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Transaction costs and recorded remittances in the post-Soviet economies: Evidence from a new dataset on bilateral flows[☆]

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ABSTRACT

Labour migrants' remittances are a rapidly growing phenomenon in the countries of the former Soviet Union. The size and growth of remittances in the countries of the recipients brought the issue under the scrutiny of researchers and policymakers. In this paper we investigate the main factors behind the growing volume of remittances in the post-Soviet space. By applying panel data techniques we found that a reduction in transaction costs and a depreciation of the currency in the host country were the main factors that influenced the growth of recorded remittances. The size of transaction costs remains a significant predictor of the volume of formal remittances, even after correcting for endogeneity using an instrumental variable estimator. The inverse relationship between transaction costs and recorded remittances suggests that migrants switch from informal channels to formal channels to send remittances when costs are low. Thus lower transaction costs may help curb the proportion of informal flows and lead to increased use of remittances in the formal economy.

1. Introduction

The phenomenal increase in the flow of remittances to transition economies and developing countries has raised questions about the role of remittances in various types of economic activity. For many households, the main purpose of remittances has been to smooth consumption and alleviate budget constraints. However, the financial system and entrepreneurship also appear to be immediate beneficiaries of this windfall (Aggarwal et al., 2011; Chowdhury, 2011).

The large-scale remittances in the post-Communist economies are a relatively recent phenomenon and are linked to dramatically increased labour mobility since the collapse of the Berlin Wall. As a result, the research on remittances in transition economies remains scarce, albeit growing rapidly. The main objective of this research is to investigate the determinants of remittances using newly available data covering the countries of the former Soviet Union. Focusing on this region allows the use of data which was not available for previous studies of remittances. Data on annual bilateral transfers from Russia to the countries of remittance recipients, data on the annual flows of migrants from particular countries to Russia, annual data on the number of branches of money transfer operators (MTOs) in Russia, and statistics on remittance transfer fees[1] charged by MTOs are all novel variables used in this panel study. Despite a somewhat small sample size, the results appear to be robust and provide solid empirical evidence as to the determinants of remittances. Remittances flow to less-developed countries via formal and informal channels. In the case of the former Soviet Union, the formal channels predominantly consist of bank and MTO transfers. Informal channels include cash carried by migrants and third parties[2] (friends, relatives, and other couriers), as well as transfers similar to 'hawala'.[3] It is assumed that the higher the proportion of remittances through formal channels, the greater the expected benefits of remittances to the economy as a whole. The financial system stands to gain from remittance transfer fees. Moreover, if it is sufficiently effective, it may attract new deposits from the beneficiaries of these transfers. Furthermore, channelling remittances through official channels, typically catalysed by lower remittance transfer fees, renders them subject to monitoring to deter money laundering and the financing of terrorist activities.

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[1] Remittance transfer fees are the service fees charged by MTOs and are considered as transaction costs for remitting money.

[2] All travellers departing Russia are required to report any currency and/or traveller's cheques of US$10,000 or more, or a foreign currency equivalent that they are carrying. Although this seems to be a factor discouraging the use of informal channels for large transfers, the majority of recorded transfers from Russia are for small amounts.

[3] Hawala is an alternative informal transfer method used in parallel to official channels and implies the use of brokers (hawaladars), family and regional ties and connections.

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Many factors may impact upon the flow of remittances. The regulatory framework for transferring remittances, taxation considerations, and the foreign exchange regimes in the host and home countries of migrants, are among the factors that may affect the recorded remittances. However, one of the main findings of this study is that lower transaction costs facilitated an increase in the volume of remittances passing through official channels.

The paper is organized as follows. Section 2 briefly reviews the literature on the determinants of remittances. Section 3 presents an overview of migration flows and remittances in the post-Soviet transition economies. Section 4 provides a description of the data and the methodology used. Section 5 presents the estimation results, and discusses the major findings and their implications. Finally, Section 6 draws conclusions and makes some policy recommendations.

2. Determinants of remittances: theoretical debate and international evidence

The theoretical foundations of micro-level research on the determinants of remittances were laid down by Lucas and Stark (1985), who identified a number of determinants at the household level: 'pure altruism', 'pure self-interest', and 'tempered altruism or enlightened self-interest'. However, in many cases the different motives could account for the same type of migration and remittance behaviours. While a body of research has attempted to identify these distinct motives, the process is difficult given that survey data is not always appropriately detailed.

Classical and neo-classical economic models view migrants as self-interested agents who leave their places of origin in search of new economic opportunities in their destination countries. As such, migrant remittances represent the largest observable impact of migration on migrant sending areas. The New Economics of Labour Migration (NELM), developed by Stark (1991) and others, links remittance behaviour to migration decisions. According to the NELM, migration decisions are a 'calculated strategy' of households aimed at improving the well-being of the whole family, and not an 'act of desperation or boundless optimism' (Stark, 1996, p. 26). According to the NELM, by sending a member of a household to migrate, the household aims to

Table 1
A summary of empirical literature on the determinants of remittances.

Author(s)	Method	Data	Findings
Ahamada and Coulibaly (2011)	Panel data techniques	87 emerging and developing countries	A high level of financial development in remittance recipient countries allows remittances to have a stabilizing effect on GDP growth.
Al Mamun et al. (2015)	Panel data techniques	61 top remittance recipient countries	A positive relationship between remittances and labour productivity in both higher remittance (size) and remittance share of GDP.
Alkhathlan (2013)	Autoregressive distributed lag	Saudi Arabia	Significant negative correlation between workers' remittances and economic growth in the short term.
Aydas et al. (2005)	Ordinary least squares (OLS)	Turkey	Black market premium, interest rate differential, inflation rate, growth, home and host country income levels, and periods of military administration in Turkey have significantly affected remittances.
Bang et al. (2016)	An instrumental variable quantile regression	Kenya	While remittances increase expenditure at all levels of the distribution, the impact is greatest for poorer households.
Bouhga–Hagbe (2006)	Vector error correction model	Egypt, Jordan, Morocco, Pakistan and Tunisia	Altruism could be an important factor in the flow of remittances. Hardship increases remittances.
Coulibaly (2015)	Panel Granger causality tests based on Seemingly Unrelated Regressions	Sub-Saharan African countries.	There is no strong evidence supporting the view that remittances promote financial development in SSA countries.
Durand et al. (1996)	OLS, Bivariate probit	Mexico	Migrants are more likely to send remittances to entrepreneurially vibrant communities.
Freund and Spatafora (2008)	Cross-country panel regressions	104 countries	Flow of migrants was the primary determinant of official remittances; transaction costs are also important.
Hagen–Zanker (2010)	Tobit models	Moldova	Self-insurance and loan repayment motives drive the volume of remittances.
Hathroubi and Chaker (2016)	Wavelet methods to time series analysis	Saudi Arabia	Remittance outflows are strongly associated with the host country aggregates and their relationships change across time scale/frequency bands.
International Monetary Fund (2005)	Panel data techniques	101 countries	The high cost of remittances and a non-conducive business environment in the home country may have detrimental consequences and result in lost opportunities for home countries.
Lueth and Ruiz-Arranz (2008)	Cross-country panel regressions	11 countries from Asia, Europe and the Middle East	Evidence of links between remittances and business cycles.
Piracha and Saraogi (2012)	Two-part Heckman selection model	Moldova	A combination of household and migrant characteristics and some community-level variables are the key elements in explaining remittance behaviour. Altruistic and investment motives drive remittances.
Schiopu and Siegfried (2006)	Cross-country panel regressions	7 EU neighbouring countries	Transaction costs, proxied by remittance infrastructure, do not have a significant impact on remittances in the whole sample and are significant only for remittance flows between countries without common borders.
Schrooten (2005)	Generalized method of moments (GMM)	Eastern Europe and the Commonwealth of Independent States	In Eastern Europe, remittances increase with unemployment and the size of the interest rate differential, and are inversely related to domestic credit.
Schrooten (2006)	GMM	Former Soviet Union	The performance of the domestic banking sector and the access of the private sector to credit are important determinants of remittances. Better international integration and quality of institutions lead to an increase in remittances.
Straubhaar (1986)	OLS	Turkey	Turkish emigrants are not sensitive to economic benefits of remitting more. Positive link between political stability in home countries and remittances.
Vargas-Silva and Huang (2006)	Vector error correction model	Brazil, Colombia, Dominican Republic, El Salvador, Mexico and USA	Host country (USA) conditions are more important than home country.