

Exploring the Relationship between Remittances and Inequality in Transition Economies

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1. Introduction

Aim and Scope of the Research

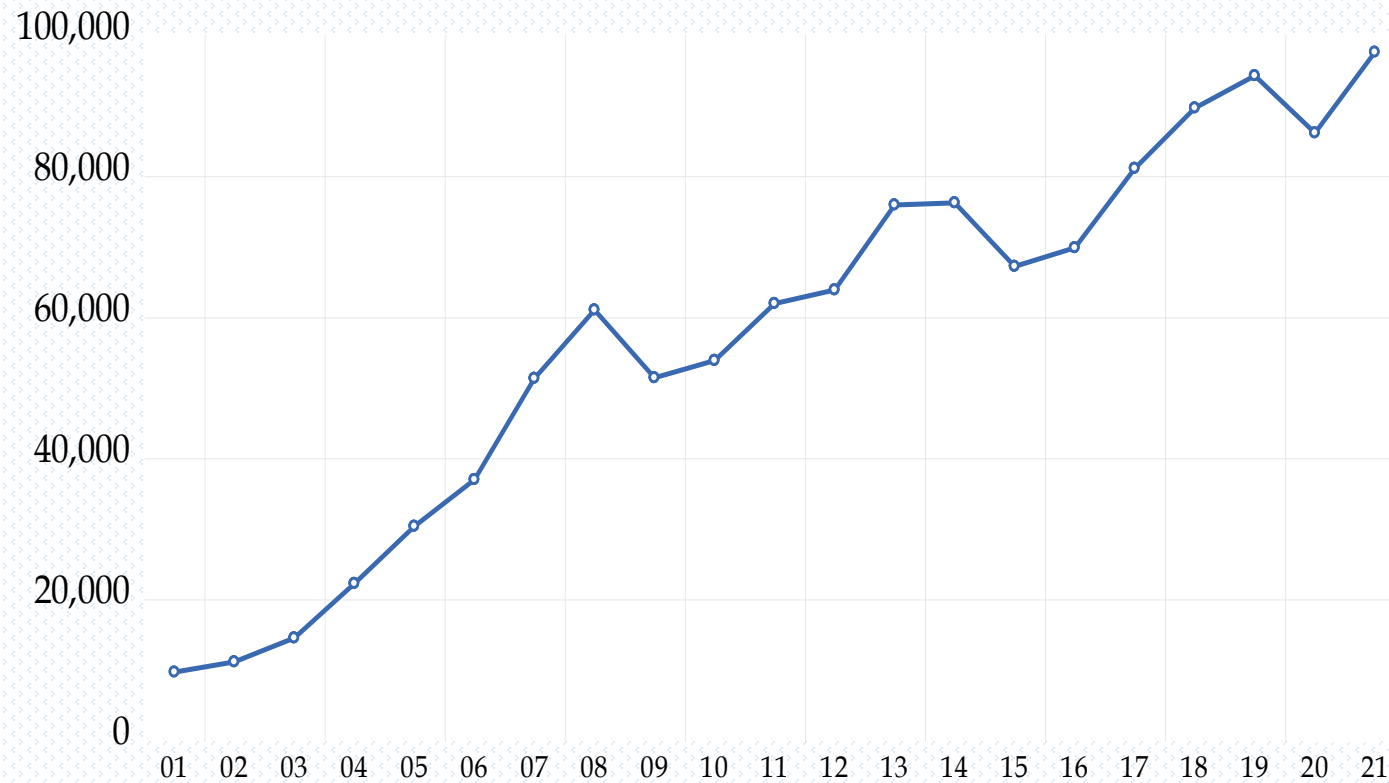
- Contribute to the discussion about international inequalities
- Explore remittances per capita in 28 countries (2007-2019)
- Focus on countries that transitioned from centrally planned to market economies
- Most countries are classified as high income or upper middle income

Social Networks: A Key Aspect

- Remittances are financial transfers sent by migrants to their countries of origin
- They reflect complex interplay of economic, social, and cultural ties and have impact on families, communities, and origin countries
- Significance at an aggregate level (World Bank Group, KNOMAD, 2018)
- Remittances per capita => dependency of population on remittances

1. Introduction

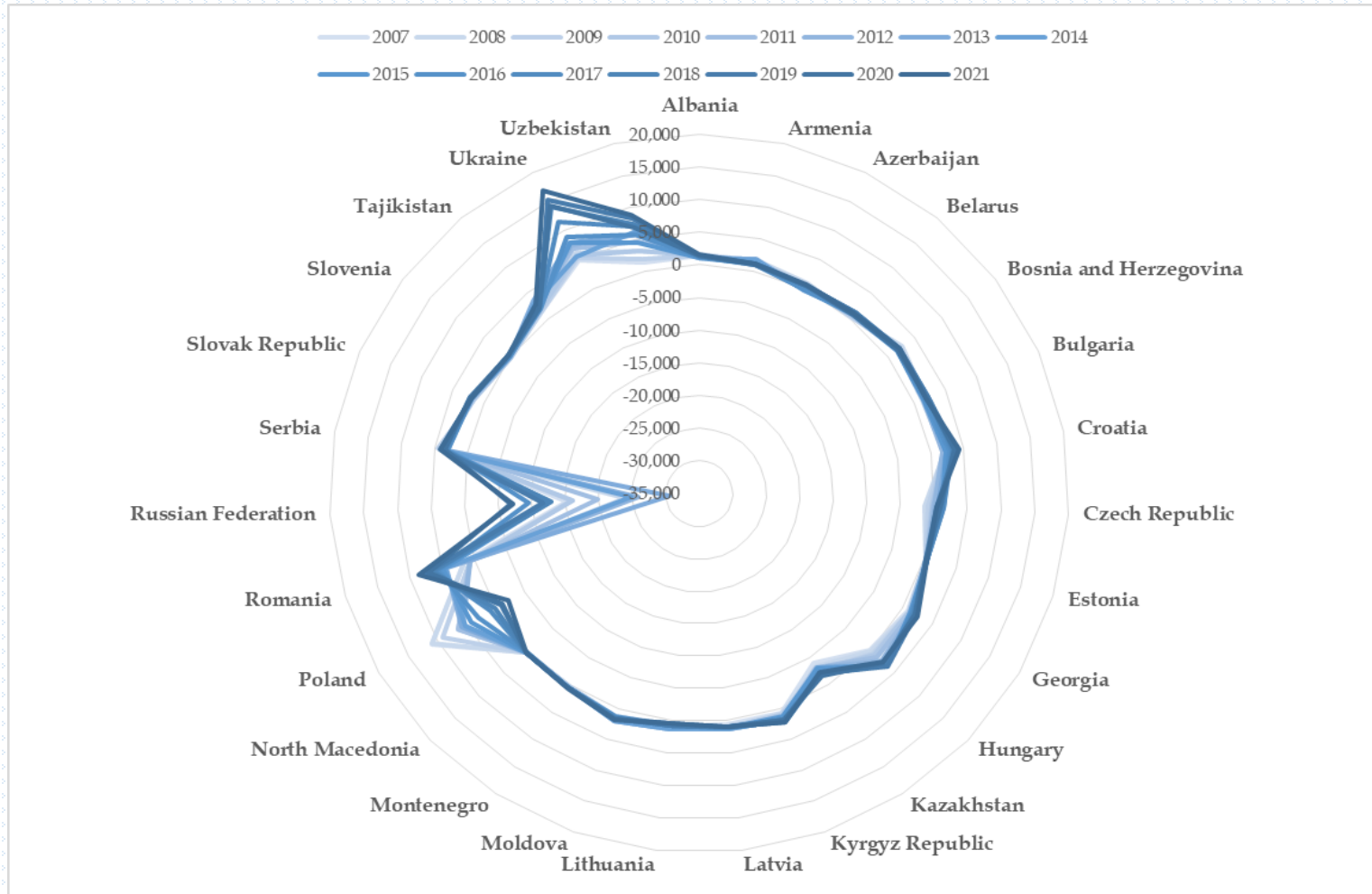
Total inward remittances (mUSD)



Visualization based on the World Development Indicators (2023)

1. Introduction

Net flow of remittances per country (mUSD)



Visualization based on the KNOMAD/World Bank data (2023)

2. Data and Method

- Three homogeneous groups based on 2019 income levels* (World Bank, 2023):
 - Panel Low & Lower middle-income countries (L&LMIC)
 - Panel Upper middle-income countries (UMIC)
 - Panel High income countries (HCI)

- The basic equation

$$Rem_{pc_{i,t}} = \beta_0 + \beta_1 Rem_{pc_{t-1}} + \beta_2 X_{i,t} + T_t + \varepsilon_{i,t}$$

- Beyond direct inequality indicator (Gini index*), study considers: GDP per capita, Poverty severity*, Unemployment, Female labor force participation, Self-employment, Non-performing loans ratio

2. Data and Method

- Only formal channel remittances are statistically captured
- Source of data:
 - World Development Indicators (Remittances)
 - UNU-WIDER, World Income Inequality Database (Gini index)
- Fixed effects estimator due to $N < T$ panels (Nickell, 1981)
- Gini index, expected sign of the coefficients:
 - Negative (Acosta, Calderón, Fajnzylber, & López, 2008)
 - Positive (Milanović, 1987; Raggl, 2017)
 - Without effect (Yang & Martinez, 2006)

2. Data and Method

Summary statistics

	N	Mean
Remittances per capita		
L&LMIC	65	321.13
UMIC	169	316.30
HIC	130	371.61
Gini index		
L&LMIC	65	33.18
UMIC	169	34.77
HIC	130	31.18

Average values by countries (leaders):

- Montenegro, Croatia, Latvia, Moldova
- Georgia, Turkmenistan, North Macedonia, Bulgaria

Remittances_pc	Panel L&LMIC			Panel UMIC			Panel HIC		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
L.Remittances_pc	0.609** (2.49)	0.541** (2.27)	0.581** (2.42)	0.628*** (8.73)	0.678*** (7.34)	0.716*** (7.44)	0.429*** (5.48)	0.429*** (5.47)	0.429*** (5.45)
GDP per capita	0.044 (0.95)	0.005 (0.12)	0.014 (0.32)	-0.010** (-2.02)	-0.009* (-1.72)	-0.006 (-1.21)	-0.009 (-1.19)	-0.006 (-0.83)	-0.007 (-1.01)
Unemployment	27.613 (1.41)	10.752 (0.52)	16.106 (0.78)	-5.126* (-1.74)	-5.781** (-2.13)	-6.155** (-2.13)	-10.691** (-2.33)	-10.338** (-2.28)	-9.559** (-2.23)
NPL	6.307* (2.06)	5.389* (1.86)	5.875* (1.97)	-0.759 (-0.49)	-1.727 (-1.30)		1.615 (0.66)	0.815 (0.34)	
Poverty Severity	-1,198.888 (-0.68)			-379.049 (-1.32)			1,111.249 (0.83)		1,756.064 (1.56)
Gini index	-43.706* (-1.86)	-50.876** (-2.31)		5.381* (1.80)	2.675 (0.89)		7.492 (1.34)	6.937 (1.23)	
Female labor particip.	-23.266* (-1.81)	-24.547* (-2.15)	-21.961* (-2.09)	2.003 (0.53)		0.906 (0.29)	6.166 (0.86)		
Self-employment	-1.920 (-0.34)			-0.840 (-0.29)	0.038 (0.02)	-1.073 (-0.39)	-26.960*** (-5.56)	-28.079*** (-5.50)	-25.340*** (-5.31)
Poverty Gap		10.064 (0.85)	12.769 (1.06)		2.209 (0.62)	2.534 (0.74)		12.781 (1.59)	
Bottom 20%			168.661** (2.37)			-5.805 (-0.49)			-13.738 (-0.75)
Constant	2,164.748* (1.95)	2,575.276** (2.50)	-606.294 (-1.08)	27.312 (0.14)	146.464 (1.50)	213.524 (1.08)	354.180 (0.91)	641.863*** (2.83)	946.730*** (4.11)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
n° of observations	34	34	34	107	99	106	120	119	120
R-squared (overall)	0.279	0.811	0.776	0.892	0.692	0.670	0.642	0.678	0.685
F-statistics	3.778	4.323	4.399	11.164	8.749	8.682	12.790	13.372	14.170

3. Results

Panel L & LMIC (extract)

Remittances p.c.	Basic eq. (1)	Equation (2)	Equation (3)
Gini	-43.70* (-1.86)	-50.87** (-2.31)	
Bottom 20%			168.66** (2.37)
R-squared	0.279	0.811	0.776

Higher remittances are associated with reduced income inequality

*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1

In parentheses, t-statistics are reported

Eq (2): Poverty gap

Eq (3): Poverty gap, Bottom 20%

3. Results

Panel UMIC (extract)

Remittances p.c.	Basic eq. (1)	Equation (2)	Equation (3)
Gini	5.38* (1.80)	2.675 (0.89)	
Bottom 20%			-5.805 (-0.49)
R-squared	0.892	0.692	0.670

Increased remittance inflows tend to worsen income inequality

The main contributors: Bulgaria, North Macedonia and Montenegro

*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1

In parentheses, t-statistics are reported

Eq (2): Poverty gap

Eq (3): Poverty gap, Bottom 20%

3. Results

Panel HIC (extract)

No effects at a panel level

	Basic eq.	Equation	Equation
Remittances p.c.	(1)	(2)	(3)
Gini	7.49 (1.34)	6.93 (1.23)	
Bottom 20%			-13.73 (-0.75)
R-squared	0.642	0.678	0.685

*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1

In parentheses, t-statistics are reported

Eq (2): Poverty gap

Eq (3): Bottom 20%

4. Conclusion

Migration and Inequality

- Migration through remittances influences the reshaping of social stratification

Inequality and Remittances

- Our findings reveal divergent patterns
 - ↓: Policy implications include facilitating flow of remittances (formal channels), digital remittances, reducing costs, financial inclusion
 - ↑: Strategies include enhancing social safety nets, investing in education, progressive taxation

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Thank you for your attention!

5. Literature

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