimes of migration governance, shaped by state interests, labour market needs, and geopolitical considerations. Her conceptualisation challenges the instrumental framing of student mobility as a purely educational endeavour and instead demonstrates how states exploit education as a migration filter, allowing certain students to transition into work and permanent residency based on economic utility. It challenges the sanitised discourse of “global education” by exposing its entanglement with migration management and labour market strategies. This shows that universities are not neutral actors but are actively involved in the marketing and managing of student migration. Their policies create a precarious labour supply for migrant labour regimes in recipient countries as a side effect.

On the other hand, education systems in migrant-sending countries have increasingly come to be seen as pipelines for transnational labour markets. Whether through state-driven strategies, donor-supported programmes, or transnational partnerships, education is increasingly instrumentalised as a migration-enabling infrastructure. Governments and educational institutions in countries such as the Philippines, India, Sri Lanka, and several Eastern European states have adapted curricula, certification standards, and institutional partnerships to better prepare students for employment abroad, thereby contributing to what scholars term the “strategic export of labour” (Rodriguez, 2010; Wickramasekara, 2011). While this offers economic and developmental benefits, it also raises profound questions about equity, autonomy, and the broader purposes of education. For instance, outflows of skilled workers may harm domestic service provision, especially in the healthcare and education sectors (Bhargava and Docquier, 2008).

Industrial relations research has a long tradition of studying higher education institutions (HEIs) as skill-formation institutions (Estevez-Abe et al., 2001). In this framework, HEIs are one of the factors that make up the overall national industrial relations framework. However, studies of the education-migration nexus challenge this by highlighting the role of HEIs as entry points for backdoor migration or exit points for the transnational migration of skilled labour. These studies are important for industrial relations research because they highlight the under-examined role of HEIs in transnational labour migration and the potential impact this can have on national industrial relations.

Conceptual Framework

This section presents key analytical concepts, such as the epistemological shift, the trade model, the education–migration nexus, and the role of higher education as a labour-market institution, which frame the comparison of higher education transformations in Slovenia and BiH.

The emergence of the education-migration nexus is rooted in two significant transformations within the education system. The first is an epistemological shift in how knowledge is produced at universities, moving from a focus on “critical thinking” to practical “problem-solving” (Freitag, 1995; Močnik et al., 2013). This change has led to a transformation of universities from autonomous social institutions into entrepreneurial corporations that, much like any business, “design new ‘products’, offer new ‘customer services’ and conquer ‘new markets’” (Freitag, 1995: 57-58). The rise of a new global middle class has opened opportunities for universities to market fee-paying study programmes to a broader international audience.

Another significant transformation is that aid to developing countries has been replaced by a trade model in universities (Sabzalieva et al., 2022; Robertson and Komljenovic, 2016; Robertson, 2011). A reduced number of scholarships has been available for students from developing countries, with these positions gradually being taken by tuition fee-paying students. However, not all international students come from affluent families capable of supporting their education, which has resulted in them becoming a source of temporary labour during and after their studies. As tuition fee payers, international students have became “cash cows” and, at the same time, “backdoor migrants” (Robertson, 2011). In countries where there is a high demand for labour, particularly for cheap temporary labour, the liberalisation of migration laws has opened more opportunities for international students to work while studying and after graduation. As a result, student visas have become a gateway for labour migration and a shortcut to lengthy procedures for obtaining work permits.

The concept of the education-migration nexus thus highlights the relationship between the commodification of education and migration policies. A study conducted in Canada revealed that higher education had become a significant export service, ranking sixth among Canadian export activities. On the other hand, international students represent 60% of the temporary workforce (Schinnerl and Ellermann, 2023: 606). Other studies also indicate that access to the labour market has become a key selling feature in promoting education abroad (Cerna and Chou, 2022: 231; Brunner, 2022: 27). Schinnerl and Ellermann (2023: 608) note that “the link between coming to Canada to study and the availability of work authorisation

both during study and after graduation, along with pathways to immigration, is a major driver of international student enrolment growth". On the other hand, restricting access to work can negatively impact the influx of international students. The UK decided to eliminate work opportunities for graduates, resulting in a decline in Indian student enrolment, which fell by as much as 50% between 2011 and 2014. To address the drop in international student numbers, the UK restored work rights in 2021, allowing graduates to work for two years after completing a bachelor's degree and three years after finishing a PhD (Schinnerl and Ellermann, 2023: 602-603).

Recent literature thus increasingly acknowledges that international student mobility is no longer driven solely by academic aspirations but is deeply embedded within broader migration strategies. Scholars have critically examined the ways in which universities act as de facto labour market institutions, offering not only educational credentials but also potential pathways to migration. Robertson (2013) argues that states strategically deploy international education systems as tools for regulating high-skilled migration. In this framework, international students are framed as student-migrants**,** i.e. individuals managed through both education and immigration policy regimes. Empirical findings from Australia show that international students increasingly enrol with migration objectives in mind (Tran et al. 2023; Robertson and Runganaikaloo, 2023). International students actively strategise their educational choices based on perceived migration outcomes, treating study as an instrumental step toward labour market integration (Brotherhood, 2023). These studies highlight that, in addition to assessing the career impacts of studying abroad (e.g. Bryła, 2015, 2020), the structural role of universities in facilitating labour migration must be critically examined. International students often work while pursuing their studies. Although limited research exists on the work of international students, notable studies include a Canadian study by Coustere, Brunner and Shokirova (2024) and several investigations into foreign students' work in Finland (Maury, 2017, 2020; Ndomo et al., 2022) and Denmark (Wilken and Ginnerskov Dahlberg, 2017). In these studies, students struggle to balance academic commitments with financial pressures, along with job insecurity, discrimination, low wages, and the anxiety of not meeting visa-renewal conditions. Additionally, migration regulations greatly affect their livelihoods. In Canada and Finland, international students are restricted to working no more than 24 and 25 hours per week, respectively, to allow adequate time for their studies. This limitation poses a risk of sanctions to students who might need to work more hours to make ends meet. In countries that permit students to work full-time (e.g. Slovenia, Lithuania, Estonia, Croatia, and Sweden), the question arises of balancing study and work. Researchers argue that when education becomes a "second job" (Beerkens, Mägi and Lill, 2011), the large-scale participation of students in paid jobs compromises the quality of higher education.

From the perspective of sending countries, few researchers acknowledge the role of HEIs in training job-ready migrants for the global labour market. Yeates (2009a, 2009b, 2010) portrays colleges and universities as part of a migrant labour commodity chain, where educational institutions within sending countries supply nurses to foreign employers. Building on Yeates' framework, Ortiga (2018) argues that HEIs attempt to educate would-be migrants for overseas jobs by enacting an ideal notion of flexibility, similar to the strategies implemented by today's global factories. Here, school owners and administrators quickly shift manpower and resources to in-demand programmes, hoping to produce the "right" type of workers at the right time. Analysing the situation in the Philippines, Ruiz (2014) argues

that the management of post-secondary educational institution has resulted in the development of a labour-exporting education system. The few available studies hence try to understand how educational institutions respond to the increased demand for education as a result of migration prospects. This is important to consider in assessing the expected magnitude of brain gain. As individuals migrate to countries with higher income, the expected returns to education are larger and the incentive for education increases. The individual incentive for migration may thus lead to educational investment decisions that produce skills mismatches in the local labour market, while skills needed by the global labour market may not necessarily be needed in the local labour market.

Methods

This study compares two education-migration nexuses at opposite ends of the transnational migration spectrum and their impact on local labour markets. It examines two different institutional responses to migration within broadly similar historical and educational contexts. By studying Slovenia and BiH as illustrative examples, we applied context and trend analyses to describe this, focusing on the historical development of HEIs, the expansion of public and private study programmes, school enrolment, and labour market performance. This helped us explain the convergence of educational institutions with migration policies in the post-Yugoslav period, after both countries had become independent but retained a shared legacy.

For the impact on local labour markets, interviews provided an in-depth description of the response of social actors. The importing strategy of the Slovenian education-migration nexus focused on international student-workers. In contrast, the Bosnian exporting strategy required attention to be paid to labour-market mismatches.

The Slovenian case study was prepared using in-depth individual interviews with migrants and experts. Between March 2024 and March 2025, we conducted 25 interviews with migrants, representatives of trade unions, and labour market institutions in Slovenia. Fifteen of these were in-depth interviews with migrants, all of whom were from countries outside the European Union. This reflects the actual statistical composition of the migrant population in Slovenia, where the majority are categorised as third-country nationals. Interviews with NGOs that provide legal and social support for migrant workers were particularly valuable.

In BiH, 18 interviews with representatives from higher education institutions (both staff and management) and government (including ministries in charge of education and the labour market, as well as accreditation agencies) were conducted between April and August 2025, focusing on collecting qualitative insights into the responses by a variety of stakeholders, and testing our theoretical assumptions described above. The findings from the interviews were combined with statistical data on labour market indicators and educational attainment trends, with the purpose of supporting the qualitative evidence, particularly with regard to the implications of skills mismatches generated in the local labour market.

Education-migration nexus in (semi)periphery

This section presents an analysis of the contextual factors in Slovenia and BiH to understand the environment in which the adaptation of educational institutions operates. A brief

description of the governance structure of the educational sector in each country offers insight needed for understanding the forces behind their adaptation. We present empirical evidence suggesting the existence and magnitude of the adaptation of educational institutions to the demand driven by migration prospects.

Slovenia

Following the separation from Yugoslavia, the Slovenian higher education system embarked on a course of Europeanisation. As was the case elsewhere, Slovenia ceased to provide scholarships to students from developing countries in the early 1990s, after severing its links with the Non-Aligned Movement. The initial developmental shift was the integration of the Slovenian higher education system into European institutions. Slovenia was among the first to join the Bologna Process and, in 2004, upon its accession to the EU, it became a member of the European Higher Education Area (EHEA). This necessitated a Bologna reform of higher education, which entailed a new degree structure with three main cycles and comparable degrees, the European Credit Transfer System (ECTS) and a new quality assurance system (Hauptman Komotar, 2018). Upon accession to the EU, students from EU countries were granted access to higher education on equal terms with Slovenian students, which was free of charge up to the doctoral level. In order to demonstrate “good practice in regional collaboration” (Resolution 2011-2020), since the first half of the 2010s Slovenia has offered students from BiH, Montenegro, North Macedonia, and Serbia the opportunity to undertake their studies in Slovenia without paying tuition fees.

The salient developmental feature is the over-expansion of public and private higher education institutions. In the academic year 2002/2003, 12 independent higher education institutions and 2 universities were offering study programmes (Resolution 2007-2010); by 2025, this number had increased to 43 institutions and 5 universities (source: NAKVIS public records). The number of institutions and study programmes thus far exceeds the European average (Hauptman Komotar, 2018; European Commission, 2024: 42). On the other hand, the number of Slovenian students has declined due to falling birth rates (from 115,000 in 2007/08 to 81,000 in 2023/24; source: SURS). In response to this demographic shift, faculties have been rapidly replacing them with state-funded ex-Yugoslav and fee-paying foreign students. The latest enrolment data (for 2023/2024) from four universities confirm their dependence on foreign students: the University of Ljubljana had 10% foreign students, the University of Maribor 14%, the University of Primorska 23%, and the University of Nova Gorica as much as 63%. In order to recruit foreign students, faculties organise fairs in ex-Yugoslav countries or engage agents, especially for Asian countries. Consequently, between academic years 2017/18 and 2023/24, the number of non-EU students increased by almost five times (source: SURS). Among students from non-European countries, Asian nationals prevail (OECD, 2023: 260). As the number of domestic students declined, faculties intensified their marketing activities abroad, coinciding with global migration pressures seeking a route to the EU via student visas.

The state supports the internationalisation of higher education. According to the government strategy, internationalisation engenders “quality education” and “circulation of talents” (Government of RS, 2023). To enhance Slovenia's appeal as a destination for foreign students, the state has implemented various measures. These include promoting study in Slovenia, removing administrative barriers for international students, and encouraging study

programmes in foreign languages (more than 150 in 2025; source: Study in Slovenia). The internationalisation of education, which was regarded as a failed initiative in 2018 (see Hauptman Komotar, 2018), has thus gained significant momentum in recent years.

Education and student work have long been closely intertwined in Slovenia. The late 1980s saw a rise in student work, which was driven by deteriorating employment opportunities (Zgaga, 2021: 20). Education has become a means of providing young people with temporary employment and income, offering them a respite from unemployment. Over decades, the proportion of students engaged in employment has exhibited an upward trend, reflecting high demand for cheap labour (Breznik and Čehovin Zajc, 2021). As students are allowed to work full time, a third of student workers are full-time workers, while a further third work more than 20 hours a week. The prospect of full-time employment is especially appealing to foreign students whose migration aspirations are driven by the need to earn money while studying. The student visa thus facilitates a relatively smooth transition to labour migration. Following the Foreigners Act, students are granted priority in the issuance of temporary residence permits and can switch from a student permit to a work permit at any time. Upon completing their studies, students are eligible for jobseeker status and the benefits that this entails for a period of nine months. As stipulated in the Employment, Self-employment and Work of Foreigners Act, students are permitted to submit applications for free access to the labour market within a period of two years and thereby avoid a labour market test. Finally, it is indisputably more agreeable to enter a foreign country as talent than a so-called economic migrant.

Bosnia and Herzegovina

BiH's education system is highly decentralised and asymmetric across the country. The decentralised structure at the state level, especially in the Federation of BiH entity with ten cantons, and the lack of cooperation between institutions limit the possibilities of establishing effective strategies and coherent policies (EU Commission, 2023). The higher education sector is facing a number of challenges. Primarily, many universities lack the necessary resources and infrastructure to provide a high-quality education. Decentralised regulation and lack of enforcement of standards allow some private universities to provide education of less than appropriate quality. Furthermore, as a consequence of a lack of resources, and to some extent the way the internal promotion and financial incentives are set up at universities, higher education institutions are predominantly focused on fulfilling their teaching role, while their research role is largely neglected. The inheritance of the Yugoslav system, with highly subsidised education at all levels, but without appropriate reforms in terms of adjustments to the new structure of the economy and labour market needs, along with the lack of coordination between different levels of authority, has resulted in a significant mismatch between the skills produced by the education system and those required by the labour market.

Unregulated student enrolment in public schools, combined with an increase in the number of private schools, has resulted in a significant increase in the number of graduates, which was not followed by labour market developments that would create conditions to absorb them. Such a situation has created an issue of “educated unemployment” and vertical mismatch. Moreover, delayed reforms of the education sector, and more recently the trend of adapting curricula to foreign labour markets, have produced a horizontal mismatch as well.

According to a graduate survey conducted in BiH in 2014 (Bartlett et al., 2016), 64% of graduates are in a job that is well matched to their field of study. The labour market status also impacts the degree of skills matching, as only 49% of currently unemployed or inactive graduates were well matched in their previous job. The mismatch in the labour market also serves as a driver of migration.

The labour market context is important for understanding the possible implications of the adaptation of universities to the export-oriented demand for education. BiH is a country with the highest inactivity, unemployment, and youth unemployment figures in Europe. According to the latest Labour Force Survey (BHAS, 2024), the employment rate in BiH is 42.9%, while the unemployment rate is 12.6%. The figures vary significantly across regions and levels of education. The youth unemployment rate is 27%.

The data on specific demographic characteristics of Bosnian emigrants are very difficult to obtain. The available evidence suggests that more educated persons are more likely to emigrate. Dimova and Wolff (2009) reported that 28.6% of emigrants from Bosnia had tertiary education, while the World Bank Factbook indicates, for example, that 12.7% of emigrants were physicians. Katseli et al. (2006) reported that the percentage of tertiary-educated immigrants from Bosnia to EU-15 was 10.95%. According to a number of surveys (e.g. annual National Survey of Citizen Perceptions between 2015 and 2024), young people in BiH express a rather high level of interest in emigration. According to a recent tracer study by CREDI at two universities in BiH, although not being fully representative, it is interesting that around 20% of recent graduates reported another country as their current country of living and working (CREDI, 2025). In such circumstances, it is clear that educational choices made by individuals are to a large extent determined by migration prospects.

Labour market outcomes

Context and trend analysis helped us to unfold the education-migration nexuses at the opposite ends of migration flows. We proceed with labour market outcomes, presenting their impacts on the working lives of international students in Slovenia and labour market dysfunctions in BiH.

Slovenia: Sweatshop for International Students

Here, we examine the impact of the education-migration nexus on the working lives of international students. As Slovenia permits students to work full-time, it is a viable option for foreign students who require an income to cover their living and study costs. According to the Eurostudent VII survey, international students are more likely than local students to engage in employment to cover their living and study costs (Gril et al., 2022: 61–62).

Students are permitted to undertake employment, which is arranged by an intermediary organisation, the student service. They do not have an employment contract, but the law stipulates a statutory minimum wage of €7.34 per hour gross (€6.32 per hour net) in 2025. Their legal protection is limited to non-discrimination, working hours, rest periods, equal treatment, restrictions for workers under 18 and liability for damages. Due to the limited protection and cheap labour, student work is in high demand among employers. Conversely, trade unions consider students to be external workers. They are considered temporary

workers who are employed under civil-law contracts, meaning they are not recognised as potential trade union members.

International students are subject to the same conditions as national students. Mahi, an Indian student, arrived in Slovenia in 2015; the other interviewees arrived more recently. Upon arrival, all students began working immediately, putting in the same number of hours as regular employees — 40 hours or more per week. Payments are determined arbitrarily, as evidenced by Rahi's experience. He received a text message from his employer informing him that his hourly wage was being reduced from €8.66 to €6.80. As he had taken out a loan to pay the migration agency, the reduced payment meant he could no longer repay the loan, cover his study costs, or support his unemployed parents.

Mahi, a long-term resident in Slovenia, explained the debt-driven migration facilitated by intermediaries:

> *People usually pay €10,000 for a work permit and other things. Ninety-nine per cent of people [from India, Bangladesh, and Pakistan] pay this amount. When they arrive, they work for minimum wages. Smart, educated, and skilled people usually do not come here. They go to Canada or Australia. Poor people usually come, but they do not have the money. So, they pay €6,000 or €5,000 up front, and the rest from these minimum salaries. They pay the rest to* people who bought them (Mahi, interview, 30 July 2024, emphasis added).

Under these pressures, international students encountered challenges in fulfilling their educational obligations. It was a frequent occurrence for Rahi to be obliged to extend his working day during the afternoon shift. He returned home late at night, which resulted in insomnia. Notwithstanding the sleep deprivation, Rahi rose early to study before his afternoon shift.

Andi from Ukraine said that he was expected to do far more than his Slovenian colleagues. A girl from India also noted that she had been given additional tasks that were not in her job description. A dishwasher's job is to clean dishes, but she was also cleaning toilets and preparing food, which does not comply with HACCP standards.

In addition to workloads, international students were confronted with challenges arising from administrative delays, which hindered their ability to successfully complete their education. They usually obtained their study visas several months after the commencement of the term. Some educational institutions facilitated students' re-enrolment for the subsequent term, while others imposed the fulfilment of all duties retrospectively.

The interviews showed that income, debt repayment, and the renewal of residence permits were prioritised over educational goals. Student Seli was expecting a baby with a partner who had found regular employment, thus providing the family with a residence permit and financial support. Heli found employment after eight months of studying in Slovenia, and Rahul after five. Both managed to exchange their student visas for work visas before the end of their first year of study. The interviewees planned only a few days ahead; their prospects did not extend further. They chose Slovenia because they found the study and working conditions feasible, and they hope to either stay or move to another European country when the opportunity arises.

Furthermore, interviews suggest that the education-migration nexus on the semi-periphery poses a risk of harmful behaviour by social actors. Educational institutions hire agents to recruit students for a fee; however, agents also charge students for their service. One interviewee said that he paid because the agent guaranteed admission to the university, although he did not fulfil the requirements. The agent therefore helped him breach the admission criteria. Another interviewee found himself at the mercy of a fellow national who exploited him in return for help with obtaining a work visa. He worked 16 hours a day in a restaurant where he also slept.

Organisations providing legal assistance and other support to migrants have reported an increasing number of international student workers seeking aid, indicating their growing presence in the labour market. Goran Lukić, founder of the Counselling Office for Workers, described this as a “small-scale industry”, in which universities profit from the tuition fees paid by students who are essentially workers.

Bosnia and Herzegovina: Labour Market Dysfunctions

Previous research has consistently highlighted the issue of slow educational reforms in BiH (World Bank, 2009; Bartlett et al., 2016; ETF, 2024). Evidence of this includes outdated curricula and textbooks, skills mismatches, and survey findings indicating low levels of satisfaction among students and employers regarding the quality of education and the skills of graduates. Additionally, there is evidence of a long transition period (more than 12 months on average) from education to employment. Bartlett et al. (2016) reported an oversupply of business and law graduates compared to a shortage of STEM and technical graduates, suggesting that this structural imbalance is exacerbated by migration-driven study choices.

According to information collected through interviews, the higher education system in BiH is generally more oriented toward protecting existing institutional structures than toward adapting curricula to the needs of the domestic labour market. Educational institutions are incentivised to adapt their curricula to individual demands in order to increase student numbers. For private schools, this is clearly a way of increasing revenue. A similar incentive exists for public institutions, as they are allocated a budget based on the number of students enrolled. The increase in the number of private schools, combined with negative demographic trends, has put further pressure on public schools to attract students.

Some programmes provide evidence indicating a high propensity for emigration. For example, the case of care-labour emigration is a well-known phenomenon. The IOM (2022) reported that demand for health professionals has continuously increased in the 2017–2020 period with almost the same dynamics (about 1,000 annually). However, the increase in employment, along with the vacated positions due to retirement (which can be estimated at about 2,500 in total annually), was not sufficient to absorb the number of health professionals graduating each year, which by 2020 was already above 4,000 with an increasing trend. Complementary to this, labour market data from 2024 reveal that, in several subregions of BiH, health professionals were among the occupations with the highest number of exits from public employment service registries of unemployed. Although the report does not distinguish between reasons, evidence suggests that both employment and emigration contribute to this trend. Available data underline the scale of outward mobility: in 2022, over 500 medical doctors trained in BiH were officially registered and

working in Germany, the top receiving country for health professionals according to OECD statistics. Nurses and medical technicians have been leaving for Germany since 2013 under the government-sponsored bilateral employment agreement; however, the total number of emigrants in this sector is estimated to be three times higher, as many of them leave through informal channels (IOM, 2022).

Enrolment data from two public universities in Sarajevo, the capital of BiH, indicate a stable annual intake of between 450 and 700 students per year on health profession programmes between 2015 and 2020. According to a government representative interviewed, “the number of students enrolled in health studies programmes is five times larger than the actual needs of the labour market in our canton”. Another example of such a trend is the increase in the number of private schools offering programmes in health studies. Almost all interviewees agree that some programmes were introduced and that enrolment in other programmes increased purely due to emigration prospects. This is further reinforced by the widespread phenomenon of language training for migration, such as the boom in German language schools in BiH, as well as the introduction of German Language into the curricula of some “export-oriented” programmes. Health and ICT students often explicitly prepare for migration by learning foreign languages and tailoring their studies to the requirements of foreign labour markets.

“Export-oriented” higher education can also lead to a mismatch in terms of the skills acquired. When emigration pathways do not materialise, these graduates remain in BiH and directly contribute to existing skills mismatches. Interviewees mentioned the issue of recent trends in returning migrants, who face barriers to reintegration into the local labour market due to differences in skills acquired and the ones demanded locally. Even when we see a match between local supply and labour market demand at the level of occupations, there are still mismatches at the level of skills offered by the education system to attract students who want to emigrate. These skills may not be applicable to the local labour market.

After presenting evidence that educational institutions may provide sub-optimal education by facilitating migration and offering skills for foreign markets instead of fulfilling their role in local societies, important questions about optimal educational policies arise. The brain-drain phenomenon can discourage investment in human capital, as educational authorities may be reluctant to invest in education for occupations with a high propensity for emigration (Leiman, 2004). This issue has been raised by educational authorities in BiH, who are concerned about reduced funding for certain subjects, such as health studies. However, it is unclear how reduced funding can ensure a sufficient labour force for the local labour market.

Discussion and Conclusion

The paper has demonstrated that the higher education systems in Slovenia and BiH have embraced the “epistemological shift” and “trade model” of Western educational institutions during their “Europeanisation”. However, market mechanisms have proved insufficient in achieving any kind of balance, and the mismanagement of public authorities has exacerbated the negative consequences. This is reflected in both countries in the uncontrolled growth of higher education institutions, an imbalance between the knowledge produced and labour market needs, and a deterioration in the quality of higher education. The two country case studies examined the unintended consequences of the adverse

responses of educational institutions to the general situation. Educational institutions have resorted to solutions linked to migration policies, creating “education-migration nexuses”. In Slovenia, adaptations of higher education have proceeded along the trajectory of an “import strategy”, whereas in BiH, they have unfolded in accordance with an “export strategy”.

In Slovenia, the education-migration nexus has enabled HEIs to overcome the challenge of a falling number of local students enrolling at a time when the number of institutions and programmes has been increasing. Slovenian HEIs have initiated the enrolment of foreign students, thereby compensating for the reduced enrolment of local students. The import-oriented “education-migration nexus” has been instrumental in resolving the inherent contradictions. In BiH, on the other hand, HEIs have developed “export strategies”: they have compensated for the weak absorption capacity of the domestic labour market by educating students for foreign labour markets. They have resolved the internal contradiction by training job-ready migrants for the global labour market. Consequently, higher education has acquired new functions as a labour market institution. In Slovenia, it has become a means of providing cheap labour. Unlike previous research, which examined the employment of international students, students in Slovenia are permitted to work full-time. Thus, a student visa can essentially serve as a ticket to labour migration. Examples of students further confirm that the relationship between study and work has been reversed. Despite their potential academic aspirations, the constraints imposed by full-time employment substantially impede their ability to meet their academic obligations.

By adapting to emigration prospects, educational institutions in BiH have become facilitators of job-ready migrants for global labour markets. The case study built on the framework offered by Yeates (2009), Ruiz (2014) and Ortiga (2018) to explain the emergence of export-oriented education in the context of high unemployment and increased demand for training in occupations that offer better emigration prospects. However, we extended the analysis by pointing out that adaptations produce inefficiencies, particularly with regard to the deepening labour market mismatch. The evidence from BiH presented here suggests that adaptations, combined with unfavourable conditions in the domestic labour market, significantly reduce the potential for a brain-gain effect. Discussions about various human capital policies suggest that the authorities are in favour of highly skilled individuals emigrating. The case study assessed the implications of such short-sighted policies on the skills mismatches produced in the local labour market, which suggests the limits of the brain gain effect on human capital.

Formations of education-migration nexuses tend to reproduce existing global hierarchies. In semi-peripheral countries, HEIs adapt to attract international students as a form of selective liberalisation, responding to labour shortages while maintaining formal restrictions on foreign workers. The implicit rule that emerges is that study becomes a legitimate migration route, tolerated insofar as it meets domestic economic needs. In peripheral countries, by contrast, HEIs participate in rule-making that normalises the export of skilled labour. Curricula are reoriented toward international certification frameworks, language training, and competencies aligned with foreign demand, embedding external labour markets into national education systems. In both cases, HEIs act as mediators of institutional adjustment: they absorb market and migration shocks by generating new forms of labour-supply governance. This transforms the very logic of IR rule-making, from one centred on the protection of domestic workers to one oriented toward the management of transnational mobility.

Education policy thereby becomes a site of IR innovation, where rules of skill formation, credential recognition, and labour market access are renegotiated in response to the structural pressures of globalisation and migration.

The comparison suggests that it is useful to study varieties of national education-migration nexuses against the background of internationalisation of education institutions and global migration flows. This research path raises questions about the role of higher education as a labour market institution, as well as broader questions about knowledge production in contemporary universities. From the industrial relations perspective, it helps to explain not only institutional adaptation within HEIs but also the reconfiguration of labour market governance under conditions of transnational migration. The analysis shows that education policy, migration policy, and labour relations are increasingly co-constitutive, reflecting a shift from nationally bounded IR systems towards multi-scalar regimes of skill and mobility governance.

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Educational institutions in the service of transnational migration? Cases of Slovenia and Bosnia and Herzegovina

Abstract

This paper examines higher education institutions as a factor facilitating international labour migration. Drawing on the notion of the education-migration nexus, it explores the role of higher education institutions as channels of labour migration in Slovenia and Bosnia and Herzegovina within the transnational labour migration regime. Our research data, obtained through the compilation of statistics, contextual factors, and interviews, show that educational institutions have resolved internal contradictions, such as declining enrolment in Slovenia and the lack of labour market absorption capacity in Bosnia and Herzegovina, by aligning with migration policies. These linkages have led to international students being exploited as a workforce for sweatshops in Slovenia and to a workforce being produced for foreign labour markets in Bosnia and Herzegovina. This paper provides both a theoretical contribution and new empirical insights into the education-migration nexus from the perspectives of two Western periphery countries that have been largely neglected in the existing literature.

Keywords: Education-migration nexus, transnational migration, internationalisation of education, Slovenia, Bosnia and Herzegovina

Introduction

An emerging scholarship reveals that international education policies and university recruitment practices are increasingly entangled with migration management, often turning education into a tactical backdoor to the labour market. This has profound implications for how states, institutions, and students navigate between learning, working, and belonging in globalised contexts. The paper examines how educational institutions in semi-peripheral and peripheral countries respond to adverse incentives that generate unintended consequences. For instance, competitive pressure to internationalise higher education can turn these institutions into a “backdoor to the labour market,” attracting labour migrants rather than international students who intend to return to their countries of origin upon completion of their studies. This may pave the way for harmful labour conditions for student workers and may not contribute to the quality of education. Similarly, in sending countries, educational institutions may adapt their curricula to train job-ready migrants for the global labour market, reducing the matching of such curricula with the local labour-market needs. This, in addition to facilitating brain drain, also leads to increased skills mismatches at the local labour market. By comparing the contrasting cases of Slovenia as a migrant-receiving semi-peripheral country, and Bosnia and Herzegovina (BiH) as a migrant-sending peripheral

country (Arrighi and Drangler 1986; Vieira 2018), this paper makes a theoretical and empirical contribution to this discussion. As such, it extends the focus of the literature on the education-migration nexus, previously focused on the impact of internationalisation of education, but neglecting unintended consequences resulting from the adverse response of educational institutions. It also provides new perspectives and fresh insights into two countries of the Western periphery that have hitherto been neglected in the literature. Moreover, a comparison of two countries that were once part of the same Yugoslav federation and share certain similarities in their educational systems, yet differ in migration trends, provides a well-suited pair of case studies. This approach offers a unique perspective on how varying migration patterns shape the responses of educational institutions within a broadly similar historical and institutional context. However, it should be noted that the paper does not focus on migration between these two countries but examines the two case studies as contrasting examples.

This article contrasts the internationalisation of higher education in two countries within the broader post-socialist and semi-peripheral space of Southeast Europe: Slovenia, a semi-peripheral receiving country, and BiH, a peripheral sending country. In this regional context, the educational institutions adapt differently to global migration aspirations depending on their country's position. These adaptations have different yet complementary effects: educational institutions in the semi-peripheral country attract a supply of precarious labour, while those in the peripheral country disrupt the domestic labour market. The case study of the receiving country thus focuses on the experiences of student-workers who enter Slovenia on a student visa in the hope of eventually obtaining a work visa. Conversely, the study conducted in the peripheral sending country focuses on the labour market implications of aligning educational institutions in BiH with migration opportunities.

The article is structured as follows. The next section reviews the literature on the education-migration nexus. This is followed by our conceptual framework, methodology, and an overview of the educational context in the two countries, focusing on adaptation to migration demands. Two case studies illustrate these adaptations: international student employment in Slovenia and labour market mismatches in BiH. The conclusion highlights further questions and avenues for research.

Literature Review

Existing research has already looked at the intersection of educational institutions and global migration, referred to as the "migration-education nexus" (Robertson, 2011, 2013; Maury, 2017; Sabzalieva et al., 2022; Cerna and Chou, 2022; Schinnerl and Ellermann, 2023) or 'edugration' (Brunner, 2022; Coustere, Brunner and Shokirova, 2024). The nexus becomes even more important with the rise of the new "capabilities-aspirations" framework for the analysis of migration, as education influences both capabilities for and aspirations to migrate (de Haas, 2021). However, previous research has focused primarily on capitalist core countries (USA, UK, Australia, Canada, Germany, France, etc.), which have developed the market for higher education services since the 1990s when they transformed themselves from global producers of goods to global providers of services (Robertson and Komljenovic, 2016). Higher education services have served the needs of upper- and middle-class populations, which have grown alongside the industrialisation of countries in the Global South and the deindustrialisation of the Global North. The provision of prestigious

universities was a response to the desire of the new affluent global classes to send their children to foreign universities and secure them good jobs through international experience and prestigious degrees. The global affluent classes could afford the high tuition fees, thus supporting the booming higher education market in the countries of the centre.

The competitive global market for higher education services has prompted countries in the centre to make their markets more appealing in line with local labour demands. Alongside education at Western universities, these countries have granted access to their labour markets. Thus, the opportunity to study abroad has evolved to include the right to work during studies and after graduation, as well as the prospect of obtaining permanent residency and citizenship. In the 1990s, Australia pioneered the provision of permanent residency to international students upon completion of their studies, a development that was subsequently emulated by others (Sabzalieva et al., 2022: 182; Robertson, 2013). This has proven to be a pivotal factor in attracting international students. As Schinnerl and Ellermann (2023) illustrate, changes in these entitlements can significantly impact the influx of international students. Therefore, the interaction between education and migration policies is essential for the success of the education industry, as the desire to study abroad often stems from the aspiration to migrate temporarily or permanently to wealthier and safer countries—a phenomenon described as “backdoor migration” (Robertson, 2011). This is further supported by data indicating that, on average, one-third of international students choose to live and work in the country where they studied after graduation (Sabzalieva et al., 2022: 181).

Robertson (2013) framed international students not merely as learners but as actors embedded in complex regimes of migration governance, shaped by state interests, labour market needs, and geopolitical considerations. Her conceptualisation challenges the instrumental framing of student mobility as a purely educational endeavour and instead demonstrates how states exploit education as a migration filter, allowing certain students to transition into work and permanent residency based on economic utility. It challenges the sanitised discourse of “global education” by exposing its entanglement with migration management and labour market strategies. This shows that universities are not neutral actors but are actively involved in the marketing and managing of student migration. Their policies create a precarious labour supply for migrant labour regimes in recipient countries as a side effect.

On the other hand, education systems in migrant-sending countries have increasingly come to be seen as pipelines for transnational labour markets. Whether through state-driven strategies, donor-supported programmes, or transnational partnerships, education is increasingly instrumentalised as a migration-enabling infrastructure. Governments and educational institutions in countries such as the Philippines, India, Sri Lanka, and several Eastern European states have adapted curricula, certification standards, and institutional partnerships to better prepare students for employment abroad, thereby contributing to what scholars term the “strategic export of labour” (Rodriguez, 2010; Wickramasekara, 2011). While this offers economic and developmental benefits, it also raises profound questions about equity, autonomy, and the broader purposes of education. For instance, outflows of skilled workers may harm domestic service provision, especially in the healthcare and education sectors (Bhargava and Docquier, 2008).

Industrial relations research has a long tradition of studying higher education institutions (HEIs) as skill-formation institutions (Estevez-Abe et al., 2001). In this framework, HEIs are one of the factors that make up the overall national industrial relations framework. However, studies of the education-migration nexus challenge this by highlighting the role of HEIs as entry points for backdoor migration or exit points for the transnational migration of skilled labour. These studies are important for industrial relations research because they highlight the under-examined role of HEIs in transnational labour migration and the potential impact this can have on national industrial relations.

Conceptual Framework

This section presents key analytical concepts, such as the epistemological shift, the trade model, the education–migration nexus, and the role of higher education as a labour-market institution, which frame the comparison of higher education transformations in Slovenia and BiH.

The emergence of the education-migration nexus is rooted in two significant transformations within the education system. The first is an epistemological shift in how knowledge is produced at universities, moving from a focus on “critical thinking” to practical “problem-solving” (Freitag, 1995; Močnik et al., 2013). This change has led to a transformation of universities from autonomous social institutions into entrepreneurial corporations that, much like any business, “design new ‘products’, offer new ‘customer services’ and conquer ‘new markets’” (Freitag, 1995: 57-58). The rise of a new global middle class has opened opportunities for universities to market fee-paying study programmes to a broader international audience.

Another significant transformation is that aid to developing countries has been replaced by a trade model in universities (Sabzalieva et al., 2022; Robertson and Komljenovic, 2016; Robertson, 2011). A reduced number of scholarships has been available for students from developing countries, with these positions gradually being taken by tuition fee-paying students. However, not all international students come from affluent families capable of supporting their education, which has resulted in them becoming a source of temporary labour during and after their studies. As tuition fee payers, international students have become “cash cows” and, at the same time, “backdoor migrants” (Robertson, 2011). In countries where there is a high demand for labour, particularly for cheap temporary labour, the liberalisation of migration laws has opened more opportunities for international students to work while studying and after graduation. As a result, student visas have become a gateway for labour migration and a shortcut to lengthy procedures for obtaining work permits.

The concept of the education-migration nexus thus highlights the relationship between the commodification of education and migration policies. A study conducted in Canada revealed that higher education had become a significant export service, ranking sixth among Canadian export activities. On the other hand, international students represent 60% of the temporary workforce (Schinnerl and Ellermann, 2023: 606). Other studies also indicate that access to the labour market has become a key selling feature in promoting education abroad (Cerna and Chou, 2022: 231; Brunner, 2022: 27). Schinnerl and Ellermann (2023: 608) note that “the link between coming to Canada to study and the availability of work authorisation

both during study and after graduation, along with pathways to immigration, is a major driver of international student enrolment growth". On the other hand, restricting access to work can negatively impact the influx of international students. The UK decided to eliminate work opportunities for graduates, resulting in a decline in Indian student enrolment, which fell by as much as 50% between 2011 and 2014. To address the drop in international student numbers, the UK restored work rights in 2021, allowing graduates to work for two years after completing a bachelor's degree and three years after finishing a PhD (Schinnerl and Ellermann, 2023: 602-603).

Recent literature thus increasingly acknowledges that international student mobility is no longer driven solely by academic aspirations but is deeply embedded within broader migration strategies. Scholars have critically examined the ways in which universities act as de facto labour market institutions, offering not only educational credentials but also potential pathways to migration. Robertson (2013) argues that states strategically deploy international education systems as tools for regulating high-skilled migration. In this framework, international students are framed as student-migrants**,** i.e. individuals managed through both education and immigration policy regimes. Empirical findings from Australia show that international students increasingly enrol with migration objectives in mind (Tran et al. 2023; Robertson and Runganaikaloo, 2023). International students actively strategise their educational choices based on perceived migration outcomes, treating study as an instrumental step toward labour market integration (Brotherhood, 2023). These studies highlight that, in addition to assessing the career impacts of studying abroad (e.g. Bryła, 2015, 2020), the structural role of universities in facilitating labour migration must be critically examined. International students often work while pursuing their studies. Although limited research exists on the work of international students, notable studies include a Canadian study by Coustere, Brunner and Shokirova (2024) and several investigations into foreign students' work in Finland (Maury, 2017, 2020; Ndomo et al., 2022) and Denmark (Wilken and Ginnerskov Dahlberg, 2017). In these studies, students struggle to balance academic commitments with financial pressures, along with job insecurity, discrimination, low wages, and the anxiety of not meeting visa-renewal conditions. Additionally, migration regulations greatly affect their livelihoods. In Canada and Finland, international students are restricted to working no more than 24 and 25 hours per week, respectively, to allow adequate time for their studies. This limitation poses a risk of sanctions to students who might need to work more hours to make ends meet. In countries that permit students to work full-time (e.g. Slovenia, Lithuania, Estonia, Croatia, and Sweden), the question arises of balancing study and work. Researchers argue that when education becomes a "second job" (Beerkens, Mägi and Lill, 2011), the large-scale participation of students in paid jobs compromises the quality of higher education.

From the perspective of sending countries, few researchers acknowledge the role of HEIs in training job-ready migrants for the global labour market. Yeates (2009a, 2009b, 2010) portrays colleges and universities as part of a migrant labour commodity chain, where educational institutions within sending countries supply nurses to foreign employers. Building on Yeates' framework, Ortiga (2018) argues that HEIs attempt to educate would-be migrants for overseas jobs by enacting an ideal notion of flexibility, similar to the strategies implemented by today's global factories. Here, school owners and administrators quickly shift manpower and resources to in-demand programmes, hoping to produce the "right" type of workers at the right time. Analysing the situation in the Philippines, Ruiz (2014) argues

that the management of post-secondary educational institutions has resulted in the development of a labour-exporting education system. The few available studies hence try to understand how educational institutions respond to the increased demand for education as a result of migration prospects. This is important to consider in assessing the expected magnitude of brain gain. As individuals migrate to countries with higher income, the expected returns to education are larger and the incentive for education increases. The individual incentive for migration may thus lead to educational investment decisions that produce skills mismatches in the local labour market, while skills needed by the global labour market may not necessarily be needed in the local labour market.

Methods

This study compares two education-migration nexuses at opposite ends of the transnational migration spectrum and their impact on local labour markets. It examines two different institutional responses to migration within broadly similar historical and educational contexts. By studying Slovenia and BiH as illustrative examples, we applied context and trend analyses to describe this, focusing on the historical development of HEIs, the expansion of public and private study programmes, school enrolment, and labour market performance. This helped us explain the convergence of educational institutions with migration policies in the post-Yugoslav period, after both countries had become independent but retained a shared legacy.

For the impact on local labour markets, interviews provided an in-depth description of the response of social actors. The importing strategy of the Slovenian education-migration nexus focused on international student-workers. In contrast, the Bosnian exporting strategy required attention to be paid to labour-market mismatches.

The Slovenian case study was prepared using in-depth individual interviews with migrants and experts. Between March 2024 and March 2025, we conducted 25 interviews with migrants, representatives of trade unions, and labour market institutions in Slovenia. Fifteen of these were in-depth interviews with migrants, all of whom were from countries outside the European Union. This reflects the actual statistical composition of the migrant population in Slovenia, where the majority are categorised as third-country nationals. Interviews with NGOs that provide legal and social support for migrant workers were particularly valuable.

In BiH, 18 interviews with representatives from higher education institutions (both staff and management) and government (including ministries in charge of education and the labour market, as well as accreditation agencies) were conducted between April and August 2025, focusing on collecting qualitative insights into the responses by a variety of stakeholders, and testing our theoretical assumptions described above. The findings from the interviews were combined with statistical data on labour market indicators and educational attainment trends, with the purpose of supporting the qualitative evidence, particularly with regard to the implications of skills mismatches generated in the local labour market.

Education-migration nexus in (semi)periphery

This section presents an analysis of the contextual factors in Slovenia and BiH to understand the environment in which the adaptation of educational institutions operates. A brief

description of the governance structure of the educational sector in each country offers insight needed for understanding the forces behind their adaptation. We present empirical evidence suggesting the existence and magnitude of the adaptation of educational institutions to the demand driven by migration prospects.

Slovenia

Following the separation from Yugoslavia, the Slovenian higher education system embarked on a course of Europeanisation. As was the case elsewhere, Slovenia ceased to provide scholarships to students from developing countries in the early 1990s, after severing its links with the Non-Aligned Movement. The initial developmental shift was the integration of the Slovenian higher education system into European institutions. Slovenia was among the first to join the Bologna Process and, in 2004, upon its accession to the EU, it became a member of the European Higher Education Area (EHEA). This necessitated a Bologna reform of higher education, which entailed a new degree structure with three main cycles and comparable degrees, the European Credit Transfer System (ECTS) and a new quality assurance system (Hauptman Komotar, 2018). Upon accession to the EU, students from EU countries were granted access to higher education on equal terms with Slovenian students, which was free of charge up to the doctoral level. In order to demonstrate “good practice in regional collaboration” (Resolution 2011-2020), since the first half of the 2010s Slovenia has offered students from BiH, Montenegro, North Macedonia, and Serbia the opportunity to undertake their studies in Slovenia without paying tuition fees.

The salient developmental feature is the over-expansion of public and private higher education institutions. In the academic year 2002/2003, 12 independent higher education institutions and 2 universities were offering study programmes (Resolution 2007-2010); by 2025, this number had increased to 43 institutions and 5 universities (source: NAKVIS public records). The number of institutions and study programmes thus far exceeds the European average (Hauptman Komotar, 2018; European Commission, 2024: 42). On the other hand, the number of Slovenian students has declined due to falling birth rates (from 115,000 in 2007/08 to 81,000 in 2023/24; source: SURS). In response to this demographic shift, faculties have been rapidly replacing them with state-funded ex-Yugoslav and fee-paying foreign students. The latest enrolment data (for 2023/2024) from four universities confirm their dependence on foreign students: the University of Ljubljana had 10% foreign students, the University of Maribor 14%, the University of Primorska 23%, and the University of Nova Gorica as much as 63%. In order to recruit foreign students, faculties organise fairs in ex-Yugoslav countries or engage agents, especially for Asian countries. Consequently, between academic years 2017/18 and 2023/24, the number of non-EU students increased by almost five times (source: SURS). Among students from non-European countries, Asian nationals prevail (OECD, 2023: 260). As the number of domestic students declined, faculties intensified their marketing activities abroad, coinciding with global migration pressures seeking a route to the EU via student visas.

The state supports the internationalisation of higher education. According to the government strategy, internationalisation engenders “quality education” and “circulation of talents” (Government of RS, 2023). To enhance Slovenia's appeal as a destination for foreign students, the state has implemented various measures. These include promoting study in Slovenia, removing administrative barriers for international students, and encouraging study

programmes in foreign languages (more than 150 in 2025; source: Study in Slovenia). The internationalisation of education, which was regarded as a failed initiative in 2018 (see Hauptman Komotar, 2018), has thus gained significant momentum in recent years.

Education and student work have long been closely intertwined in Slovenia. The late 1980s saw a rise in student work, which was driven by deteriorating employment opportunities (Zgaga, 2021: 20). Education has become a means of providing young people with temporary employment and income, offering them a respite from unemployment. Over decades, the proportion of students engaged in employment has exhibited an upward trend, reflecting high demand for cheap labour (Breznik and Čehovin Zajc, 2021). As students are allowed to work full time, a third of student workers are full-time workers, while a further third work more than 20 hours a week. The prospect of full-time employment is especially appealing to foreign students whose migration aspirations are driven by the need to earn money while studying. The student visa thus facilitates a relatively smooth transition to labour migration. Following the Foreigners Act, students are granted priority in the issuance of temporary residence permits and can switch from a student permit to a work permit at any time. Upon completing their studies, students are eligible for jobseeker status and the benefits that this entails for a period of nine months. As stipulated in the Employment, Self-employment and Work of Foreigners Act, students are permitted to submit applications for free access to the labour market within a period of two years and thereby avoid a labour market test. Finally, it is indisputably more agreeable to enter a foreign country as talent than a so-called economic migrant.

Bosnia and Herzegovina

BiH's education system is highly decentralised and asymmetric across the country. The decentralised structure at the state level, especially in the Federation of BiH entity with ten cantons, and the lack of cooperation between institutions limit the possibilities of establishing effective strategies and coherent policies (EU Commission, 2023). The higher education sector is facing a number of challenges. Primarily, many universities lack the necessary resources and infrastructure to provide a high-quality education. Decentralised regulation and lack of enforcement of standards allow some private universities to provide education of less than appropriate quality. Furthermore, as a consequence of a lack of resources, and to some extent the way the internal promotion and financial incentives are set up at universities, higher education institutions are predominantly focused on fulfilling their teaching role, while their research role is largely neglected. The inheritance of the Yugoslav system, with highly subsidised education at all levels, but without appropriate reforms in terms of adjustments to the new structure of the economy and labour market needs, along with the lack of coordination between different levels of authority, has resulted in a significant mismatch between the skills produced by the education system and those required by the labour market.

Unregulated student enrolment in public schools, combined with an increase in the number of private schools, has resulted in a significant increase in the number of graduates, which was not followed by labour market developments that would create conditions to absorb them. Such a situation has created an issue of “educated unemployment” and vertical mismatch. Moreover, delayed reforms of the education sector, and more recently the trend of adapting curricula to foreign labour markets, have produced a horizontal mismatch as well.

According to a graduate survey conducted in BiH in 2014 (Bartlett et al., 2016), 64% of graduates are in a job that is well matched to their field of study. The labour market status also impacts the degree of skills matching, as only 49% of currently unemployed or inactive graduates were well matched in their previous job. The mismatch in the labour market also serves as a driver of migration.

The labour market context is important for understanding the possible implications of the adaptation of universities to the export-oriented demand for education. BiH is a country with the highest inactivity, unemployment, and youth unemployment figures in Europe. According to the latest Labour Force Survey (BHAS, 2024), the employment rate in BiH is 42.9%, while the unemployment rate is 12.6%. The figures vary significantly across regions and levels of education. The youth unemployment rate is 27%.

The data on specific demographic characteristics of Bosnian emigrants are very difficult to obtain. The available evidence suggests that more educated persons are more likely to emigrate. Dimova and Wolff (2009) reported that 28.6% of emigrants from Bosnia had tertiary education, while the World Bank Factbook indicates, for example, that 12.7% of emigrants were physicians. Katseli et al. (2006) reported that the percentage of tertiary-educated immigrants from Bosnia to EU-15 was 10.95%. According to a number of surveys (e.g. annual National Survey of Citizen Perceptions between 2015 and 2024), young people in BiH express a rather high level of interest in emigration. According to a recent tracer study by CREDI at two universities in BiH, although not being fully representative, it is interesting that around 20% of recent graduates reported another country as their current country of living and working (CREDI, 2025). In such circumstances, it is clear that educational choices made by individuals are to a large extent determined by migration prospects.

Labour market outcomes

Context and trend analysis helped us to unfold the education-migration nexuses at the opposite ends of migration flows. We proceed with labour market outcomes, presenting their impacts on the working lives of international students in Slovenia and labour market dysfunctions in BiH.

Slovenia: Sweatshop for International Students

Here, we examine the impact of the education-migration nexus on the working lives of international students. As Slovenia permits students to work full-time, it is a viable option for foreign students who require an income to cover their living and study costs. According to the Eurostudent VII survey, international students are more likely than local students to engage in employment to cover their living and study costs (Gril et al., 2022: 61–62).

Students are permitted to undertake employment, which is arranged by an intermediary organisation, the student service. They do not have an employment contract, but the law stipulates a statutory minimum wage of €7.34 per hour gross (€6.32 per hour net) in 2025. Their legal protection is limited to non-discrimination, working hours, rest periods, equal treatment, restrictions for workers under 18 and liability for damages. Due to the limited protection and cheap labour, student work is in high demand among employers. Conversely, trade unions consider students to be external workers. They are considered temporary

workers who are employed under civil-law contracts, meaning they are not recognised as potential trade union members.

International students are subject to the same conditions as national students. Mahi, an Indian student, arrived in Slovenia in 2015; the other interviewees arrived more recently. Upon arrival, all students began working immediately, putting in the same number of hours as regular employees — 40 hours or more per week. Payments are determined arbitrarily, as evidenced by Rahi's experience. He received a text message from his employer informing him that his hourly wage was being reduced from €8.66 to €6.80. As he had taken out a loan to pay the migration agency, the reduced payment meant he could no longer repay the loan, cover his study costs, or support his unemployed parents.

Mahi, a long-term resident in Slovenia, explained the debt-driven migration facilitated by intermediaries:

> *People usually pay €10,000 for a work permit and other things. Ninety-nine per cent of people [from India, Bangladesh, and Pakistan] pay this amount. When they arrive, they work for minimum wages. Smart, educated, and skilled people usually do not come here. They go to Canada or Australia. Poor people usually come, but they do not have the money. So, they pay €6,000 or €5,000 up front, and the rest from these minimum salaries. They pay the rest to* people who bought them (Mahi, interview, 30 July 2024, emphasis added).

Under these pressures, international students encountered challenges in fulfilling their educational obligations. It was a frequent occurrence for Rahi to be obliged to extend his working day during the afternoon shift. He returned home late at night, which resulted in insomnia. Notwithstanding the sleep deprivation, Rahi rose early to study before his afternoon shift.

Andi from Ukraine said that he was expected to do far more than his Slovenian colleagues. A girl from India also noted that she had been given additional tasks that were not in her job description. A dishwasher's job is to clean dishes, but she was also cleaning toilets and preparing food, which does not comply with HACCP standards.

In addition to workloads, international students were confronted with challenges arising from administrative delays, which hindered their ability to successfully complete their education. They usually obtained their study visas several months after the commencement of the term. Some educational institutions facilitated students' re-enrolment for the subsequent term, while others imposed the fulfilment of all duties retrospectively.

The interviews showed that income, debt repayment, and the renewal of residence permits were prioritised over educational goals. Student Seli was expecting a baby with a partner who had found regular employment, thus providing the family with a residence permit and financial support. Heli found employment after eight months of studying in Slovenia, and Rahul after five. Both managed to exchange their student visas for work visas before the end of their first year of study. The interviewees planned only a few days ahead; their prospects did not extend further. They chose Slovenia because they found the study and working conditions feasible, and they hope to either stay or move to another European country when the opportunity arises.

Furthermore, interviews suggest that the education-migration nexus on the semi-periphery poses a risk of harmful behaviour by social actors. Educational institutions hire agents to recruit students for a fee; however, agents also charge students for their service. One interviewee said that he paid because the agent guaranteed admission to the university, although he did not fulfil the requirements. The agent therefore helped him breach the admission criteria. Another interviewee found himself at the mercy of a fellow national who exploited him in return for help with obtaining a work visa. He worked 16 hours a day in a restaurant where he also slept.

Organisations providing legal assistance and other support to migrants have reported an increasing number of international student workers seeking aid, indicating their growing presence in the labour market. Goran Lukić, founder of the Counselling Office for Workers, described this as a “small-scale industry”, in which universities profit from the tuition fees paid by students who are essentially workers.

Bosnia and Herzegovina: Labour Market Dysfunctions

Previous research has consistently highlighted the issue of slow educational reforms in BiH (World Bank, 2009; Bartlett et al., 2016; ETF, 2024). Evidence of this includes outdated curricula and textbooks, skills mismatches, and survey findings indicating low levels of satisfaction among students and employers regarding the quality of education and the skills of graduates. Additionally, there is evidence of a long transition period (more than 12 months on average) from education to employment. Bartlett et al. (2016) reported an oversupply of business and law graduates compared to a shortage of STEM and technical graduates, suggesting that this structural imbalance is exacerbated by migration-driven study choices.

According to information collected through interviews, the higher education system in BiH is generally more oriented toward protecting existing institutional structures than toward adapting curricula to the needs of the domestic labour market. Educational institutions are incentivised to adapt their curricula to individual demands in order to increase student numbers. For private schools, this is clearly a way of increasing revenue. A similar incentive exists for public institutions, as they are allocated a budget based on the number of students enrolled. The increase in the number of private schools, combined with negative demographic trends, has put further pressure on public schools to attract students.

Some programmes provide evidence indicating a high propensity for emigration. For example, the case of care-labour emigration is a well-known phenomenon. The IOM (2022) reported that demand for health professionals has continuously increased in the 2017–2020 period with almost the same dynamics (about 1,000 annually). However, the increase in employment, along with the vacated positions due to retirement (which can be estimated at about 2,500 in total annually), was not sufficient to absorb the number of health professionals graduating each year, which by 2020 was already above 4,000 with an increasing trend. Complementary to this, labour market data from 2024 reveal that, in several subregions of BiH, health professionals were among the occupations with the highest number of exits from public employment service registries of unemployed. Although the report does not distinguish between reasons, evidence suggests that both employment and emigration contribute to this trend. Available data underline the scale of outward mobility: in 2022, over 500 medical doctors trained in BiH were officially registered and

working in Germany, the top receiving country for health professionals according to OECD statistics. Nurses and medical technicians have been leaving for Germany since 2013 under the government-sponsored bilateral employment agreement; however, the total number of emigrants in this sector is estimated to be three times higher, as many of them leave through informal channels (IOM, 2022).

Enrolment data from two public universities in Sarajevo, the capital of BiH, indicate a stable annual intake of between 450 and 700 students per year on health profession programmes between 2015 and 2020. According to a government representative interviewed, “the number of students enrolled in health studies programmes is five times larger than the actual needs of the labour market in our canton”. Another example of such a trend is the increase in the number of private schools offering programmes in health studies. Almost all interviewees agree that some programmes were introduced and that enrolment in other programmes increased purely due to emigration prospects. This is further reinforced by the widespread phenomenon of language training for migration, such as the boom in German language schools in BiH, as well as the introduction of German Language into the curricula of some “export-oriented” programmes. Health and ICT students often explicitly prepare for migration by learning foreign languages and tailoring their studies to the requirements of foreign labour markets.

“Export-oriented” higher education can also lead to a mismatch in terms of the skills acquired. When emigration pathways do not materialise, these graduates remain in BiH and directly contribute to existing skills mismatches. Interviewees mentioned the issue of recent trends in returning migrants, who face barriers to reintegration into the local labour market due to differences in skills acquired and the ones demanded locally. Even when we see a match between local supply and labour market demand at the level of occupations, there are still mismatches at the level of skills offered by the education system to attract students who want to emigrate. These skills may not be applicable to the local labour market.

After presenting evidence that educational institutions may provide sub-optimal education by facilitating migration and offering skills for foreign markets instead of fulfilling their role in local societies, important questions about optimal educational policies arise. The brain-drain phenomenon can discourage investment in human capital, as educational authorities may be reluctant to invest in education for occupations with a high propensity for emigration (Leiman, 2004). This issue has been raised by educational authorities in BiH, who are concerned about reduced funding for certain subjects, such as health studies. However, it is unclear how reduced funding can ensure a sufficient labour force for the local labour market.

Discussion and Conclusion

The paper has demonstrated that the higher education systems in Slovenia and BiH have embraced the “epistemological shift” and “trade model” of Western educational institutions during their “Europeanisation”. However, market mechanisms have proved insufficient in achieving any kind of balance, and the mismanagement of public authorities has exacerbated the negative consequences. This is reflected in both countries in the uncontrolled growth of higher education institutions, an imbalance between the knowledge produced and labour market needs, and a deterioration in the quality of higher education. The two country case studies examined the unintended consequences of the adverse

responses of educational institutions to the general situation. Educational institutions have resorted to solutions linked to migration policies, creating “education-migration nexuses”. In Slovenia, adaptations of higher education have proceeded along the trajectory of an “import strategy”, whereas in BiH, they have unfolded in accordance with an “export strategy”.

In Slovenia, the education-migration nexus has enabled HEIs to overcome the challenge of a falling number of local students enrolling at a time when the number of institutions and programmes has been increasing. Slovenian HEIs have initiated the enrolment of foreign students, thereby compensating for the reduced enrolment of local students. The import-oriented “education-migration nexus” has been instrumental in resolving the inherent contradictions. In BiH, on the other hand, HEIs have developed “export strategies”: they have compensated for the weak absorption capacity of the domestic labour market by educating students for foreign labour markets. They have resolved the internal contradiction by training job-ready migrants for the global labour market. Consequently, higher education has acquired new functions as a labour market institution. In Slovenia, it has become a means of providing cheap labour. Unlike previous research, which examined the employment of international students, students in Slovenia are permitted to work full-time. Thus, a student visa can essentially serve as a ticket to labour migration. Examples of students further confirm that the relationship between study and work has been reversed. Despite their potential academic aspirations, the constraints imposed by full-time employment substantially impede their ability to meet their academic obligations.

By adapting to emigration prospects, educational institutions in BiH have become facilitators of job-ready migrants for global labour markets. The case study built on the framework offered by Yeates (2009), Ruiz (2014) and Ortiga (2018) to explain the emergence of export-oriented education in the context of high unemployment and increased demand for training in occupations that offer better emigration prospects. However, we extended the analysis by pointing out that adaptations produce inefficiencies, particularly with regard to the deepening labour market mismatch. The evidence from BiH presented here suggests that adaptations, combined with unfavourable conditions in the domestic labour market, significantly reduce the potential for a brain-gain effect. Discussions about various human capital policies suggest that the authorities are in favour of highly skilled individuals emigrating. The case study assessed the implications of such short-sighted policies on the skills mismatches produced in the local labour market, which suggests the limits of the brain gain effect on human capital.

Formations of education-migration nexuses tend to reproduce existing global hierarchies. In semi-peripheral countries, HEIs adapt to attract international students as a form of selective liberalisation, responding to labour shortages while maintaining formal restrictions on foreign workers. The implicit rule that emerges is that study becomes a legitimate migration route, tolerated insofar as it meets domestic economic needs. In peripheral countries, by contrast, HEIs participate in rule-making that normalises the export of skilled labour. Curricula are reoriented toward international certification frameworks, language training, and competencies aligned with foreign demand, embedding external labour markets into national education systems. In both cases, HEIs act as mediators of institutional adjustment: they absorb market and migration shocks by generating new forms of labour-supply governance. This transforms the very logic of IR rule-making, from one centred on the protection of domestic workers to one oriented toward the management of transnational mobility.

Education policy thereby becomes a site of IR innovation, where rules of skill formation, credential recognition, and labour market access are renegotiated in response to the structural pressures of globalisation and migration.

The comparison suggests that it is useful to study varieties of national education-migration nexuses against the background of internationalisation of education institutions and global migration flows. This research path raises questions about the role of higher education as a labour market institution, as well as broader questions about knowledge production in contemporary universities. From the industrial relations perspective, it helps to explain not only institutional adaptation within HEIs but also the reconfiguration of labour market governance under conditions of transnational migration. The analysis shows that education policy, migration policy, and labour relations are increasingly co-constitutive, reflecting a shift from nationally bounded IR systems towards multi-scalar regimes of skill and mobility governance.

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