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The Socio-Economic Determinants of Migration in Western Balkans Countries

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Abstract: The high level of migration should serve as an indicator for countries of origin to better understand the factors that drive people to migrate, while considering the negative effects of this trend. According to the World Development Report of 2023, 184 million individuals, or 2.3% of the world's population, live outside their home country. The purpose of this study is to evaluate and analyze the socio-economic drivers of migration in Western Balkan nations, which have influenced mass migration of the last decades. Push factors, such as unemployment, poverty, or national security, as well as pull ones, such as the economy, education, and desire for a higher standard of living, can influence migration movements. In this research paper, a gravity model for migration flows in the Western Balkans will be assessed. The considered time period is from 2009 to 2022. The final result is expected to point out a significant relationship between migratory flows and indicators that influence them, such as GDP per capita, differences in the level of unemployment or corruption between countries, or gravity variables like population and distance.

Keywords: migration determinants; gravity model; Western Balkan countries

JEL Classification: F22; J61; O15[2]

1. Introduction

Migration, as a global phenomenon, has also had a significant negative impact in the Western Balkans (WB) countries, since many people, mostly the younger generation, are continually leaving. Understanding the consequences of the recent mass exodus requires a thorough evaluation and analysis of socio-economic issues. However, determining factors in different countries change depending on the political, economic, social, demographic, and environmental conditions.

Currently, a new wave of migration has emerged due to the inequalities in income and living standards in these countries, the migration of qualified and well-paid professionals, labour market integration difficulties, the lack of equal opportunities for individuals, economic and demographic imbalances, and the impact of climate change. This movement of people is voluntary or forced, legal or irregular, as well as temporary or permanent.

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[2] https://www.aeaweb.org/jel/guide/jel.php.

However, basically, the decision to emigrate is a very personal one for individuals who are looking for new opportunities and a higher standard of living.

2. Facts and Figures

The number of asylum seekers has reduced slightly since 2015, but still remains at high levels. Referring to asylum seekers from the Balkan nations who apply to EU-27 countries (see figure 1), Albania had the largest number, with about 13,000 applications in 2022, of which approximately 10,000 were first-time applicants. North Macedonia and Serbia are second and third in terms of asylum seekers in 2022, with 6,605 and 4,220, respectively (Eurostat, 2024).

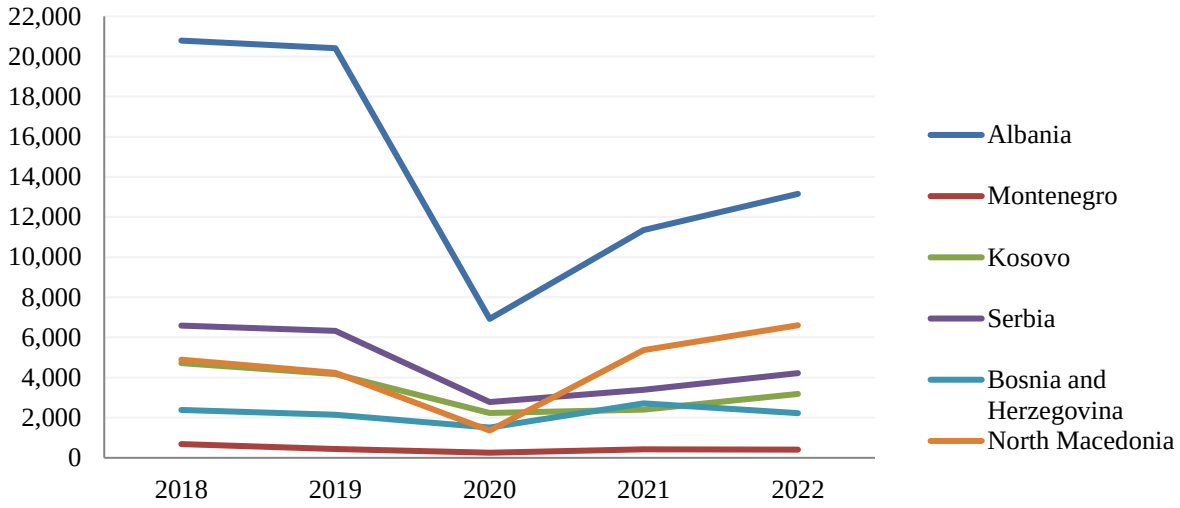


Figure 1. Asylum Applicants from Western Balkan in EU-27countries, 2018-2022

Source: Eurostat (Author elaboration)

The request for asylum, as well as the growing number of immigrants, mostly to the EU, indicates an unsustainable social and economic situation in these countries. Poverty, low salaries, minimal investments in education and health, weak policies and the level of corruption are some of the causes that have accompanied and continue to affect mass departures in WB.

Differences in economic opportunities, particularly employment and wage differentials, are still considered as the key drivers of migration.

According to Eurostat, in 2022, the average annual net wages (after tax) ranged from €106,839 in Switzerland to €12,923 in Bulgaria. This means that the average monthly net wages in Europe ranged from €1,077 to €8,903.

In WB, the gross average monthly wages ranged from €521-985, lower compared to EU countries. Table 1 shows some important socio-economic indicators related to migration, such as GDP per capita, unemployment rate, population growth and population living below the income poverty line.

Table 1. Socio-Economic Indicators in Western Balkan

Country/Indicator	Population growth (annual %)	GDP per capita (current US$)	Unemployment rate (%)	Gross Average Monthly Wages (€, at current Exchange rates)	Population living below income poverty line (%)	
					National poverty line	PPP $1.90 a day
	Year 2022				2009-2020	2009-2021
Albania	-1.2	6,803	11.8	608	21.8	0
Bosnia and Herzegovina	-1.2	7,585	14.1	662	16.9	0.1
North Macedonia	-0.4	6,591	15.1	956	21.6	3.4
Montenegro	-0.3	9,894	15.4	883	22.6	2.9
Serbia	-2.5	9,394	9.5	985	21.7	2.3
Kosovo	-1.4	5,351	12.1	521	n/a	n/a

Source: World Bank, United Nations Data and National Statistical Institutions (Author elaboration) n/a- not available

Investments in education are a crucial factor influencing youth emigration. The quality of education affects the number of young people who choose to study abroad. Numerous young people who leave their home country to study abroad, and high-skilled workers, lead to the phenomenon of brain drain in origin country. Figure 2 depicts the total outbound internationally mobile tertiary students from WB studying abroad. Serbia, Bosnia and Herzegovina, and Albania had the most international outbound students in 2021 (15,060, 15,011, and 14,120, respectively).

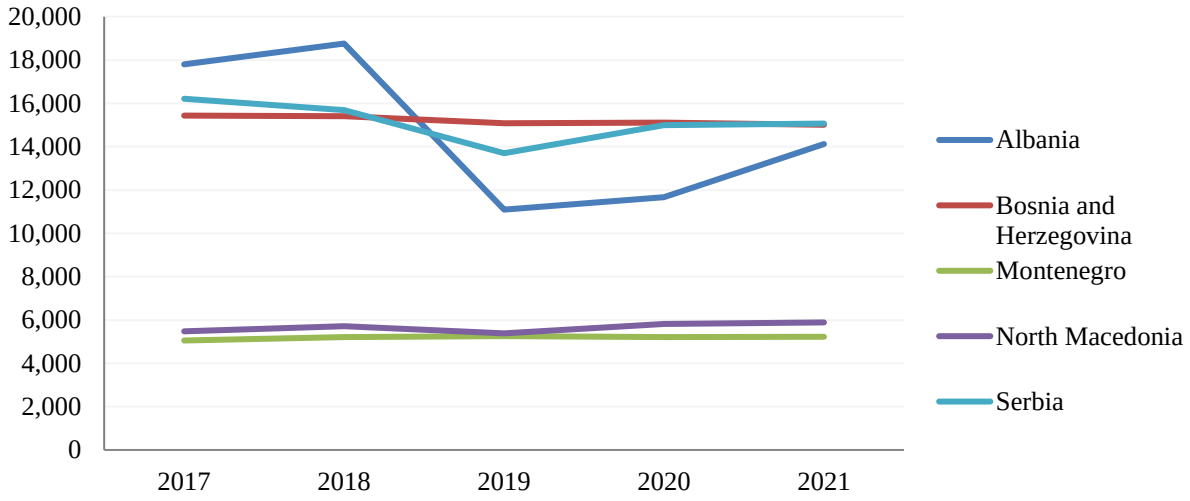


Figure 2. Total Outbound Internationally Mobile Tertiary Students from Western Balkan Studying Abroad (Number)

Source: UNESCO Institute for Statistics

Another significant factor influencing international migration is the prevalence of corruption. Figure 3 presents the corruption perceptions index (CPI)[1] for each WB country in 2022. North Macedonia emerged as the least corrupt among Western Balkan countries, boasting a CPI of 45. On the other hand, Bosnia and Herzegovina, Albania, and Serbia were identified as the most corrupt, with CPI scores of 34, 36, and 36, respectively.

[1] The Corruption Perceptions Index (CPI) ranks 180 countries and territories around the world by their perceived levels of public sector corruption, scoring on a scale of 0 (highly corrupt) to 100 (very clean).

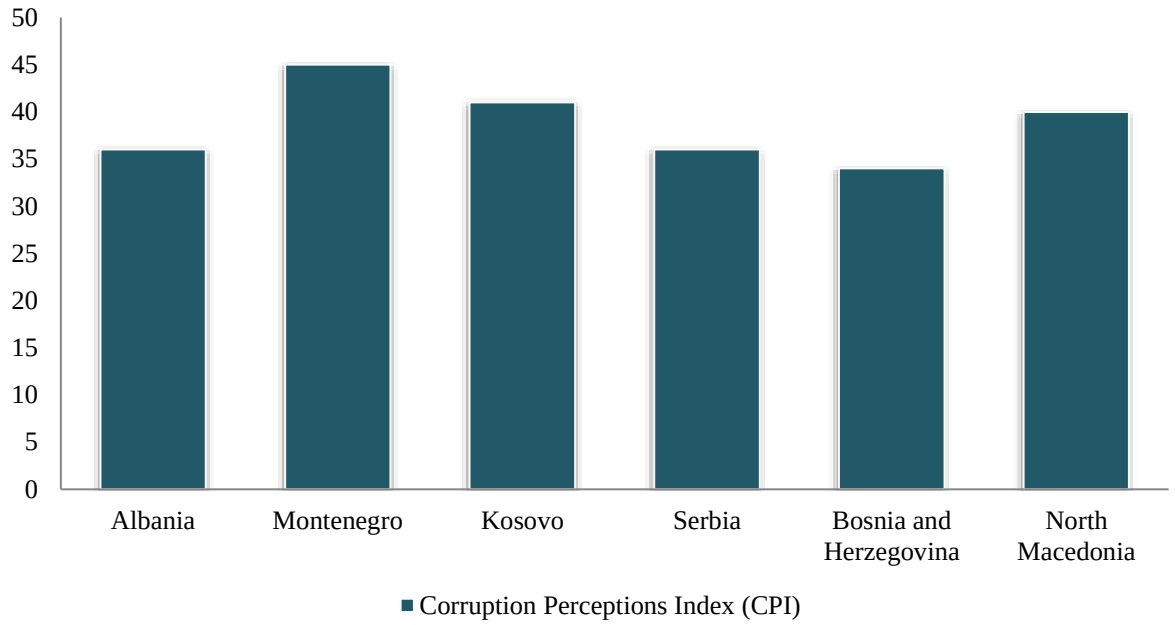


Figure 3. Corruption Perceptions Index (CPI) in Western Balkan, 2022
Source: Transparency International Data (Author elaboration)

3. Literature Review

3.1. Theories of Migration

Migration studies cover a wide range of issues, including the causes and effects of migration, migration flow patterns, migrants' experiences, migration' impact on sending and receiving communities, and immigration and emigration policies.

"Ravenstein (1885;1889), considered an early contributor to migration studies, in which he formulated the "Laws of Migration". Ravenstein considered migration as an integral aspect of economic progress, and he asserted that the primary causes of migration were economic. Lee (1966) argued that migration decisions are determined by 'plus' and 'minus' factors in areas of origin and destination; intervening obstacles (such as distance, physical barriers, immigration laws and so on); and personal factors. Ravenstein and Lee provide many basic insights that are still valid, such as that migration in one direction tends to generate movements in the opposite direction and that migration often takes place in clear spatial patterns linking particular destinations and origins" (de Haas, Castles & Miller, 2020, p. 44).

Van der Gaag and Wissen (2003) classified the various factors that determine migration flows in four main categories: *economic variables* (GDP per capita; income growth; index price; rental price; etc.), *labour market variables* (unemployment rate), *environmental variables*/*quality of life* (public safety; social services; environmental quality; political aspect; etc.) and *gravity variables* (population size; distance) (Etzo, 2008, pp. 8-10).

Hammar, Brochmann, Tamas and Faist (1997) have classified theories using levels of migration. Migration theories, according to Hammar et al. (1997) and Faist (2000), are classified into three levels: micro, meso, and macro.

The micro level answers the question: *Why do people migrate?* According to Hicks (1932), the decision to migrate or not depends on the costs and benefits of migration. He first addressed maximizing

behaviour and argued that differences in net economic advantages are the main causes of migration (Etzo, 2008, p. 3). Sjaastad (1962), who applied human capital theory to migration, presented migration as an investment that increases the productivity of human capital, such as knowledge and skills. People vary in terms of age, gender, personal skills and knowledge, so there will also be differences in the extent to which they can expect to gain from migrating (de Haas, Castles & Miller, 2020, p. 47).

There are many researchers who analyze the micro approach (see for example, Harris & Tadoro, 1970; Lewis, 1954; Cadwallader, 1992; Greenwood, 1975, 1985, 1997; Carrington, 1996; Bauer & Zimmermann, 1995, 1997; Cushing & Poot, 2004).

In the macro approach, aggregate migration flows are studied in relation to the entire economic system. Individual optimisation decisions are expected to contribute to a more optimal allocation of factors of production, primarily through the transfer of labour from poor to rich areas and countries and concomitant reverse flows of capital from rich to poor areas, which is expected to decrease economic gaps between origin and destination areas (de Haas, 2021, p. 5).

"Most migration theories can be grouped together into two main paradigms, following a more general division in social sciences between 'functionalist' and 'historical–structural' theoretical paradigms. Functionalist migration theory generally treats migration as a positive phenomenon, as an 'optimization' mechanism serving the interests of most people, increasing productivity and contributing to greater equality within and between societies. Rooted in neo-Marxist political economy, historical–structural theories primarily see migration as an exploitation mechanism. They emphasize how social, economic, cultural and political structures constrain and direct the behaviour of individuals in ways that generally do not lead to greater equilibrium, but rather reinforce such disequilibria, unless governments intervene to redistribute resources. They see migration as providing a cheap, exploitable labour force, which mainly serves the interests of the wealthy in receiving areas, causes a 'brain drain' in origin areas, and therefore reinforces social and geographical inequalities. Moreover, the authors stressed that push–pull models identify economic, environmental and demographic factors which are assumed to push people out of places of origin and pull them into destination places. 'Push factors' usually include population growth and population density, lack of economic opportunities and political repression, while 'pull factors' usually include demand for labour, availability of land, economic opportunities and political freedoms" (de Haas, Castles & Miller, 2020, pp. 44-45).

3.2. Modelling Migration: The Gravity Model

Ravenstein (1885, 1889) was the first author that applied the gravity theory on migration flows, who in the first law of migration states that the great number of migrants only proceed a short distance and that population produces the current of migration, obviously referring to the two gravity variables, distance and population size as the main determinants of migration. Thus, based on authors Lowry and Lee (1966), the gravity model was extended to include the economic and other explanatory variables (Etzo, 2008, p. 5).

Vanderkamp (1977) initially estimated the gravity model of migration, when he used as independent variables geographical distance between countries and population.

The gravity model, often applied in empirical studies exploring migration determinants, is outlined as follows:

$$M_{ij} = \beta_0 + \beta_1 \cdot D_{ij} + \beta_2 \cdot P_i + \beta_3 \cdot P_j + \beta_4 \cdot Y_i + \beta_5 \cdot Y_j + \beta_6 \cdot U_i + \beta_7 \cdot U_j + \varepsilon_{ij}$$

where, M_{ij} refers the migration flows from origin i to destination j, D refers to distance, P refers to population size, Y refers to income, U refers to unemployment rate and ε is the error term. The regression is expressed in log-log form in order to obtain estimates for the parameters which can be interpreted as elasticities.

4. Empirical Application and Results

Considering the micro and macro theories of migration, an extended gravity model will be applied to WB countries. The gravity model on migration determinants in WB takes the following form (expressed in natural logarithm):

$$mig\_od_t = \beta_0 + \beta_1 \cdot gdpcap\_o_t + \beta_2 \cdot pop\_o_t + \beta_3 \cdot gdpcap\_d_t + \beta_4 \cdot pop\_d_t + \beta_5 \cdot dist\_od + \beta_6 \cdot diff\_cpi\_do_t + \beta_7 \cdot diff\_unemp\_od_t + \varepsilon\, od_t$$

The variables included in this empirical model (based on gravity model applied by authors Malaj & De Rubertis, 2017)[1] are:

Dependent variable

- mig_odt - Migration stocks destination d from origin o at year t.

Independent variables

- gdpcap_ot - GDP per capita in origin o at year t *(expected sign -);*
- pop_ot - Population in origin o at year t *(expected sign +);*
- gdpcap_dt - GDP per capita in destination d at year t *(expected sign +);*
- pop_dt - Population in destination d at year t *(expected sign +);*
- dist_od - Distance between countries *(expected sign -);*
- diff_cpi_dot-Difference between corruption perception index in destination d and origin o *(expected sign +);*
- diff_unemp_odt-Difference between unemployment rates in origin o and destination d *(expected sign +).*

In this paper's model, the dependent variable is migration stocks, as researchers like Ortega et al. (2009), Grogger et al. (2011), and Malaj and De Rubertis (2017) consider migration stock data to be more reliable than migration flow data. The dataset includes WB migration stock in the most important European destinations and the corresponding determinants for the time period 2009-2022. The main sources of data collection are international organizations such as the World Bank, Eurostat, OECD, Transparency International and the National Statistics Institutes of the EU countries.

The following table shows the estimation results for the formulated equations.

[1]Available at: https://migrationletters.com/index.php/ml/article/view/327.

Table 2. Estimation results (SPSS software)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-22.213	4.899		-4.534	.000
	gdpcap_o	-.581	.264	-.077	-2.199	.028
	pop_o	1.218	.086	.451	14.225	.000
	gdpcap_d	1.175	.306	.180	3.840	.000
	pop_d	1.189	.079	.617	15.003	.000
	dist	-2.425	.186	-.460	-13.018	.000
	diff_cpi	.559	.120	.187	4.643	.000
	diff_unemp	.563	.118	.177	4.787	.000

a. Dependent Variable: mig

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.830[a]	.689	.683	1.1468

a. Predictors: (Constant), diff_unemp, pop_o, pop_d, dist, gdpcap_o, diff_cpi, gdpcap_d

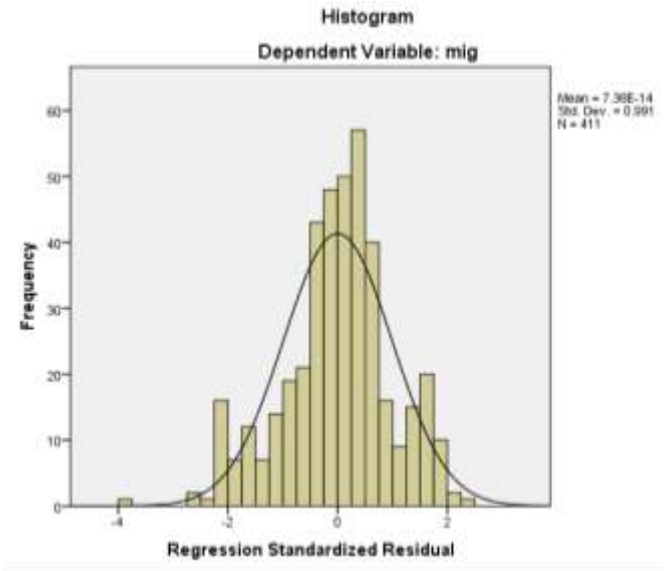
ANOVA[a]

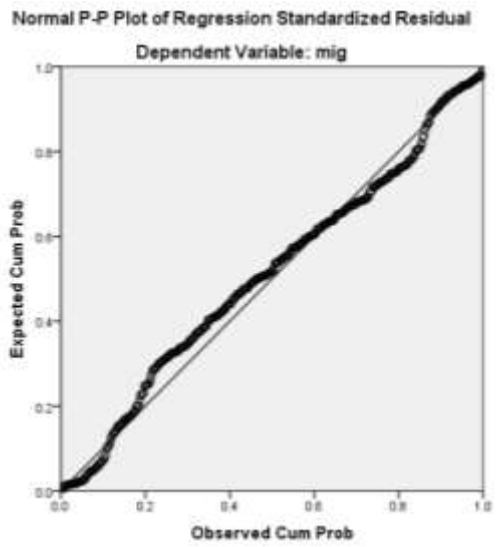
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1172.794	7	167.542	127.395	.000[b]
	Residual	530.002	403	1.315		
	Total	1702.795	410			

a. Dependent Variable: mig

b. Predictors: (Constant), diff_unemp, pop_o, pop_d, dist, gdpcap_o, diff_cpi, gdpcap_d

Parameters are statistically significant and in line with expectations, so it's confirmed the relevance of the considered variables for migration stocks. The adjusted R-squared is relatively high, about 0.68, so the model explains about 68 % of the variation of migration stocks.





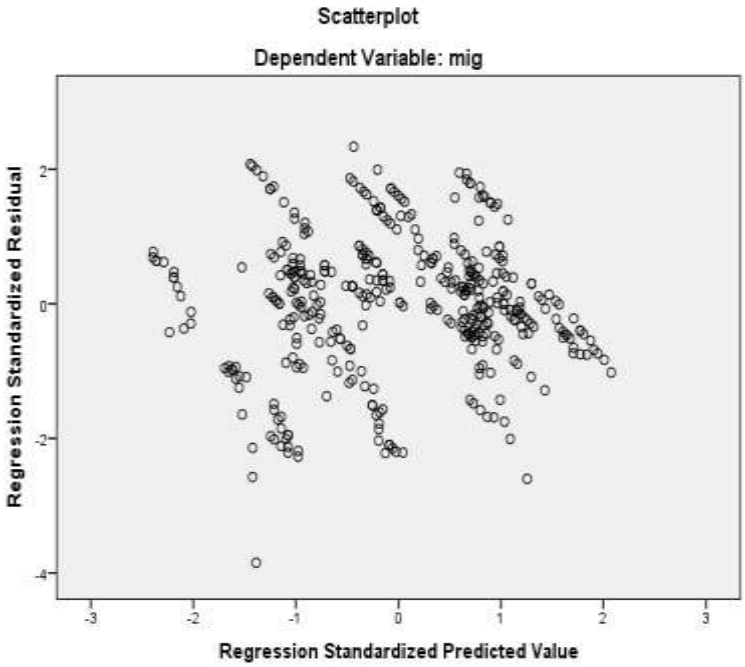


Figure 4. Graphical Representation of Model Residuals and the Distribution (SPSS Software)

5. Concluding Remarks

Concluding remarks for the socio-economic determinants of migration in WB countries emphasize the complex interplay of various factors shaping migration patterns in the region.

The availability of jobs and income disparities between WB countries and destination countries significantly influence migration flows. Economic migrants are often driven by the prospect of higher wages and better living standards abroad. Moreover, highly skilled individuals may migrate for better career prospects abroad, contributing to brain drain in their home countries.

The state of the healthcare system, social services, and levels of corruption can all serve as driving forces behind migration, compelling individuals to seek better conditions elsewhere.

Additionally, the application of a gravity model to migration flows in the WB offered valuable insights into the relationship between various socio-economic indicators and migration patterns. Results from the model reinforced existing theories by demonstrating the significance of factors such as GDP per capita, unemployment rates, corruption levels, and geographical proximity in shaping migratory flows.

In conclusion, addressing the socio-economic determinants of migration in WB countries requires a comprehensive approach that tackles issues related to political stability, economic development, and governance. Efforts to reduce corruption, promote inclusive growth, and enhance regional cooperation are essential for creating conditions that discourage outward migration and foster opportunities for individuals to thrive in their home countries. By understanding the complexities of migration dynamics and addressing underlying drivers, policymakers can work towards building resilient societies and promoting sustainable development in the WB region.

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