



Research Article

© 2024 Kambo et al.
This is an open access article licensed under the Creative Commons
Attribution-NonCommercial 4.0 International License
(<https://creativecommons.org/licenses/by-nc/4.0/>)

Received: 2 September 2023 / Accepted: 21 December 2023 / Published: 5 January 2024

Role of Education in Economic Integration of the Albanian Emigrant's: A Multinomial Regression Approach

Arben Kambo¹

Elton Guberaj²

Flora Merko³

Marta Biancardi⁴

¹Departments of Mathematics Informatics,
Economics & Agribusiness Faculty,
Agricultural University of Tirana, Tirana, Albania

²Department of Finance & Accounting,
Economics & Agribusiness Faculty,
Agricultural University of Tirana, Tirana, Albania

³Department of Economic Sciences, Business Faculty,
Aleksander Moisiu University, Durres, Albania

⁴Department of Economy and Finance,
University of Bari, Aldo Moro, Bari, Italy

DOI: <https://doi.org/10.36941/jesr-2024-0007>

Abstract

The objective of the study is to analyze role of educational level of immigrants in the country of origin, training, and the recognition of school documents in economic integration and employment. In this study, the motivation and the reasons for sending and the destination of the use of remittances was analyzed. The Cassarino's model theoretical approach was used in this study to explain the new models of integration. In this study, the descriptive statistics method and logistic regression modeling is used. The data analysis shows that 68.7% of returned immigrants feel happy after returning compared to 31.3% who do not feel happy after returning. The main destination of the use of immigrant remittances based on the data results were for family needs, 97.9% of the responses affirm that and 2.1% affirm the use for other purposes. The group of immigrants without education have a very high relative chance of using remittances to meet the needs of their families. The role of equivalencies of education documents in the status of employment was analyzed, where 7.5% declared that the education documents of the country of emigration were known, 84.1% declared that they were not known, and 8.3 % gave the other answer. Differences exist regarding the employment status for immigrants whose education documentation was known. For an immigrant whose education documents are recognized, the chance of being employed is 3.07 times higher than an unemployed person and 4.41 times higher than the self-employed group. Participation in vocational training courses in the countries of immigration increases the chance of perceiving the economic situation as very good by 2.15 times higher compared to those who perceive it as unchanged. It is necessary to collect the data and information about reintegration of migrants in their country of origin.

Keywords: logistic, regression, return, integration, education, remittances

1. Introduction

From the perspective of migration experts, Albania serves as an excellent laboratory for exploring the diverse facets of international migration, internal, return migration, and so forth, (Barjaba K., King R. 2005). Moreover, Albania stands out as a nation that effectively demonstrates the intricate interplay between migration and development. On one hand, it is evident that emigration has played a pivotal role in the country's evolution towards a more advanced economy and society, (De Soto H., et al, 2002). On a larger scale, the departure of emigrants has significantly contributed to the nation's GDP composition since the early 1990s. Concurrently, on an individual level, it has provided substantial assistance to the survival and advancement of numerous Albanian households. Another outcome of migration is its influence on Albania's demographic distribution, leading to a division between the densely urbanized center in the Tirana region and the depopulated mountainous and hilly zones in the northern, southern, and inland regions of the country, (Vullnetari J., King R. 2011),(King & Vullnetari, 2009). Their motivations stemmed from escaping poverty and insecurity, while seeking expanded prospects for personal fulfillment. These outward movements, predominantly motivated by economic factors, persisted throughout the 1990s and into the 2000s, leading to a substantial reduction in the population, (Gëdeshi & King, 2018).

According to the World Bank statistics, the significance of inward remittances to Albania are vitally important. Currently, a substantial 1.3 million Albanian migrants have established themselves abroad, constituting a remarkable 40 percent of the nation's present population of Albania. The most notable clusters of these migrants are notably situated in Italy, Greece, Germany, and the United States of America. The evaluated worth of remittance inflows destined for Albania in 2014 stood at an impressive 8.5 percent of the country's gross domestic product (GDP), translating to an approximate sum of USD 1.1 billion, (World Bank Group, 2014).

2. Literature Review

While return migration has been studied since the 1960s, there was a significant and thought-provoking discussion among scholars about the phenomenon of return migration and its impact on countries of origin. According to the neoclassical approach, return migration is the result of a failed migration experience that did not bring benefits. This theory is based on the idea of wage differentials between sending and receiving countries, (Todaro 1969, 140). The return happens when these migrants decide to leave abroad due to their unsuccessful experiences. The neoclassical migration economics, sees migrants as individuals who seek to maximize their income and desire permanent settlement and family reunification. In their study, (Constant and Massey, 2002, 27-8), found that return migration of workers to Germany from 1984 to 1997 was influenced by employment rates in receiving countries, as well as having a spouse in the country of origin.

According to the structural approach to return migration, return is a matter of individual experience and also depends on the social and institutional factors in the countries of origin, (Cerase, 1974). Cerase identifies four different types of returnees: the "failure return," the "return of conservatism," the "retirement return," and the "innovation return", (Cerase, 1974, p. 245). The success of their reintegration process depends on various factors, including changes in the country of origin and professional advancement.

The structuralism approach to return migration has tended to focus more on how returnee initiatives can promote economic development within the context of local government structures rather than on the return migration phenomenon itself, (Velikonja, 1984). Structuralisms have often viewed the migration experiences of returnees as limited to the acquisition of skills, which are lost in the economies of origin, and the use of income earned abroad, (Velikonja, 1984).

Social network theory provides a perspective on return migration by emphasizing the importance of social ties between migrants and their places of origin or residence in other countries, (Cassarino, J. P., 2004). These ties can include relationships with family, friends, and other social

network members. (Portes et al, 1999).

Resource mobilization includes the resources migrants bring with them from their country of migration, known as social capital. These migrants believe they have accumulated sufficient resources to pursue their projects. Based on the social network's theory, some studies have analyzed return migrants to Albania. According to (Pereiro and Biscione , 2016: 148), the process of return migration is indicated by many factors, including economic factors such as unemployment in destination's countries, non-economic factors, as being fond of their country of origin or concerns related to the families left behind. In their study, (Kerpaci and Kuka 2019: 106-107.), concluded that the decision to return is thought as a failure of the migrants in adapting to the rules and norms of the destination countries.

3. Study Methodology and Data Collection Method

3.1 The source of the study data and data collection techniques

The data collection was carried out by a special survey organized by the National Institute of Statistics of Albania, referring to the Cassarino's approach for the three stages of migration. Initially, the interviewees are asked for the reasons of leaving the country and returning to Albania. Next, they are asked on the integration experiences in the last country of destination and the information on how they are influenced in the decision making of returning to Albania. Further, information is collected on the process of returning to Albania and the possibility of staying forever. Support for reintegration and the reintegration experience of returnees in Albania was part of the collected information. The results of the survey are representative for the entire population of emigrants returned to Albania for the period 2009-2013. Based on the fact that there are no official registrations and data for emigration in Albania, these data are unique in their kind for emigration studies. For more technical data related to the way of constructing the questions, sampling, the way of conducting the survey, you can find detailed information on:(Filipi, G., Galanxhi, E., Nesturi, M., & Grazhdani, M. (2014).The data processing program used was SPSS 23.

3.2 Methodology of the study

In the study, is used the descriptive statistics method and regression method. Logistic regression is used to describe the relationship between some independent variables to a dependent dichotomous or multinomial variable. (Kleinbaum, D. G.,et.al, 2002). The logistic equation gives the probability of the dependent variable as follow:

$$z = a + b_1X_1 + b_2X_2 + b_3X_3 + \dots + b_kX_k \quad (1),$$

$$f(z) = \frac{1}{1 + e^{-z}} \quad (2),$$

$$f(z) = \frac{1}{1 + e^{-(a + b_1X_1 + b_2X_2 + b_3X_3 + \dots + b_kX_k)}} \quad (3)$$

Where $X_1, X_2, X_3, \dots, X_k$ are independent variables. We used data set to estimate the unknown parameters $b_1, b_2, b_3, \dots, b_k$. The method used is called maximum likelihood (ML). The report of the results was made by testing hypotheses and also constructing interval estimation about the parameters. Chi-square statistic, likelihood ratio test and the p-value are reported also. For technical details of the methods used, see (Hosmer Jr, D. W., Lemeshow, S., & Sturdivant, R. X. 2013).

3.2.1 Logit transformation

The logit transformation is calculated:

$$P(X) = \frac{1}{1 + e^{-(a + \hat{a} b_i X_i)}} \tag{4}$$

$$\frac{P(X)}{1 - P(X)} = \frac{\frac{1}{1 + e^{-(a + \hat{a} b_i X_i)}}}{1 - \frac{1}{1 + e^{-(a + \hat{a} b_i X_i)}}} = e^{(a + \hat{a} b_i X_i)} \tag{5}$$

$$\text{Logit}P(X) = \ln_e \left[\frac{P(X)}{1 - P(X)} \right] \tag{6}$$

$$\ln_e \left[\frac{P(X)}{1 - P(X)} \right] = \ln_e [e^{(a + \hat{a} b_i X_i)}] = (a + \hat{a} b_i X_i) \tag{7}$$

ROR, the ratio for risk odds ratio:

$$\text{ROR}_{X_i, X_0} = \frac{\text{odds for } X_i}{\text{odds for } X_0} = \frac{e^{(a + \hat{a} b_i X_i)}}{e^{(a + \hat{a} b_i X_0)}} \tag{8}$$

$$\frac{e^a}{e^b} = e^{a-b}; a = a + b_i X_i; b = a + b_i X_0 \Rightarrow e^{(a + \hat{a} b_i X_i)} - e^{(a + \hat{a} b_i X_0)} = e^{[a - a + \hat{a} b_i (X_i - X_0)]} = e^{\hat{a} b_i (X_i - X_0)}$$

$$\text{ROR} = e^{\hat{a} b_i (X_i - X_0)} \tag{9}$$

$$\text{ROR} = e^{b_i} \tag{10}$$

For more technical details about mathematical transformation and the method used, see: (Kleinbaum, D. G., et.al, 2002)

3.3 Variables and their measurement scale

Table 1: Variables and their measurement scale

Code of variable by national questionnaire	Symbol of variable	Variable description	Measurement	Variable categories
B1	X _i	B1. What was your level of education before immigrating (highest level of education completed):	Multinomial	- Couldn't complete any level | _ | 1 - Primary school | _ | 2 - 8/9 year old school | _ | 3 - Secondary school | _ | 4 - Vocational school | _ | 5 - University (cycle I or master) | _ | 6 - Postgraduate (doctorate and others) | _ | 7
L1	X _i	L1. What was your initial employment status in the last country of immigration?	Multinomial	- Employed with salary _ | 1 - Self-employed _ | 2 - Unemployed _ | 3 - Pensioner _ | 4 - Housekeeper _ | 5 - Student/pupil | _ | 6 - Other (_____) | _ | 7
L2	X _i	L2. What is your employment status before returning to Albania?	Multinomial	- Employed with salary _ | 1 - Self-employed _ | 2 - Unemployed _ | 3 - Pensioner _ | 4 - Housekeeper _ | 5 - Student/pupil | _ | 6 - Other (_____) | _ | 7
K1	Y _i /X _i	K1. Was your Albanian diploma recognized in the host country?	Binomial	- Yes _ | 1 - No | _ | 2

Code of variable by national questionnaire	Symbol of variable	Variable description	Measurement	Variable categories
K4	Y _i	K4. Have you attended any vocational courses/training?	Binomial	- Yes | 1 - No | 2
L7	X _i / Y _i	L7. How would you rate your economic situation in the last country of emigration?	Multinomial	- Very good | 1 - Good | 2 - Unchanged | 3 - Bad | 4
S2.	Y _i /X _i	S2. Do you feel happy that you are back in Albania?	Binomial	- Yes | 1 - No | 2
M3	Y _i	M3. What was the reason for sending the income?	Multinomial	-To meet the needs of the family | 1 -For children's education 2 -To build / buy a house _ 3 -To invest in an economic project | 4 -To buy land / farm | 5 -For the modernization of agricultural equipments | 6 -For the construction of public facilities | 7

3.4 Objective of the study

Many studies have been conducted in relation to immigration since Albania is a school for the study of emigration, using different statistical methods, mainly descriptive and graphic methods. In particular, the focus has been on issues such as frequencies of sending remittances, evaluation of remittances, and the role they play in the budget family and in the macroeconomic indicators of the country. These studies are based on interviews and partial data with large errors of representation and non-representation. Based on the fact that in Albania there are only assessments and no regular official reports regarding the main variables that have to do with the economic, social, and demographic indicators of immigrants in general and returnees in particular, this database is the most unique and the most complete so far conducted by the Institute of Statistics. In this study, through logistic regression, we are going to do an in-depth analysis evaluating and analyzing the relationship between different variables of migrants during 3 phases: before emigration, during the stay and return to the homeland.

The objective of the study is to analyze role of training and the recognition of school documents in economic integration and employment, the role of the educational level in the degree of the integration of returned immigrants and in the planning of re-immigration, role of educational level of immigrants in the country of origin to motivation and the reasons for sending and the destination of the use of remittances, raising these research issues:

- a) Recognition and equivalence of school documents in the country of emigration has a positive effect on the level of economic integration of immigrants in the country of emigration.
- b) Recognition and equivalence of school documents in the country of emigration has a negative effect on the level of integration of immigrants in the country of origin.
- c) There is relationship between the events: have they or not attended any vocational courses/training in the country of emigration and the employment status before returning at home.
- d) The educational level of immigrants in the country of origin affects the motivation of the reasons for sending and the destination of the use of remittances in the country of origin.

4. Results and Discussions

In economic theories, the role of immigrant remittances in the economic development of the countries of origin is argued when they are oriented towards safe and efficient investments, their role in alleviating poverty and encouraging agricultural and rural development, as well as reducing

unemployment. Although in Albania until now efforts have been made to analyze the role of remittances in economic development, the studies have not been representative in terms of data collection and provision. The data used in these study are unique as it was the first case of the collection of the data with the three completed stages of emigration. It is known that in Albania the collection of data for emigrants for economic, social, and demographic variables is not organized.

Nominal Regression
Nominal Regression - Case Processing Summary - June 28, 2023

Case Processing Summary

		N	Marginal Percentage
a. To meet the needs of the family	Yes	88076.78	97.9%
	No	1887.00	2.1%
B1. What was your schooling level before you emigrated?	I couldn't finish any level	813.40	0.7%
	Primary school	2080.03	2.3%
	8/9 year old school	46395.06	51.6%
	High school	34665.87	38.5%
	Professional school	4137.03	4.6%
	University (I or Master's cycle)	2062.08	2.3%
Valid		89963.78	100.0%
Missing		43580.22	
Total		133544.00	
Subpopulation		6 ^a	

a. The dependent variable has only one value observed in 1 (16.7%) subpopulations.

Figure 1: To meet the need of family, case processing:

Nominal Regression
Nominal Regression - Parameter Estimates - June 29, 2023

Parameter Estimates

a. To meet the needs of the family ^a	B	S.E.	WAL	df	Sig.	Exp(B) Lower Bound Upper Bound		
						Lower Bound	Upper Bound	Upper Bound
Yes	3.722	.146	654.222	1	.000	16.8480000	16.8480000	16.8480000
[5]=1	25.143	.000		1	.000	16.8480000	16.8480000	16.8480000
[2]=0	.309	.074	17.263	1	.000	1.347	.444	2.243
[3]=0	.238	.160	2.452	1	.119	1.269	.344	1.823
[4]=0	-.112	.151	.522	1	.469	1.117	.421	1.822
[5]=0	-.657	.161	23.512	1	.000	.423	.222	.577
[3]=1	g ^b			1				

a. The dependent variable is categorical.
b. The parameter is set to zero because it is redundant.

Figure 2: Parameter estimates to meet the needs of family dependent and level of education before immigrating as independent.

The destination of the use of emigrant remittances and the analysis of the data results: 97.9% of the responses affirm the use for family needs and 2.1% affirm the use for other purposes. Further, the study has analyzed according to the groups referring to the educational level and it has resulted: 0.7% have no education, 2.3% with primary school, 51.6% with 8/9 year old school, 38.5% with secondary school, 4.6% with vocational secondary school, and 2.3% with university education. Using logistic regression, the role of educational level was analyzed according to table 3, by calculating the relative chances of sending remittances for family needs compared to the possibility of not sending for family needs according to groups with different education levels and resulted are based on the value of Exp^b , table 3. The uneducated group has a very high relative chance of using remittances to meet the needs of their families. The relative chance for immigrants with primary education is 1.46 times or 146% ($p=0.095$), for immigrants with 8/9 years of education is 1.266 times or 126% ($p=0.115$), for immigrants with secondary education is 1.117 times or 117% ($p=0.465$) and for immigrants with secondary vocational education 0.42 times 42% ($p=0.00$) The immigrants with secondary vocational education have the relative chance to use remittances for family needs 58% less.

Nominal Regression
Nominal Regression - Case Processing Summary - June 28, 2023

Case Processing Summary

		N.	Missing Percentage
d. To invest in an economic project	Yes	4893.08	6.4%
	No	85070.70	93.6%
d1. What was your schooling level before you emigrated?	I couldn't finish any level	613.32	0.7%
	Primary school	2037.92	2.3%
	8/9 year old school	43765.58	54.2%
	High school	1584.11	16.2%
	Professional school	3765.85	4.8%
	University (I or Master's cycle)	2037.92	2.3%
VARIABLE		85963.78	100.0%
SUMMARY		100000.00	
IGOR		155944.00	
Maximum Likelihood		0	

Figure 3: To invest in an economic project, case processing.

Nominal Regression
Nominal Regression - Parameter Estimates - June 28, 2023

Parameter Estimates

d. To invest in an economic project ^a		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Yes	Intercept	-2.504	.083	903.307	1	.000			
	[B1=1]	.869	.137	40.024	1	.000	2.385	1.822	3.123
	[B1=2]	-1.161	.164	51.689	1	.000	.307	.222	.423
	[B1=3]	-.307	.088	12.868	1	.000	.735	.622	.870
	[B1=4]	-.535	.087	37.592	1	.000	.586	.494	.695
	[B1=5]	.189	.089	3.594	1	.058	1.208	.994	1.468
	[B1=6]	g ^b	.	.	0	.	.	.	.

a. The reference category is: No.
b. This parameter is set to zero because it is redundant.

Figure 4: To invest in an economic project as depended and level of education as factor, parameter estimates.

Nominal Regression
Nominal Regression - Classification - June 28, 2023

Observed	Predicted		
	Yes	No	Percent Correct
Yes	0	4893.08	0.0%
No	0	85070.70	100.0%
Overall Percentage	0.0%	100.0%	84.6%

Figure 5: To invest in an economic project, case classification.

Nominal Regression
Nominal Regression - Observed and Predicted Frequencies - June 28, 2023

Observed and Predicted Frequencies

B1. What was your schooling level before you emigrated?	d. To invest in an economic project	Frequency			Percentage	
		Observed	Predicted	Pearson Residual	Observed	Predicted
		I couldn't finish any level	Yes	100.08	100.078	.000	16.3%	16.3%
Primary school	No	513.32	513.318	.000	83.7%	83.7%
	Yes	51.12	51.116	.000	2.4%	2.4%
8/9 year old school	No	2037.92	2037.918	.000	97.6%	97.6%
	Yes	2630.28	2630.283	.000	5.7%	5.7%
High school	No	43765.58	43765.577	.000	94.3%	94.3%
	Yes	1584.11	1584.111	.000	4.6%	4.6%
Professional school	No	33081.76	33081.760	.000	95.4%	95.4%
	Yes	371.69	371.686	.000	9.0%	9.0%
University (I or Master's cycle)	No	3765.85	3765.845	.000	91.0%	91.0%
	Yes	155.81	155.805	.000	7.6%	7.6%
	No	1906.28	1906.279	.000	92.4%	92.4%

The percentages are based on total observed frequencies in each subpopulation.

Figure 6: To invest in an economic project, observed and predicted frequencies.

As it was seen in table 5, 5.4% of the responses affirm the use of remittances to invest in an economic project and 94.6% affirm the use for other purposes. Further, the study has analyzed according to the groups referring to the different educational level and it has resulted: 0.7% have no education, 2.3% with primary school, 51.6% with 8/9 year old school, 38.5% with secondary school, 4.6% with vocational secondary school, and 2.3% with university education. Using logistic regression, the role of educational level was analyzed according in table 5. By calculating the relative chances of sending remittances to invest in an economic project compared of not sending to invest in an economic project according to groups with different education levels based on the value of Exp^{Ab} , table 5. The uneducated have a very high relative chance of using remittances to invest in an economic project compared to the possibility of not sending to invest in an economic project =2.38 or 238%($p=0.000$).The relative chance for immigrants with primary education is 0.307 times or 30.7% ($p=0.000$); for immigrants with 8/9 years of education, it is 0.735 times or 73.5% ($p=0.000$); for immigrants with secondary education it is 0.586 times or 58.6% ($p=0.000$); for immigrants with secondary vocational education 1.208 times 120,8% ($p=0.058$) It is clear that immigrants without education and with secondary vocational education have more relative chances to use remittances to invest in an economic project compared to other categories respectively:(+138%);(+20.8%). The least interested in using remittances to invest in an economic project are respectively immigrants with primary education, with high school education and with 8/9 school grades respectively:(-69.3%);(-41.4%); (-26.5%). More detailed studies are needed in the future to analyze how these changes are related to the types of economic investments, especially the types of economic investments that are preferred by those who do not have a year of schooling. Percentage of correct classification of the regression model =94.6

Nominal Regression

Nominal Regression - Case Processing Summary - June 28, 2023

		N	Marginal Percentage
c. To build/buy a home	Yes	26386.16	29.3%
	No	63577.62	70.7%
B1. What was your schooling level before you emigrated?	I couldn't finish any level	613.40	0.7%
	Primary school	2089.03	2.3%
	8/9 year old school	46395.86	51.6%
	High school	34665.87	38.5%
	Professional school	4137.53	4.6%
	University (1 or Master's cycle)	2062.08	2.3%
Valid		89963.78	100.0%
Missing		43580.22	
Total		133544.00	
Subpopulation		6	

Figure 7: To build/buy a home, case processing.

Nominal Regression

Nominal Regression - Parameter Estimates - June 28, 2023

c. To build/buy a home ^a	B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
							Lower Bound	Upper Bound
Yes	Intercept	-.1812	.063	817.042	1	.000		
	[B1=1]	.772	.112	47.746	1	.000	2.163	1.738 2.692
	[B1=2]	.501	.083	36.424	1	.000	1.650	1.402 1.941
	[B1=3]	.901	.064	196.901	1	.000	2.462	2.171 2.792
	[B1=4]	1.053	.064	267.331	1	.000	2.867	2.527 3.253
	[B1=5]	.829	.072	131.289	1	.000	2.292	1.988 2.641
	[B1=6]	0 ^b	-	-	0	-	-	-

a. The reference category is: No.

b. This parameter is set to zero because it is redundant.

Figure 8: To build/buy a home, as depended and level of education as factor, parameter estimates.

Nominal Regression

Nominal Regression - Observed and Predicted Frequencies - June 28, 2023

Observed and Predicted Frequencies

B1. What was your schooling level before you emigrated?	c. To build/buy a home	Frequency			Percentage	
		Observed	Predicted	Pearson Residual	Observed	Predicted
		I couldn't finish any level	Yes	160.16	160.158	.000	26.1%	26.1%
	No	453.24	453.238	.000	73.9%	73.9%
Primary school	Yes	443.48	443.475	.000	21.2%	21.2%
	No	1645.56	1645.559	.000	78.8%	78.8%
8/9 year old school	Yes	13308.17	13308.166	.000	28.7%	28.7%
	No	33087.69	33087.694	.000	71.3%	71.3%
High school	Yes	11057.83	11057.832	.000	31.9%	31.9%
	No	23608.04	23608.040	.000	68.1%	68.1%
Professional school	Yes	1126.97	1126.970	.000	27.2%	27.2%
	No	3010.56	3010.561	.000	72.8%	72.8%
University (1 or Master's cycle)	Yes	289.56	289.559	.000	14.0%	14.0%
	No	1772.53	1772.526	.000	86.0%	86.0%

The percentages are based on total observed frequencies in each subpopulation.

Figure 9: To build/buy a home, observed and predicted frequencies.

Referring to table 8, 29.3% of the responses affirm the use of remittances to build/buy a home, and 70.7% affirm the use for other purposes. Further, the study has analyzed according to the groups referring to the educational level and it has resulted: 0.7% have no education, 2.3% with primary school, 51.6% with 8/9 year old school, 38.5% with secondary school, 4.6% with vocational secondary school, and 2.3% with university education. Using logistic regression, the role of educational level was analyzed according to table 9. by calculating the relative chances of sending remittances to build/buy a home compared to the possibility of not sending to build/buy a home according to groups with different education levels and based on the value of Exp^{b_i} results are in table 9. The uneducated have the relative chance of using remittances to build/buy a home compared to the possibility of not sending to build/buy a home =2.163 or 216.3% (p=0.000).The relative chance for immigrants with primary education is 1.65 times or 165% (p=0.000); for immigrants with 8/9 years of education, it is 2,462 times or 246.2% (p=0.000); for immigrants with secondary education it is 2.867 times or 286.7% (p=0.000); for immigrants with secondary vocational education 2.292 times 229.2% (p=0.000) It is clear that immigrants with high school education and with 8/9 school grades have more relative chance to use remittances to build/buy a home compared to other categories respectively:(+186%);(+146%). The least interested in using remittances to build/buy a home are respectively immigrants with primary education and without education respectively: (+65%);(+116.3%). Referring to the data, the purchase or construction of houses remains one of the main destinations for using of remittances in Albania, regardless of the educational level of the immigrants. The average relative chance for each category = +128% .More detailed studies are needed for the motives of using remittances for this destination and the factors that have influenced connecting it to the markets, investment opportunities and the functioning of real estate markets. Percentage of correct classification of the regression model =70.7%.

Referring to the data, 4.3% of the responses affirm the use of remittances to buy a land/farm and 95.7% affirm the use for other purposes. Further, the study has analyzed according to the groups referring to the educational level and it has measured that: 0.7% have no education, 2.3% with primary school, 51.6% with 8/9 year old school, 38.5% with secondary school, 4.6% with vocational secondary school, and 2.3% with university education. Using logistic regression, the role of educational level was analyzed by calculating the relative chances of sending remittances to buy land/farm compared to the possibility of not sending to buy a land/farm according to groups with different education levels, results are based on the value of Exp^{b_i} . It is clear that immigrants with high school education, immigrants with secondary education and with 8/9 school grades have more chance to use remittances to buy a land/farm compared to other categories Percentage of correct

classification of the regression model =95.7%. More in-depth studies are needed in the future to analyze the interest of uneducated immigrants to invest in agriculture in order to build policies for their continued education.

Referring to the data 2.1% of the responses affirm the use of remittances for modernizing agriculture equipment and 97.9% affirm the use for other purposes. Further, the study have analyzed according to the groups referring to the educational level and it was measure that: 0.7% have no education, 2.3% with primary school, 51.6% with 8/9 year old school, 38.5% with secondary school, 4.6% with vocational secondary school, and 2.3% with university education. Using logistic regression, the role of educational level was analyzed. by calculating the relative chances of sending remittances for modernizing agriculture equipment compared to the possibility of not sending remittances for modernizing agriculture equipment according to groups with different education levels based on the value of Exp^{b_i} . It is clear respectively that immigrants with primary school education, high school education immigrants and with 8/9 school grades of educations have more chances of using modernizing agriculture equipment compared to other categories. Percentage of correct classification of the regression model =97.9%. More in-depth studies are needed in the future to analyze the interest of other categories of immigrants to invest in modernizing of agriculture equipment in order to build lifelong education policies.

Nominal Regression - Case Processing Summary - June 30, 2023

Case Processing Summary			N	Marginal Percentage
b. For children's schooling	Yes		20394.59	22.7%
	No		69569.19	77.3%
B1. What was your schooling level before you emigrated?	I couldn't finish any level		613.40	0.7%
	Primary school		2089.03	2.3%
	8/9 year old school		46395.86	51.6%
	High school		34665.87	38.5%
	Professional school		4137.53	4.6%
	University (I or Master's cycle)		2062.08	2.3%
	Valid		89963.78	100.0%
Missing		43580.22		
Total		133544.00		
Subpopulation		6		

Figure 10: For children's schooling, case processing

Nominal Regression - Parameter Estimates - June 30, 2023

b. The school of children ^a		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Yes	Intercept	-2.782	.094	876.225	1	.000			
	[B1=1]	-.144	.206	.484	1	.486	.866	.578	1.298
	[B1=2]	.966	.113	72.795	1	.000	2.627	2.104	3.279
	[B1=3]	1.742	.095	339.301	1	.000	5.710	4.744	6.873
	[B1=4]	1.335	.095	197.627	1	.000	3.801	3.155	4.579
	[B1=5]	1.925	.100	370.765	1	.000	6.852	5.633	8.335
	[B1=6]	0 ^b			0				

a. The reference category is: No.

b. This parameter is set to zero because it is redundant.

Figure 11: For children's schooling, as depended and level of education as factor, parameter estimates.

Refer to table 11, 22, 7% of the responses affirm the use of remittances in investing for children schooling and 77.3% affirm the use for other purposes. Further, the study has analyzed according to the groups referring to the educational level and it has measured that: 0.7% have no education, 2.3%

with primary school, 51.6% with 8/9 year old school, 38.5% with secondary school, 4.6% with vocational secondary school, and 2.3% with university education. Using logistic regression, the role of the educational level was analyzed according to table 12, by calculating the relative chances of sending remittances investing in children schooling compared to the possibility of not sending to invest in children schooling according to groups with different education levels and results are based on the value of Exp^{b_i} . The uneducated group has a very low relative chance of using remittances for children schooling compared to not sending for investing in children schooling =0.866 or 86.6% (p=0.486). The relative chance of immigrants with primary education is 2.627 times or 262,7% (p=0.000); for immigrants with 8/9 years of education, it is 5.710 times or 571% (p=0.000); for immigrants with secondary education it is 3.801 times or 380% (p=0.000); for immigrants with secondary vocational education 6.852 times 685% (p=0.000) It is clear that immigrants with secondary vocational education and with 8/9 years of education have more chance to use remittances for children schooling compared to other categories respectively:(+585,2%);(+280%). The least interested in using remittances for children schooling are respectively immigrants without education and with primary education, respectively:(-23,6%);(+162,7%). Referring to the data, it results that in general, immigrants are motivated to use remittances for the education and schooling of their children, and this interest increases with the increase in the educational level. An in testing fact is that the category that has the relative chance to send more remittances for this purpose are those who have graduated from secondary vocational schools, which have respectively 2.6 times higher than those with primary school, 1.2 times higher than them with 8/9 years of education and 1.8 times higher than those with general high school. More detailed studies are needed in the future to analyze the factors that motivate this category to use more remittances for the education of their children. In advance, we think that this category has better enjoyed the role of education in economic and social integration. This analysis can be used for the design of new strategies regarding the organization and operation of vocational secondary education in the future in the country of origin.

Nominal Regression
Nominal Regression - Case Processing Summary - June 28, 2023

Case Processing Summary

		N	Marginal Percentage
K4. Have you attended any professional training courses?	Yes	9486.36	7.1%
	No	124057.64	92.9%
L7. How would you assess your economic situation in the last place of residence?	Very good	17083.63	12.8%
	Good	93455.56	70.0%
	Unchanged	17061.79	12.8%
	Bad	5943.02	4.5%
Valid		133544.00	100.0%
Missing		.00	
Total		133544.00	
Subpopulation		4	

Figure 12: Participated in professional training courses, case processing.

Nominal Regression
Nominal Regression - Parameter Estimates - June 28, 2023

Parameter Estimates

K4. Have you attended any professional training courses? ^a		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Yes	Intercept	-2.912	.059	2464.426	1	.000			
	[L7=1]	.574	.065	79.085	1	.000	1.776	1.565	2.016
	[L7=2]	.374	.060	38.943	1	.000	1.454	1.293	1.636
	[L7=3]	-.060	.069	.757	1	.384	.942	.824	1.078
	[L7=4]	0 ^b	.	.	0	.	.	.	.

a. The reference category is: No.
b. This parameter is set to zero because it is redundant.

Figure 13: Participated in professional training courses as factor and assessing of economic situation in the last place of residence as depended parameter estimates.

It turned out that 7.1% participated in professional training courses and 92.9% did not participate. Assessment of the economic situation in the last place of residence in the country of emigration: 12.8% very good; 70% good; 12.8% unchanged and 4.5% worse, table 13. The role of professional training in the countries of emigration in economic integration was highlighted. The analysis of the data shows that the emigrants who participated in the professional training have a relative chance to evaluate the economic situation in the last place of residence very well 1.776 or 177.6%, (p=0.000), the relative chance to give a good assessment 1.454 or 145.4% (p=0.000) and the relative chance to give an answer for unchanged situation 0.942 or 94.2% (p=0.384). Participation in vocational training courses increases the chance of perceiving the economic situation as very good by 2.15 times higher compared to those who perceive it as unchanged and increases the chance of perceiving the economic situation as good by 1.543 times higher compared to those that they perceive as unchanged, table 14. More detailed studies are needed for this issue in the future regarding the types, duration, and forms of their organization. However, the data show that professional qualifications play an important role in the economic integration of immigrants in the countries of emigration.

Nominal Regression
Nominal Regression - Case Processing Summary - June 28, 2023

		N	Marginal Percentage
K1. Did your Albanian diploma recognize you in the last place of residence?	Yes	9912.57	7.5%
	No	119534.09	92.5%
	Other	10928.15	8.3%
L2. What was your job status before returning to Albania?	Employed with salary	59097.24	45.0%
	His own employed	3265.57	2.5%
	Unemployed	52946.43	40.3%
	Pensioner	5413.11	4.1%
	Home	6085.56	4.6%
	Student/student	3975.39	3.0%
Valid	Other	569.50	0.4%
Missing		131374.91	100.0%
Total		2169.19	
Subpopulation		133544.00	
		7	

Figure 14: Recognition of education documents, case processing.

Nominal Regression
Nominal Regression - Parameter Estimates - June 28, 2023

Albanian diploma recognize you in the last place of residence? *		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Yes	Intercept	1.773	.152	136.881	1	.000			
	[L2=1]	-1.758	.153	132.531	1	.000	.172	.128	.233
	[L2=2]	-3.249	.186	303.929	1	.000	.039	.027	.056
	[L2=3]	-2.875	.155	344.946	1	.000	.056	.042	.076
	[L2=4]	-26.757	.000	.	1	.	2.397E-12	2.397E-12	2.397E-12
	[L2=5]	-1.761	.189	87.177	1	.000	.172	.119	.249
	[L2=6]	.162	.162	.997	1	.318	1.176	.856	1.616
	[L2=7]	0 ^b	.	.	0	.	.	.	.
No	Intercept	1.457	.156	87.647	1	.000			
	[L2=1]	.696	.156	19.870	1	.000	2.008	1.477	2.725
	[L2=2]	.330	.164	4.060	1	.044	1.390	1.009	1.916
	[L2=3]	1.015	.156	42.103	1	.000	2.760	2.031	3.750
	[L2=4]	1.249	.165	57.001	1	.000	3.485	2.520	4.820
	[L2=5]	2.143	.175	149.526	1	.000	8.527	6.048	12.022
	[L2=6]	-.148	.167	.784	1	.376	.863	.622	1.197
	[L2=7]	0 ^b	.	.	0	.	.	.	.

a. The reference category is: Other.
b. This parameter is set to zero because it is redundant.

Figure 15: Recognition of education documents as factor and the job status before returning to Albania as depended, parameter estimates.

Referring the table 16, the equivalence of education documents increases the chance of being employed among immigrants with university education 6.83 times higher compared to immigrants with professional education and 21 times higher compared to immigrants with 8/9 years of education, but p= 0.316.

One of the objectives of the study was the analysis of the role of recognition of education

documents in the status of employment relationships, where 7.5% declared that the education documents of the country of emigration were known, and 84.1% declared that they were not known and 8.3 % gave the other answer, table 16. Based on the data, 45% were employed, 2.5% self-employed and 49.3% unemployed, the rest 4.1% pensioners, 4.6% housewives and 3% students. Differences exist regarding the employment status for immigrants whose education documentation was known. Based on data of table 16, the relative chance that an employee's education documents to be recognized =0.172, (p=0.000); for a self-employed person=0.038 (p=0.000) and for an unemployed =0.056, (p=0.000). Even though the relative chances that an employed, self-employed, or unemployed person has for their education documents to be recognized are small, there are differences between them. For an immigrant whose education documents are recognized, the chance of being employed is 3.07 times higher than an unemployed person and 4.41 times higher than a self-employed person and the chance of being self-employed compared to the unemployed is 0.69 times lower. More studies are needed in the future. These results can serve to build strategies and increase cooperation regarding the recognition and equivalence of school and education documents between the countries of origin and destination of immigrants.

Nominal Regression

Nominal Regression - Case Processing Summary - June 28, 2023

Case Processing Summary			
		N	Marginal Percentage
K1. Did your Albanian diploma recognize you in the last place of residence?	Yes	9912.57	7.5%
	No	110534.09	84.1%
	Other	10928.15	8.3%
S2. Are you happy to be back in South Africa?	Yes	90424.84	68.8%
	No	40949.97	31.2%
Valid		131374.81	100.0%
Missing		2169.19	
Total		133544.00	
Subpopulation		2	

Figure 16: Recognition of education documents and happiness of returning in homeland case processing.

Nominal Regression

Nominal Regression - Parameter Estimates - June 28, 2023

K1. Did your Albanian diploma recognize you in the last place of residence? ^a		Parameter Estimates							
		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Yes	Intercept	-.080	.021	14.797	1	.000			
	[S2=1]	-.031	.028	1.218	1	.270	.970	.918	1.024
	[S2=2]	0 ^b	.	.	0	.	.	.	.
No	Intercept	1.894	.016	14899.740	1	.000			
	[S2=1]	.657	.020	1036.496	1	.000	1.928	1.853	2.007
	[S2=2]	0 ^b	.	.	0	.	.	.	.

a. The reference category is: Other.

b. This parameter is set to zero because it is redundant.

Figure 17: Recognize of education documents as factor and happiness of returning in homeland as depended, parameter estimates.

The analysis of the data tab, 17 showed that the lack of equivalence of education documents in the countries of emigration increases the chance that the emigrants who returned to their homeland will

be dissatisfied. Based on the data, 68.8% are satisfied with the return and 31.2% are not satisfied with the return to their homeland. The relative chance, of receiving a statement of satisfaction for the return to the homeland for an immigrant who's education documents are recognized =0.97 ($p=0.27$), while the relative chance of receiving a statement of satisfaction for the return from an immigrant returning to the homeland whose education documents are not recognized was =1.928 ($p=0.000$). Ignorance of education documents increases the chance of receiving an affirmation of satisfaction of returning to the homeland = 1.98 times.

5. Conclusions

The data analysis shows that 68.7% of returned migrants feel happy after returning compared to 31.3% who do not feel happy after returning. The destination of the use of emigrant remittances and the analysis of the data results: 97.9% of the responses affirm the use for family needs and 2.1% affirm the use for other purposes. The uneducated have a very high relative chance of using remittances to meet the needs of their families, but those with secondary vocational education have the relative chance of using remittances for family needs 58% less.

As it was seen 5.4% of the responses affirm the use of remittances to invest in an economic project and 94.6% affirm the use for other purposes. It is clear that immigrants without education and with secondary vocational education have more relative chance of using remittances to invest in an economic project compared to other categories respectively:(+138%);(+20.8%). The least interested in using remittances to invest in an economic project are respectively immigrants with primary education, with high school education and with 8/9 school grades respectively:(-69.3%);(-41.4%); (-26.5%). More detailed studies are needed in the future to analyze how these changes are related to the types of economic investments, especially the types of economic investments that are preferred by those who do not have a year of schooling.

Referring to the data, the purchase, or construction of houses remains one of the main destinations for the use of remittances in Albania, regardless of the educational level of the immigrants. It is clear that immigrants with high school education and with 8/9 school grades have more relative chance of using remittances to build/buy a home compared to other categories respectively:(+186%);(+146%). The least interested in using remittances to build/buy a home are respectively immigrants with primary education and without education. The average relative chance for each category = +128%. More detailed studies are needed for the motives of using remittances for this destination and the factors that have influenced connecting it to the markets, investment opportunities and the functioning of real estate markets.

Based on the data, immigrants with high school education, immigrants with secondary education and with 8/9 school grades have more chances of using remittances to buy a land/farm compared to other categories. More in-depth studies are needed in the future to analyze the interest of uneducated immigrants to invest in agriculture in order to build policies for their continued education.

The least interested in using remittances for children schooling are respectively immigrants without education and with primary education, respectively:(-23.6%);(+162.7%).

Referring to the data, it results that in general, immigrants are motivated to use remittances for the education and schooling of their children, and this interest increases with the increase in the educational level. The category that has the relative chance to send more remittances for this purpose are those who have graduated from secondary vocational schools, which have respectively 2.6 times higher than those with primary school, 1.2 times higher than them with 8/9 years of education and 1.8 times higher than those with general high school. More detailed studies in the future are needed to analyze the factors that motivate this category to use more remittances for the education of their children. In advance, we think that this category has better enjoyed the role of education in economic and social integration. This analysis can be used for the design of new strategies regarding the organization and operation of vocational secondary education in the future in the country of origin.

The role of professional training in the countries of emigration in economic integration was highlighted. Assessment of the economic situation in the last place of residence in the country of emigration: 12.8% very good; 70% good; 12.8% unchanged and 4.5% worse. Participation in vocational training courses increases the chance of perceiving the economic situation as very good by 2.15 times higher compared to those who perceive it as unchanged and increases the chance of perceiving the economic situation as good by 1.543 times higher compared to those that they perceive as unchanged. More detailed studies are needed for this issue in the future regarding the types, duration, and forms of their organization. However, the data show that professional qualifications play an important role in the economic integration of immigrants in the countries of emigration.

The role of equivalencies of education documents in the status of employment was analyzed, where 7.5% declared that the education documents of the country of emigration were known to them, and 84.1% declared that they were not known to them and 8.3 % gave the other answer. Differences exist regarding the employment status for immigrants whose education documentation was known. However, the relative chances that an employed, self-employed, or unemployed person has their education documents recognized are small, there are differences between them. For an immigrant whose education documents are recognized, the chance of being employed is 3.07 times higher than an unemployed person and 4.41 times higher than a self-employed person and the chance of being self-employed compared to the unemployed is 0.69 times lower. More studies are needed in the future. These results can serve for building strategies and increase cooperation regarding the recognition and equivalence of school and education documents between the countries of origin and destination of immigrants.

The equivalence of education documents increases the chance of being employed among immigrants with university education 6.83 times more compared to immigrants with professional education and 21 times more compared to immigrants with 8/9 years of education, but $p=0.316$.

The analysis of the data showed that the equivalence of education documents in the countries of emigration increases the chance that the emigrants who returned to their homeland will be dissatisfied. Based on the data, 68.8% are satisfied with the return and 31.2% are not satisfied with the return to their homeland. The relative chance of receiving a statement of satisfaction for the return to the homeland for an immigrant whose education documents are recognized =0.97 ($p=0.27$), while the relative chance of receiving a statement of satisfaction for the return from an immigrant returning to the homeland whose education documents are not recognized =1.928 ($p=0.000$). Ignorance of education documents increases the chance of receiving an affirmation of satisfaction of returning to the homeland = 1.98 times.

6. Recommendations and Policy Implications

It is important taking legal and institutional steps to facilitate the procedures for the equivalencies of education documents, and increasing the competitiveness of educational institutions in the country at all levels by making a possible ranking assessment in relation to the well-known international practice. A database for all immigrants is needed regarding their education, qualifications and professional skills. Identification of the professional training needs for returned immigrants expanding the range of professions and increasing the level of practice utility of training. It is very important to adapt the legal and institutional framework to attract migrants who want to return to their countries by increasing the level of interest and making investment facility in sectors such as agriculture, agro-tourism, green economy, smart agriculture and rural tourism etc. It is urgent to collect information on the conditions of immigrants after their return and their integration. The National Statistics Office of Albania in cooperation with other institutions such as Immigration Offices and in cooperation with the Border Police are able to collect at the time of registration in the entry-exit system in the territory of the country some information. These data should be related to the social, economic, demographic, professional, and other characteristics of returned migrants.

7. Limitations of the Study

Referring the data, potential migration, remains high. This means that a significant percentage of the population of Albania living inside the country would like, or intends, to emigrate in the future. Therefore, in Albania, was still a toxic demographic mix with high emigration, low returns, and potential migration to the future at high levels as well as low and falling rates of births, (King, R., & Gëdeshi, I., 2020). Major changes have occurred since the collection of the data used in our study, therefore, conducting further studies based on the new realities of the data, would be more valuable and would better complement the previous studies. More studies should be conducted regarding the brain flow and educated immigrants with university education according to the countries of emigration and professions.

References

- Ali, N., Black, R., & Koser, K. (2001). The limits to 'transnationalism': Bosnian and Eritrean refugees in Europe as emerging transnational communities. *Ethnic and racial studies*, 24(4), 578-600.
- Ammassari, S., & Black, R. (2001). Harnessing the potential of migration and return to promote development: applying concepts to West Africa. United Nations.
- Cassarino, J. P. (2004). Theorising return migration: The conceptual approach to return migrants revisited. *International Journal on Multicultural Societies (IJMS)*, 6(2), 253-279.
- Cerase, F. P. (1974). Expectations and reality: a case study of return migration from the United States to Southern Italy. *International migration review*, 8(2), 245-262.
- Cerase, F. P. (1974). The structural approach to return migration. *International migration review*, 8(3), 245-265.
- Constant, A., & Massey, D. S. (2002). Return migration by German guestworkers: Neoclassical versus new economic theories. *International migration*, 40(4), 5-38.
- Cronk, B. C. (2017). How to use SPSS®: A step-by-step guide to analysis and interpretation. Routledge.
- de Soto, H. (Ed.). (2002). Poverty in Albania: a qualitative assessment (Vol. 520). World Bank Publications.
- Dumon, W. (1986). Return migration: theory and practice. Unwin Hyman.
- Dustmann, C. (2001). Return migration, wage differentials, and the optimal migration duration. *European Economic Review*, 45(8), 1613-1637.
- Field, A. (2009). Logistic regression. *Discovering statistics using SPSS*, 264, 315.
- Filipi, G., Galanxhi, E., Nesturi, M., & Grazhdani, M. (2014). Return migration and reintegration in Albania 2013. Technical report, Albanian Institute of Statistics and International Organization for Migration.
- Galor, O., & Stark, O. (1990). Migrants' savings, the probability of return migration and migrants' performance. *International economic review*, 463-467.
- García-Pereiro, T., & Biscione, A. (2016). Return migration in Albania: the profiles of returnees. *Rivista Italiana di Economia Demografia e Statistica*, 70(2), 141-152.
- Gëdeshi, I., & King, R. (2018). New trends in potential migration from Albania. Friedrich-Ebert-Stiftung Office Tirana.
- Ghosh, B. (2007). Managing migration: towards the missing regime?. *Migration without borders: Essays on the free movement of people*, 97-118.
- Hosmer Jr, D. W., Lemeshow, S., & Sturdivant, R. X. (2013). Applied logistic regression (Vol. 398). John Wiley & Sons.
- Kerpaci, K., 2019. Setting up a small business in Albania: Return migration and entrepreneurship. *migrant entrepreneurship*, 37, pp.89-103.
- King, R. (2005). Albania as a laboratory for the study of migration and development. *Journal of Southern Europe and the Balkans Online*, 7(2), 133-155.
- King, R., & Gëdeshi, I. (2020). New trends in potential migration from Albania: the migration transition postponed?. *Migration and Development*, 9(2), 131-151.
- King, R., & Vullnetari, J. (2009). The intersections of gender and generation in Albanian migration, remittances, and transnational care. *Geografiska Annaler: series B, human geography*, 91(1), 19-38.
- King, R., Cela, E., Fokkema, T., & Vullnetari, J. (2014). The migration and well-being of the zero generation: Trans generational care, grand parenting, and loneliness amongst Albanian older people. *Population, Space and Place*, 20(8), 728-738.

- Kleinbaum, D. G., Klein, M., & Pryor, E. R. (2002). Logistic regression: a self-learning text (Vol. 94). New York: springer.
- Rogers, R. (1986). The transnational nexus of migration. *The ANNALS of the American Academy of Political and Social Science*, 485(1), 34-50.
- Taylor, A. M. (1996). International capital mobility in history: the saving-investment relationship.
- Todaro, M. P. (1969). A model of labor migration and urban unemployment in less developed countries. *The American economic review*, 59(1), 138-148.
- Velikonja, J. (1984). Return migration: Structuralist and neoclassical approaches. *International Migration Review*, 18(2), 245-266.
- World Bank Group. (2013). Global financial development report 2014: Financial inclusion (Vol. 2,) World Bank Publications.