https://doi.org/ 10.7251/EMC2302379K
UDK: 314.15-057.85-026.49(497.5)
Datum prijema rada: 10. novembar 2023.
Submission Date: November 10, 2023
Datum prihvatanja rada: 15. decembar 2023.
Acceptance Date: December 15, 2023
Časopis za ekonomiju i tržišne komunikacije
Economy and Market Communication Review
Godina/Vol. **XIII** • Br./No. **II**
str./pp. 379-394

ORIGINALNI NAUČNI RAD / ORIGINAL SCIENTIFIC PAPER

KEY EMIGRATION FACTORS OF STUDENTS IN SLAVONIA & BARANJA REGION IN CROATIA

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Abstract: *The aim of this research is to examine the intention of students in Croatian region of Slavonia & Baranja about the possibility of going abroad after completing their studies and to identified push and pull factors which influence the most the decision to emigrate. The research is based on a survey conducted on a sample of 420 students in the Croatian region of Slavonia & Baranja. The study uses descriptive statistical analysis and multi-variant analysis–factor method. Research results according to respondent's perception, showed that the majority (61%) expressed intention to stay in Croatia. Data identified unemployment, low paying job and low standard of living in Croatia as main push reasons for their intention to migrate and better standard of living and higher quality of life, better opportunities for career development and better and more stable job as main pull reasons for their intention to migrate. The results also recognized "economic and social reasons" as main push reasons and "economic and non-economic (personal) reasons as main pull reasons. The research findings confirmed the hypotheses of the paper that economic factors are the main push and pull motives for migration for students in Slavonia & Baranja.*

Keywords: *migration, students, push factors, pull factors, Slavonia & Baranja*

JET classification: *J60*

INTRODUCTION

Migrations have always existed, and in today's era of globalization and increasing digitization and availability of information, as well as the removal of barriers to people's mobility, have become a phenomenon characteristic of the development of every country in the world. The high intensity of emigration from Croatia, with a diaspora of about the same number as in the country, indicates the low level of development of the country and that in the future the inhabitants will seek salvation in emigration. This is the main reason for emigration, and in addition, there are various attractive factors of developed countries for a better life. In recent years, Croatia has witnessed large migration especially among youth.

The trend of emigration of young people from Croatia was triggered by the economic crisis in 2008 and has continued until today. Except the young population, the

emigration of the highly educated population also increased, i.e. the "brain drain" process. According to European Commission „High emigration of highly-skilled workers can have detrimental effects on a society. Concerns about loss of talent are present for many regions of the world, in particular in developing countries, which are often left with shortages in critical professions due to the prospect of higher pay from abroad. " (Eu Science Hub, 2023.) Universities are considered as key sources of the economic development of country. So, studying student migration trends is a significant because it impacts on socio-economic development.

Researchers have developed a variety of theoretical frameworks to explain and predict human migration behavior. „The oldest theory of migration is Ravenstein's Laws of Migration (Ravenstein, 1885)., which claimed that the call for labor in the canters of industry and commerce is the prime cause of the flow of migration in the UK. " (Chi Jin, Jansen, Boumeester, & Boelhouwer, 2022.) Also, (Lee, 1966.) in his article "A Theory of Migration" states that there are four main categories of factors that influence migration: factors related to the place of origin and factors related to the destination, obstacles the migrant encounters on the way, and personal factors.

Students emigrate under the influence of various factors. To better understand the motivations that make people to emigrate this study adopts the push and pull factors. „Push and pull factors are forces that can either induce people to move to a new location or oblige them to leave old residences, they can be economic, political, cultural, and environmentally based. Push factors are conditions that can drive people to leave their homes, they are forceful, and relate to the country from which a person migrates. " (Krishnakumar & Indumathi, 2014.) The pull factors to migration are the opposite of push factors. The push factors influencing migration can be categorized into three variables: economic, social and political factors. (for example, lack of employment, Low living standard, natural disasters, security…) The pull factors refer to the aspects that attract migrants to some country. (employment opportunities, higher standards of living, higher wages…) According to (Lee, 1966.) the most important push factors are: 1) weakening of a certain resource, demand crisis, 2) loss of job, 3) discrimination of a potential migrant, whether it is political, religious, ethnic or some other discrimination, 4) alienation from family or wider communities, 5) war or natural disaster. On the other hand, he lists pull factors: 1) the possibility of employment, 2) higher income in the place of immigration, 3) the possibility of training and acquiring a higher level of education, 4) better climatic conditions and better housing conditions, 5) merging with family and relatives and 6) cultural and social content. They are often useful elements of a new country that encourage people to immigrate there in search of a better life.

According to the "Global Competitiveness Report 2019. released by the World Economic Forum, Bosnia and Herzegovina (BiH), Croatia, North Macedonia, and Serbia are among the top-ranked countries with the biggest brain-drain in the world." (World Economic Forum, 2019.) It is evident from these results that Croatia is quite affected by this phenomenon. According to the results of the Croatian National Statistical Institute, in the period between the two population censuses (2011 and 2021), Croatia remains without its own population. "The large number of 329268 people left Croatia." (Croatian Bureau of Statistics, 2022.) As for the age structure of emigrants, "the largest share in 2021 is the population aged 20-39" (Croatian Bureau of Statistics,

2022.), which indicates the fact that the majority is young. "If a country sees a large number of its highly-skilled workers go abroad to work, the remaining population will be older and have a lower potential for productivity." (Eu Science Hub, 2023.) Migration today in Croatia reflects people's attitudes that Croatia does nothing for their well-being and that they simply have to look for a better life for themselves and their families.

When it comes to emigration in search of a better standard of living, Eastern Croatia leads the way among Croatian regions. According to data on population migration in 2021, "Brod-Posavina County (-1,268 persons), Vukovar-Srijem County (-1,261 persons) and Osijek-Baranja County (-1,222 persons) had the largest negative balance of total population migration." (Croatian Bureau of Statistics, 2022.) In addition, the area of Slavonia & Baranja, which includes five counties (Brod-Posavina, Osijek-Baranja, Vukovar-Srijemska, Požeško-Slavonska and Virovitica-Podravska) is the area on the territory of the Republic that, according to official data, has the most unfavorable demographic figures for years, which is considered the most demographically endangered part of the Republic of Croatia, but also a below-average populated area in its entirety. The assumption is that "in 2030, Eastern Croatia will have a fifth less population than in 2011" (Živić, 2017.)

Precisely for these reasons, the goal of the paper is to collect and analyze data on the intention of the students of Slavonia & Baranja region to migrate after completing their studies, as well as their main factors (push and pull) that would influence the intention to migrate. The ultimate goal is to determine the most important individual push-pull factors that influence the intention to migrate. The purpose of the work is to contribute to research that deals with research on migration and the phenomenon of "brain drain".

The research is based on the following research questions:

1. Do students think about leaving Croatia after completing their studies?
2. Do students prefer to leave Croatia for the long term or go to a specific one period and come back?
3. What are the individual push-pull factors that most influence the intention to migrate?
4. What are the area that the most influence to migrate?

Hypothesis 1 (H1). Economic factors are the main push motives for migration for students in Slavonia & Baranja region.

Hypothesis 2 (H2). Economic factors are the main pull motives for migration for students in Slavonia & Baranja region.

The paper is structured as follows. The next section provides an overview of the theories of migration intention among students and introduces the push and pull factors. The third section describes the data collection process and statistical methods. The fourth section presents the findings, followed by a discussion. The paper concludes with the main findings in conclusion.

LITERATURE REVIEW

Research theme of the relevant empirical research papers related to the migration is extremely extensive, but research papers related to the Croatian migration are more modest. Some research conducted on the topic of migration focused only on the

perception of young people. But an important and sometimes neglected aspect of the critical approach is certainly the perception and attitudes of students, especially since students are the ones who represent the greatest potential of knowledge. So far in Croatia there is no research on the students from Slavonia & Baranja region on migration intention.

(Škreblin Kirbiš, 2019.) on a sample of 118 students of economy of a private university in Zagreb, investigated the tendency to emigrate, attitudes related to emigration and past international experience as possible predictors of the intention to live and work abroad. The results showed that 20% of students are inclined to emigrate, 30% are undecided, and 50% are not inclined to emigrate. The general attitude of students towards Croatia is slightly positive, and it is shown to be a significant and important predictor of the tendency to emigrate in addition to attractive factors. (Zdrilić & Sokolović, 2022.) analyzed migration intentions of Croatian students. Results showed that students who has financial problems and have someone live abroad have a stronger intention to migrate. Results also identified three groups of factors relevant to migration intentions: socioeconomic environment, human capital development and personal relationship. (Rajković & Horvatin, 2017.) had a special focus on young people from Slavonia, who masse go to live and work in Ireland. In addition to the main economic motive for emigration, psychological dissatisfaction, positive experiences of previous migrants, the possibility of quickly finding a job, simple bureaucratic procedures, knowledge of the English language, etc. stand out. The research carried out on 553 students of various faculties of the University of Zagreb on the intention to leave conducted by Šverko I. (2005) indicates that students intend to go abroad (75,3%) because of the better economic conditions offered to them there, and then because of better opportunities for education and training. (Šverko, 2005.)

(Marušić & Marković-Denić, 2018.) examined the attitudes of 180 students in their final year of medicine at the University of Belgrade about emigration after completing their studies. The results showed that two thirds of final year students want to leave the country after completing their studies in search of employment and professional advancement. (Gherhes, Dragomir, & Cernicova-Buca, 2020.) analyzed 1782 Romanian engineering students from the five major technical Romanian universities in relation to their migration intentions, motivations, and destinations. Results showed that students are inclined to migrate in a significant proportion and the economic factor being the main migration driver. (Fouarge, Özer, & Seegers, 2019.) investigated the relationship between personality traits and individuals' intentions to migrate on 7412 university students in Germany. Results showed that more open and extravert students are more likely to consider moving abroad while more conscientious and agreeable students are less inclined to migrate. (Hajduch, Orosova, & Stefanakova, 2019.) explore migration intention of 474 university students from Slovakia. Results showed that students who want to leave their home country report a higher level of emigration self-efficacy, more positive migration experience and also more frequent migration experience. (Šeherčehajić & Ramić, 2022.) investigated the emigration attitudes of 203 students at the University of Sarajevo. Results showed that students strongly desire to emigrate abroad for better working conditions, lifestyle, and opportunities for improvement. (Todorović, Stojiljković, & Ćirić, 2019.) examine the main reasons of 355 university students to leave Serbia. Results showed that about 36.2% of students

planned to leave country and the most common reasons is searching for a work (46%). (Kostrzewa, Bonior, Polak, & Domagala, 2022.) analyzed the intention of migration and identified the factors affecting their intentions to migrate among 236 students in Poland. The analysis confirmed the high interest in migration. The key push and pull factors were economic issues, work in better infrastructural conditions, opportunities for better work–life balance and opportunities for professional development. (Nateter & Lavrič, 2022.) analyzed migration intention in 10 countries of Southeast Europe: Albania, Bosnia and Herzegovina (B&H), Bulgaria, Croatia, Kosovo, Macedonia, Montenegro, Romania, Serbia, and Slovenia. Findings showed that the level of socio-economic development in a country affects the emigration desire of young people. High levels of emigration desire among young people, surpassing less-developed countries such as Croatia, Romania, or Bulgaria. (Petreska, Prodanova, & Kocarev, 2022.) pointed out that students' personal and social expectations, and the higher education services' quality and resources, shape brain drain responses. Analysis was on 1150 students from public universities in the Republic of Macedonia. (Czibere & Racz, 2019.) analyzed what causes and motivations lie behind international migration, and what factors influenced young Hungarians to work or study abroad. It also discussed the factors that increase or hinder the migratory propensity, and the differences of opinion between young women and men.

Numerous international studies have attempted to examine the factors influencing the student migration. (Cameron, Farivar, & Coffey, 2019.) explore employment and migration intentions and outcomes of international graduate alumni from two Australian universities. Results have strategic implications for the promotion of Australian higher education to overseas markets. (Gesing & Glass, 2019.) examined students' mobility intentions at ten U.S. research universities. Results suggest that economic push-pull factors influence intent to stay in the U.S., while political, social, socioeconomic, and sociopolitical reverse push-pull factors influence intent to return to their home country. (Piguet, Nassa, Ndiaye, Oumarou, & Wade, 2022.) analyzed 4000 African students' emigration intentions. Results show taht only a minority of students wish to leave and then only temporarily, to improve their human capital upon return. (Sylla, Quadih, Barkanan, Hassoune, & Nani, 2021.) estimated the prevalence of migration intention of 251 final year medical student in Morocco. Findings showed that the 70.1% of final year students had intention to leave the country, of which 63.6% were female. The main pull and push factors are: better training, better working conditions and quality of life. The students intended to leave the country because they were not satisfied about formation and salary. There wasn't significant association between the migration intention and socioeconomic profile of students. (Chi Jin, Jansen, Boumeester, & Boelhouwer, 2022.) explore explore beliefs and background factors that influence 1242 university students' intention to develop in first-tier cities after graduation. (Afridi, Muhammad, & Afrid, 2021.) analyzed the personal, internal and external factors affecting migration intentions of 220 Business Students of Pakistan. the results show that all the internal factors, i.e. the home country push factors and the academic pull factors from abroad, affect the migration intentions of the business students. Personal factors also affect migration intensions. Female student is least intended to go abroad as compared to male students. Young age students are more interested in shifting abroad as compared to older age students. The research has practical impli-

cations as for as policy making for evaluating student migration intentions. (Weerasinghe & Karunarathne, 2022.) analyzed factors affecting the migration intention on Undergraduates students in Sri Lanka. migration intention among female respondents is higher when compared to migration intention among male respondents. Nearly 69% of management undergraduates who participated in this survey have an intention to migrate. Pull factors such as international career and international experience have been recognized as key important factors. Apart from pull factors, political instability has been highlighted as a significant push factor that affects the migration intention of management undergraduates.

Various studies have explored the push and pull theory and factors: (Khalid & Urbanski, 2021.) study hinged on the Push-Pull Migration model. They investigated how economic, political, environmental, and social factors impact on workers decision to migrate. The results show the significance of economic pull factors such as availability of jobs and high wages as the main drivers of migration. Push factors also contributed in different ways to strengthen the resolve of migrants to leave their countries in search of better opportunities, like; unemployment, low paying job, political instability, repressive dictatorships regimes, and social factors. (Mihi- Ramirez & Kumpikaite, 2014.) investigated 1250 students' attitudes to migration in Lithuania. Results showed the main migration motivations identified are economic reasons. (Charsley & Show, 2006.) elaborated on the role of encouragement by family members seeking to reunite with migrated relatives has been quoted as a major reason for migration. (Carabal & Calvo, 2021.) explained that the social factors pushing migration are based on the human desire to achieve better quality of life. Migrants are pushed by social factors such as the need for better education for themselves and their families. (Urbanski, 2022.) founded that among the pull factors considered, economic factors (prospects for higher wages, improved living standards, personal development, job opportunities, good welfare standards and labor demands) have the highest influence on migration.

METODOLOGY

Methodologically, this paper is a quantitative descriptive analysis of 420 survey responses by university students in Slavonia & Baranja region about their migration intentions.

Sample of respondents

The target population of this study consist of 420 university students in Slavonia & Baranja region, including bachelors, masters, and Ph.D. students. The universities in this research refer to Higher Education Institutions. This research targeted students who were enrolled at two universities: University Josip Juraj Strossmayer in Osijek, University in Slavonski Brod, and Polytechnic in Vukovar and Polytechnic in Virovitica. By selecting all faculties, all six scientific and artistic fields: biotechnical, artistic, technical, social, natural science and the humanistic field. In addition, student's permanent place of residence is the area of Slavonia & Baranja region.

For the purpose of data collection, an online survey method was used on the Google Forms platform. The survey was conducted between January 1th, 2023 and April 1th, 2023 in selected faculties. The research survey consists of first part, where respondents filled in basic information about themselves. The second part addressed

the students' intent to migrate (none, temporally and permanent). The respondents had several statements at their disposal and all measurements were taken using 5-point Likert scales (ranging from 1 = strongly disagree to 5 = strongly agree). The third part of questions consisted of certain statements that were marked as potential factors (push and pull) for emigration from Croatia, where respondents indicated how much they agreed with each statement using a Likert scale from 1 to 5. Part of the questionnaire was partially adapted from the paper "Student intentions to go abroad: The size of the potential 'brain drain' and its determinants in 1995, 1997, and 2004" (Šverko, 2005.) and push and pull factors were partially adapted according to (Lee, 1966.)

Data processing methods

Statistical data processing was done using the methods of descriptive and analytical statistics in the software package SPSS. Descriptive statistical parameters were calculated for all variables. In addition, it was also used factor analysis, with which it examined the dimensionality.

RESULTS AND DISCUSSION

The results of the research are based on the survey "Student's intention on emigration".

Table 1. Socio-demographic characteristics of the survey participants

Characteristics		Total (N)	%
Gender	Male	138	32,86
	Female	282	67,14
Years	18-30	352	83,80
	31- 40	42	10
	41-50	25	6
	51 -60	1	0,23
University	University in Slavonski Brod	175	41,6
	University J.J. Strossmayer in Osijek	133	31,6
	Polytechnic in Vukovar	69	16,43
	Polytehnic in Virovitica	43	10,23

Source: author

Table 1 shows that over half (83,80%) of the respondents are young population (18-30) of which 32,86% are male and 67,14% are female. Although the male to female ratio seems to be unequable, according to UNESCO „it is visible rapid increase in women's educational attainment, which has tripled globally between 1995 and 2018 in female enrolment in higher education: in 74% of the countries with data as well as in all regions, women are overrepresented, except for Central and Southern Asia, where there is parity, and sub-Saharan Africa, where men are overrepresented with 73 female students enrolled for every 100 males." (UNESCO, 2021.) The largest share of respondents is studying at University of Slavonski Brod (41,6%) and the smallest share

in Polytehnic in Virovitica. Social sciences are the most represented (65,95%) than technical sciences (12,14%) and biomedicine and healthcare (5,48%) which is in accordance with the data "according to the scientific and artistic fields to which the study programs refer, the most represented is the field of social sciences (43.1%), followed by the field of technical sciences (26.0%), the field of biomedicine and healthcare (12.2%), the field of humanities (6.3%), biotechnical sciences (4.6%), natural sciences (3.8%), arts (2.1%) and interdisciplinary sciences (1.9%)." (Croatian Bureau of Statistics, 2022.) According to student status 68,57% are full-time students and 31,43% are part-time students which is again in line with the data that there are more full-time students. "In 2021/2022. In Croatia 72.6% of students were enrolled in full-time studies, and 27.4% in part-time studies." (Croatian Bureau of Statistics, 2022.)

Table 2. Descriptive indicators measuring variables for emigration intention

Variable	Answers 1 & 2	Answers 3	Answers 4 & 5
Intention to stay in Croatia	(61) 14,52%	(81) 19,28%	(258) 61,43%
Emigrate and return to Croatia	(319) 75,9%	(57) 13,57%	(44) 10,48%
Permanent emigration abroad	(370) 88,09%	(20) 4,76%	(30) 7,14%

Source: author

Table 2. shows that that 61,43% of students are intended to stay in Croatia, 10,48% are intended to emigrate and return to Croatia and 7,14% are intended to emigrate.

Table 3. Descriptive indicators measuring variables for emigration intention

Variable	M	Median	Mode	Min	Max	SD	Skew	KURT	STD. ERR
Intention to stay in Croatia	3,77	4,00	4,00	1,00	5,00	1,15	-0,80	-0,11	0,06
Emigrate and return to Croatia	1,96	2,00	1,00	1,00	5,00	1,04	1,02	0,40	0,05
Permanent emigration abroad	1,60	1,00	1,00	1,00	5,00	0,93	1,85	3,04	0,04

Source: author

Table 3. shows that students mostly agree with the statement that they have intention to stay in Croatia which indicates a low tendency to emigrate. Accordingly, students at least agree with the statement they will permanent emigrate abroad. Also, statement for emigration and return to Croatia have low level of acceptance. These results are different from the results presented in the literature review where the percentage of students inclined to emigrate is much higher. The obtained value of the Cronbach's alpha coefficient is .735 and confirms the consistency in the answers of the respondents through different scales, which indicates that the reliability can be considered acceptable. In this study, only migration intentions were addressed and not the actual migration behavior. However, it has been found that migration intentions are good predictors of future migration (van Dalen & Henkens, 2008.). (Wanner, 2021.) also investigated relationship between remigration intentions and actual behaviors and to

verify whether remigration intentions can predict migrants' actual behaviors and pointed out the relationship between migrants' intentions and behaviors is even stronger.

Table 4. Descriptive indicators measuring variables of push factors

Variable	M	Median	Mode	Min	Max	SD	Skew	KURT	STD. ERR
Natural disaster (earthquake, floods, Covid-19)	2,48	2,0	3,0	1,0	5,0	1,14	0,34	-0,68	0,05
Closing the company	3,21	3,0	4,0	1,0	5,0	1,19	-0,14	-0,94	0,05
Bad economic situation	3,70	4,0	4,0	1,0	5,0	1,09	-0,62	-0,26	0,05
Low paying job	4,02	4,0	5,0	1,0	5,0	1,01	-0,97	0,38	0,04
Unemployment	4,15	4,0	5,0	1,0	5,0	1,02	-1,30	1,27	0,04
Low standard of living	3,96	4,0	4,0	1,0	5,0	0,98	-0,89	0,42	0,04
Corruption	3,81	4,0	5,0	1,0	5,0	1,12	-0,69	-0,31	0,05
Poor public services	3,52	4,0	4,0	1,0	5,0	1,09	-0,37	-0,55	0,05
Dissatisfaction with state management	3,56	4,0	3,0	1,0	5,0	1,13	-0,27	-0,82	0,05
Inability to advance	3,96	4,0	5,0	1,0	5,0	1,05	-0,86	0,06	0,05

Source: author

Table 4. shows that the respondents mostly agree that unemployment is the most push factor for intention of emigration. Right up to it low paying job. Respondents at least agree with natural disasters. All the results are quite high. The obtained value of the Cronbach's alpha coefficient is .889 and confirms the consistency in the answers of the respondents through different scales, which indicates that the reliability can be considered very good.

Table 5. Descriptive indicators measuring variables of pull factors

Variable	M	Median	Mode	Min	Max	SD	Skew	KURT	STD. ERR
Higher salary compared to the one in Croatia	3,95	4,00	4,00	1,0	5,0	1,05	-0,9	0,26	0,05
A better and more stable job	4,09	4,00	4,00	1,0	5,0	0,96	-1,12	0,99	0,05
Better standard of living and higher quality of life	4,12	4,00	5,00	1,0	5,0	0,94	-1,10	0,88	0,05
Better opportunities for career development	4,11	4,00	5,00	1,0	5,0	0,95	-1,01	0,62	0,05
Better training in the profession	3,98	4,00	4,00	1,0	5,0	1,03	-0,95	0,29	0,05
More pleasant nature and climate	2,89	3,00	2,00	1,0	5,0	1,25	0,17	-1,00	0,06

Better public services (education, health, social)	3,56	4,00	4,00	1,0	5,0	1,11	-0,45	-0,56	0,05
A better political system	3,43	3,00	3,00	1,0	5,0	1,17	-0,29	-0,78	0,06
Relatives abroad	2,73	3,00	2,00	1,0	5,0	1,25	0,23	-0,96	0,06
Recommendations and positive experiences of friends	3,00	3,00	3,00	1,0	5,0	1,19	0,04	-0,92	0,06
Partner abroad	3,54	4,00	4,00	1,0	5,0	1,22	-0,53	-0,57	0,06
Traveling and getting to know new people and cultures	3,23	3,00	4,00	1,0	5,0	1,29	-0,15	-1,11	0,06

Source: author

Table 6. show that the respondents mostly agree that better standard of living and higher quality of life and better opportunities for career development are the most pull factor for intention of emigration. Respondents at least agree that relatives abroad and more pleasant nature and climate are intention for emigration. Family did not prove to be a strong attractive factor which is surprising. The obtained value of the Cronbach's alpha coefficient is .901 and confirms the consistency in the answers of the respondents through different scales, which indicates that the reliability can be considered excellent. The Kaiser–Meyer–Olkin test score (KMO) for push variables is 0.881, and for pull variables is 0,899 confirmed the adequacy of the sample and Bartlett's Test of Sphericity was significant ($p < 0.01$) and supported the factorability of the items. Considering this, the data are suitable for the application of factor analysis. A correlation matrix for push factors is made and shown in Table 6.

Table 6. Correlation matrix for push factors

Variable	Correlations, marked correlations are significant at p < ,05000 N=420									
	ND	**CC**	**BES**	**LPJ**	**U**	**LSL**	**CR**	**PPS**	**DSM**	**IA**
ND	1,000									
CC	,362	1,000								
BES	,231	,605	1,000							
LPJ	,217	,450	,685	1,000						
U	,234	,412	,574	,739	1,000					
LSL	,242	,372	,547	,687	,774	1,000				
CR	,257	,368	,475	,464	,454	,488	1,000			
PPS	,203	,300	,430	,438	,418	,474	,642	1,000		
DSM	,162	,384	,479	,453	,354	,407	,678	,718	1,000	
IA	,177	,327	,455	,562	,571	,551	,483	,548	,530	1,000

Source: author

Table 7. Total Variance Explained for push factors

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5,205	52,051	52,051	3,224	32,241	32,241
2	1,163	11,627	63,677	2,661	26,611	58,853
3	1,012	10,119	73,796	1,494	14,943	73,796
4	,734	7,339	81,135			
5	,480	4,798	85,932			
6	,366	3,663	89,595			
7	,338	3,382	92,977			
8	,266	2,662	95,639			
9	,239	2,390	98,029			
10	,197	1,971	100,000			

Source: author

Table presents the eigenvalues, the percentage of variance, the cumulative eigenvalue and the cumulative percentage of variance associated with each other. It reveals that first three factors explain approximately 73.8% of total variance. Dimension 1 (factor 1) describes 32.2% of the total sample variance. Dimension 2 (factor 2) describes a total of 26.6% of the sample variance. Factor 1 and 2 together describe a total of 58.8% of the variance of the sample. Dimension 3 (factor 3) describes a total of 14.9% of the sample variance. Factors 1, 2, and 3 together describe a total of 73.8% of the variance of the sample.

Table 8. Rotated Component Matrix for push factors

Rotated Component Matrix			
	Component		
	1	2	3
1	,879	,185	,136
2	,836	,254	,177
3	,818	,270	,115
4	,650	,296	,383
5	,575	,527	,015
6	,208	,873	,141
7	,254	,848	,089
8	,280	,773	,219
9	,041	,090	,855
10	,378	,194	,692

Source: author

Table shows the loading of varimax rotated factor matrix for three - factor model. Factor 1 contains economic variables: unemployment, poorly paid work, low living standards and bad economic situation and can be called ECONOMIC REASONS. An important criterion for dividing migration is according to its cause: economic and non-economic migration. "Economic migrations occur due to the migrant's intention of employment, ensuring a higher standard of living, in the area of reception or in the homeland, if it is a matter of temporary migration or labor force circulation. Non-economic migrations are most often characterized by political, climatic, cultural-social, family and other reasons." (Kavain, 2022.) Factor 2 contains social variables: impossibility of advancement, dissatisfaction with state management, poor public services and corruption and can be called SOCIAL REASONS. The variable "impossibility of advancement" is equally represented in factor 1 and factor 2, and we distributed it in factor 2. Factor 3 contains two hard-to-connect variables (climate and industry), and since the first two dimensions (factor 1 and factor 2 describe a total of 58% of the variance, this third factor can be excluded from the interpretation and reduction of the dimensionality of the sample, as reduction is usually accepted for research dimensions that describe more than 50% of the variance of the sample.

Table 9. Correlation matrix for pull factors

Variable	Correlations, marked correlations are significant at p < ,05000 N=420											
	1	2	3	4	5	6	7	8	9	10	11	12
1	1,000											
2	,798	1,000										
3	,715	,826	1,000									
4	,708	,781	,810	1,000								
5	,614	,679	,702	,825	1,000							
6	,265	,278	,344	,359	,423	1,000						
7	,476	,538	,567	,559	,606	,578	1,000					
8	,464	,480	,465	,505	,499	,485	,672	1,000				
9	,295	,262	,262	,279	,326	,445	,406	,453	1,000			
10	,381	,368	,348	,377	,413	,450	,488	,475	,678	1,000		
11	,255	,267	,306	,291	,291	,290	,367	,293	,426	,406	1,000	
12	,341	,330	,312	,383	,386	,366	,362	,398	,362	,318	,285	1,000

Source: author

Table 10. Total Variance Explained for pull factors

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6,096	50,796	50,796	4,318	35,983	35,983
2	1,643	13,693	64,489	3,421	28,506	64,489
3	,832	6,934	71,423			
4	,732	6,097	77,520			
5	,652	5,431	82,951			

6	,514	4,284	87,235
7	,399	3,326	90,561
8	,320	2,669	93,230
9	,279	2,324	95,554
10	,248	2,071	97,624
11	,153	1,272	98,896
12	,133	1,104	100,000

Source: author

Table presents the eigenvalues, the percentage of variance, the cumulative eigenvalue and the cumulative percentage of variance associated with each other. It reveals that first two factors explain approximately 64.5% of total variance. Dimension 1 (factor 1) describes 35.9% of the total sample variance. Dimension 2 (factor 2) describes a total of 28.5% of the sample variance. Factor 1 and 2 together describe a total of 64.5% of the variance of the sample.

Table 11. Rotated Component Matrix for pull factors

Rotated Component Matrix		
	Component	
	1	2
1	,898	,186
2	,885	,249
3	,883	,211
4	,825	,209
5	,785	,340
6	,065	,826
7	,201	,777
8	,206	,696
9	,439	,613
10	,520	,603
11	,145	,594
12	,287	,508

Source: author

Table shows the loading of varimax rotated factor matrix for three - factor model. Factor 1 contains variables: A better and more stable job, better opportunities for career development, a better standard of living and a higher quality of life, a higher salary compared to the one in Croatia, better training in the profession and relatives abroad and can be called ECONOMIC REASONS. Factor 2 contains variables: recommendations and positive experiences of friends, more pleasant nature and climate, a better political system, better public services (education, health, social), partner abroad and traveling and getting to know new people and cultures can be called NON-ECONOMIC (PERSONAL) REASONS. Knowledge of pull, but also push factors of a certain

country, is necessary a prerequisite for creating a quality migration policy.

The research does not confirm the research by (Šverko, 2005.) that the majority of respondents intend to go abroad from Croatia, but it also does not confirm other research such as (Sylla, Quadih, Barkanan, Hassoune, & Nani, 2021.) at the world level about the high percentage of going abroad after completing their studies. On the other hand, research confirms research such as (Troskot, Prskalo, & Šimić Banović, 2019.) that economic factors (especially unemployment or inability to find a suitable job in the profession) are the main push and pull motives for emigration in Croatia. Most research points to the fact that migration is primarily motivated by economic factors. These results are not surprising considering that people almost always emigrate with the purpose of improving their material conditions. (Sprenger, 2013.)

CONCLUSION

In the last ten years, Croatia has been marked by intensive emigration of the population abroad. The same dynamics of emigration from Croatia will most likely continue in the future unless there are drastic changes in the institutional system to combat the causes and symptoms of existing negative migration trends. The analysis of the research results indicates that majority (61%) of young people - students in Slavonia & Baranja expressed intention to stay in Croatia, 10,48% are intended to emigrate and return to Croatia and 7,14% are intended to emigrate for permanent. According to factor analysis hypothesis H1 which states that economic factors are the main push motives for migration for students in Slavonia & Baranja is accepted. Also, hypothesis H2 which states that economic factors are the main pull motives for migration for students in Slavonia & Baranja is accepted. Data identified unemployment, low paying job and low standard of living in Croatia as main push reasons for their intention to migrate and better standard of living and higher quality of life, better opportunities for career development and better and more stable job as main pull reasons for their intention to migrate. Consequently, “economic and social reasons” are the main push reasons and “economic and non-economic (personal) reasons are main pull reasons.

This work contributes by introducing a clear time horizon to our measure of intentions, we are able to differentiate between individuals who intend to migrate temporarily and permanently. This research aims to contribute to further research on the subject of migration intentions of the students of Slavonia & Baranja, since there is still little relevant research on this topic in the Republic of Croatia. The collected data on migration intentions will provide information on the basic characteristics of potential migrants from Slavonia & Baranja and their reasons for making the decision to emigrate.

However, the intention of emigration can be limiting. The basic limitation refers to the impossibility of predicting whether and when migration will occur and whether migration will be permanent or temporary. Also, data was collected from Slavonia & Baranja. This research can be a starting point for more detailed research - to include students from all universities in the Republic of Croatia.

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