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REMITTANCES IN THE CIS COUNTRIES

A STUDY OF SELECTED CORRIDORS

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CURRENCY EQUIVALENTS

Armenian Dram - ADR
Kygyz Som - SOM
Moldovan Leu - LEU
Russian Ruble – RUB
Tajikistan Somoni – TJS

EXCHANGE RATES

December 30, 2006

ADR 363.23 = US$1
SOM 39.87 = US$ 1
LEU 12.84 = US$ 1
RUB 26.34 = US$ 1
TJS 3.38 = US$ 1

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ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
AML	Anti-Money Laundering
ATM	Automation Teller Machines
CBA	Central Bank of Armenia
CEE	Central and Eastern Europe
CFT	Countering Finance of Terrorism
CIS	Commonwealth of Independent States
DFID	British Department of International Development
ECA	Eastern Europe and Central Asia Region
GDP	Gross Domestic Product
ICT	Information and Communication Technologies
MTOs	Money Transfer Operators
NBA	National Bank of Armenia
NBFI	Non-Bank Financial Institution
POS	Point of Sales
PTM	Post Terminal Machines
SHF	Mexican Federal Mortgage Society

CONTENTS

INTRODUCTION

Remittance flows in the Eastern European and Central Asian countries (ECA region) are large and consistently increasing. In 2004, officially recorded remittances to the ECA region amounted to over US$15 billion, the equivalent of seven percent of global remittances and ten percent of remittances received by developing countries. Remittances measured in the balance of payments constituted over 30 percent of GDP in Moldova, 20 in Tajikistan, and just below 10 in Armenia and the Kyrgyz Republic.

The formal infrastructure to channel remittance flows in the ECA region is experiencing rapid developments, primarily driven by (i) the number of remittances and money transfer services providers -banks, specialized money transfer operators (MTOs) and the Postal systems, and (ii) the level of competition. The growth of MTOs has been particularly significant under improved macroeconomic conditions in Russia and in the region, the development of financial and banking systems, an almost fully liberalized remittances transfer regime, and the introduction and development of new technologies.

These developments present an opportunity, as increased remittance flows through formal channels would allow increases in the deposit and savings base, with beneficial effects on overall credit and investment levels. Recent studies on Mexico and other Latin American countries have shown strong positive correlation between the level of formal remittances and deposits, and strong positive correlation between remittances and the overall level of development of the financial infrastructure.

However, the formalization of remittance transfers remains complicated and in need of support by policymakers. In the ECA Region, using commercial banks for remitting funds is complicated by issues such as a lack of confidence in the banks of the receiving countries, and the low educational levels of labor migrants. MTOs on the other hand do not provide savings and other banking services, which limits their development impact. Finally, the postal systems are generally constrained by limitations on operations in foreign currencies and their dependence on national budgets.

The objective of this paper is to collect, organize and analyze information on remittance corridors from Russia to Armenia, the Kyrgyz Republic, Moldova and Tajikistan.[1] It aims to provide an overview of the current framework and infrastructure for sending and receiving remittances, including aggregate flows, existing and potential operators, cost structures and, barriers and other factors affecting costs. Ultimately, it turns to setting out topics for policymakers' attention. Section 1 provides an overview of migration, remittances and financial sector developments; Section 2 analyzes results from surveys undertaken with migrants who had returned in Georgia, the Kyrgyz Republic and Tajikistan (and uses as benchmarks, Bosnia-Herzegovina, Bulgaria and Romania); Section 3 turns to the results of questionnaires and interviews with central banks, banks, MTOs, postal networks and other intermediaries; and Section 4 turns to the emerging topics for policymaking.

[1] Data has not always been available, especially in the case of Moldova. Notably, we make use of some available data on Georgia, and, when possible, Bosnia-Herzegovina, Bulgaria and Romania as benchmarks.

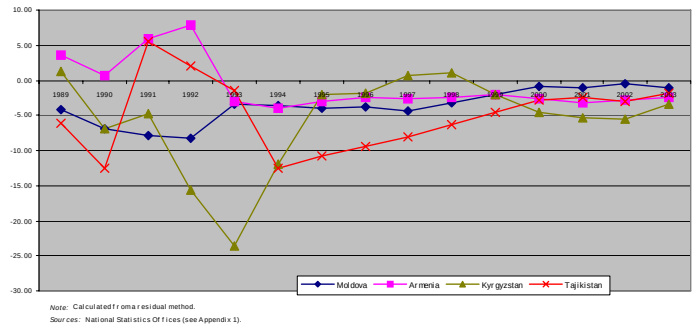
SECTION 1: OVERVIEW OF MIGRATION, REMITTANCES AND FINANCIAL SECTOR DEVELOPMENT

This section takes stock of the patterns of migration in Eastern Europe and the Former Soviet Union, the size and regional distribution of the remittance transfer market and the degree of development of the respective financial sectors.

1.1 Patterns of Migration in Eastern Europe and the Former Soviet Union

Migration has been an important part of the transition process in the former centrally planned economies of Eastern Europe and the Former Soviet Union, and continues as these countries move beyond transition.[2] If movements between industrial countries are excluded, migration in this region accounts for over one-third of total world emigration and immigration. Russia is home to the second-largest number of migrants in the world after the United States; Ukraine is fourth after Germany; and Kazakhstan and Poland are respectively ninth and tenth. Labor migration is likely to gain in importance in view of the ageing of populations in Europe and the high-income economies of the Former Soviet Union.

Figure 1 Net Emigration Rates per One Thousand Inhabitant (1989-2003)



Note: Calculated from a residual method.
Sources: National Statistics Offices (see Appendix 1).

Early in the transition, migration patterns from the low-income CIS countries were fairly volatile (Figure 1). In the early years of transition, large quantities of migration inflows and outflows erupted, as many households took advantage of the lowering of Soviet travel restrictions to move to ethnic homelands or to areas where expected wages, employment opportunities and quality of life were higher. In addition, others moved to escape from conflicts that emerged among and within some of the former Soviet republics.

Migration volatility eased by about 1995 (see Figure 1). Previous to this, Armenia swung from being a net immigration country (until 1993) to a negative migration balance. The Kyrgyz Republic's migration balance also fell sharply negative during the early 1990s, before converging with Armenia and Moldova's net emigration rates of around 2 to 3 migrants per one thousand of population. Tajikistan's migration balance remained between -5 and -10 per one thousand inhabitants before it also converged with the rates experienced in other low-income CIS economies by about 1999.

[2] World Bank (Forthcoming) *Migration and Remittances: Eastern Europe and the Former Soviet Union*, Washington DC, World Bank.

The majority of migrants from low-income CIS economies travel to middle-income CIS countries (Russian Federation, Kazakhstan, and Ukraine). From the start of transition to 2002, over 90 percent of migrants from Armenia and Moldova traveled to one of the middle income CIS, while 80 percent of Kyrgyz migrants and 87 percent of Tajik migrants relocated there (Table 1). The majority of these flows were to Russia, though sizeable numbers also traveled to Ukraine (see Figure 2).

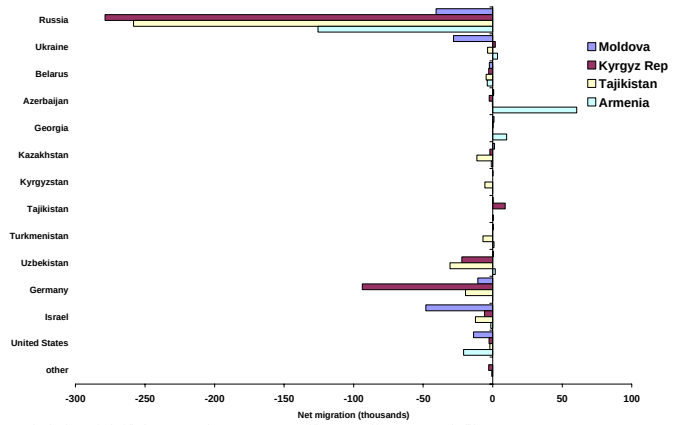
Table 1 Low Income CIS Countries' Migrants Destinations (Percentage of Total Outflows to European and CIS Countries)

	Western Europe	EU8	Middle Income CIS	Low Income CIS
Armenia	0.57	0.49	92.02	6.92
Kyrgyz Rep	11.86	0.11	79.95	8.09
Moldova	0.17	0.35	94.91	4.57
Tajikistan	0.03	0.10	87.98	11.88

***Sources*:** National Statistics Offices (see Appendix 1).

There are some variations in migration patterns among countries. A sizeable portion of migrants from the Kyrgyz Republic from 1990 to 2002 traveled to Western Europe (12 percent), particularly Germany. A significant number also traveled within the low income CIS, particularly from the Kyrgyz Republic and Tajikistan to Uzbekistan.

Figure 2 Net Migration Flows for Armenia, the Kyrgyz Republic, Moldova, and Tajikistan



Note: Migration data are for the following years: Armenia 1990-1995, Kyrgyz Republic 1990-96, Moldova 1990-1997, and Tajikistan, 1990-95.
Source: National Statistical Offices.

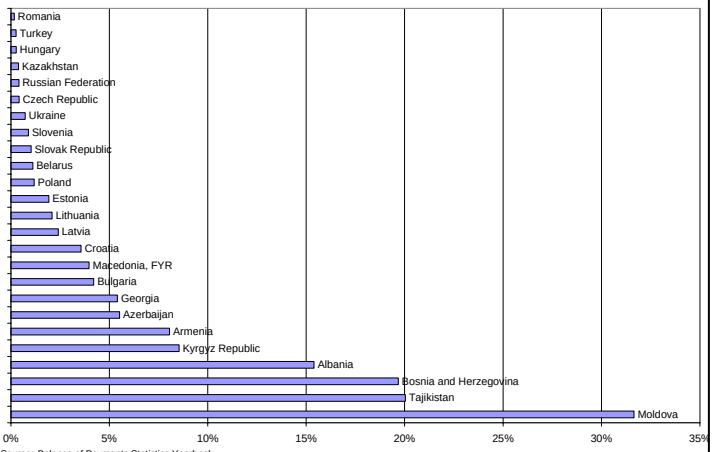
Undocumented migration flows are likely to be important. Undocumented immigration is, by definition, difficult to quantify, although it represents a large proportion of migration originating in the low-income CIS countries. Currently, there is an estimated 3 million undocumented immigrants in the EU, and between 3 million and 3.5 million in Russia. Due to their irregular situation, most labor migrants do not benefit from the same protection rights and do not have access to the formal financial system for the purposes of depositing their income and transferring remittances.

1.2 Patterns of Remittances

Remittance flows in the ECA region are large. In 2004, officially recorded remittances to the ECA region amounted to over US$15 billion, the equivalent of 7 percent of the global total (US$72.3 billion) and 10 percent of remittances received by developing countries.

Many of the world's largest recipients of international remittances are found in the Former Soviet Union, particularly in the low-income economies of the CIS (in % of GDP). Remittances measured in the balance of payments (Figure 3) constitute over 30 percent of GDP in Moldova, 20 percent Tajikistan, and just below 10 percent in Armenia and the Kyrgyz Republic.

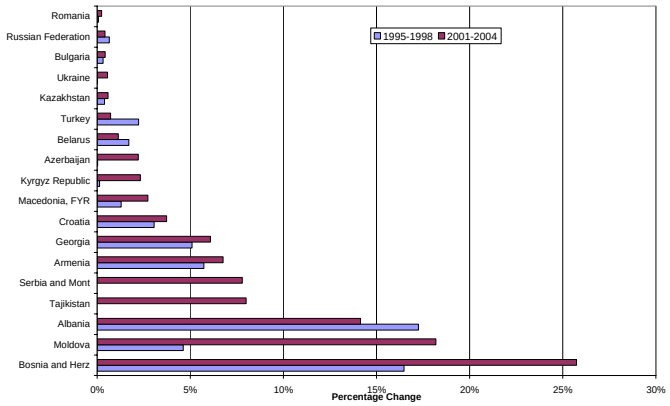
Figure 3 Remittances in % of GDP in Europe and Central Asia (Current US Dollars)



Source: Balance of Payments Statistics Yearbook.
Note: Remittances defned as the sum of received workers' remittances and compensation of employees in 2005 or latest available year. Both remittances and GDP are measured in current US dollars.

The balance of payments statistics may underestimate actual remittance inflows by as much as fifty percent.[3] Surveys conducted by the World Bank found that as many as two-thirds of migrants may send remittances home through transfer channels that government authorities do not or can not monitor -for example, through friends and family or by public transportation drivers.[4] Of the low-income CIS countries, only Moldova estimates remittances sent through these 'informal' channels, perhaps explaining why remittances to Moldova appear so much larger a percentage of GDP when compared to other countries in this sub-region.[5]

Figure 4 Growth Rates of Remittances in Select Europe and Central Asian Countries, 1995-1998 and 2001-2004.



Source: IMF Balance of Payments Yearbook.
Note: Remittances defined as the sum of received workers' remittances and compensation of employees in current USD dollars.
Missing columns indicate that data was not available.

Remittance growth rates have accelerated in the majority of ECA countries during the last five years (Figure 4). In Moldova, remittances from 2001 to 2004 grew by 18 percent, compared to less than 5 percent during the period 1995 to 1998. The growth in remittance inflows in Armenia and

[3] World Bank (2006) *Global Economist Prospects 2006: Economic Implications of Remittances and Migration*, Washington DC, World Bank.
[4] World Bank (Forthcoming) *Migration and Remittances: Eastern Europe and the Former Soviet Union*, Washington DC, World Bank. Full survey results available at http://www.worldbank.org/eca.
[5] De Luna Martinez. Jose (2005), "Workers' Remittances to Developing Countries: A Survey with Central Banks on Select Policy Issues," Policy Research Working Paper 3638, World Bank.

Tajikistan were also over 5 percent during this latter period of time. In some cases, this growth may not represent a change in remittance inflows so much as the increased use of formal transfer channels by migrants or enhanced government capacity to measure remittances.

Remittances to the low-income CIS countries originate from a wide variety of migrant destinations.[6] As Table 2 illustrates, the key destination for low-income CIS migrants are the middle income CIS, which are the source of a large percentage of workers' remittances. Yet, migrants' earning higher incomes in Western Europe and in North America contribute relatively larger proportions of the total inflow into the low-income CIS. Over half of remittances into Armenia originate in the United States or Canada, while over 30 percent of Moldova's remittances originate from North America.

Table 2 Source of Remittances to Low-Income CIS Countries (percentage of total remittances inflows)

	EU15	EU8	Middle Income CIS	Low Income CIS	USA & Canada	Other
Armenia	19.85	0.57	11.44	2.78	54.36	11.00
Kyrgyz Rep	34.38	0.94	37.75	0.53	6.45	19.96
Moldova	29.74	0.99	25.60	0.17	30.92	12.57
Tajikistan	26.79	0.91	27.19	9.65	5.27	30.20

Note: Estimated with a Bayesian entropy method (see Appendix 2).

Source: IMF Balance of Payments Statistics and World Bank Staff Estimates.

1.3 Distribution of Remittances

Wealthier households receive larger remittances. Table 3 presents estimates of average remittances and consumption per quintile for receiving and for all households for the low-income CIS countries for which household budget survey data on remittances is available[7]. As would be expected, wealthier households receive more remittances. This tendency is prevalent for all countries in our analysis, data quality permitting. Notably, for the lower quintiles, remittances per capita are high, with the exception of the Kyrgyz Republic.

[6] Table 2 presents estimates (through a Bayesian entropy model) and should be treated with caution.
[7] Note that no data is available for Moldova. By contrast, data is available for Georgia.

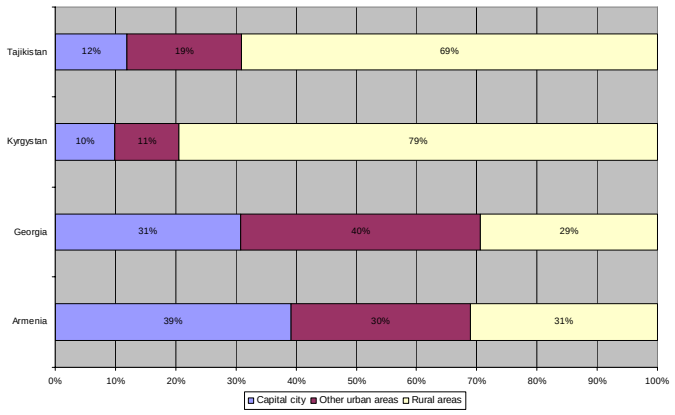
Table 3 Annual consumption and remittances per capita by income quintiles (U.S. dollars)

Income Quintile	1	2	3	4	5
Armenia (2003)					
Consumption per capita (all households)	135.39	194.02	244.81	312.24	547.30
Share of receiving households	16.51%	16.30%	16.40%	17.61%	21.20%
Remittances per capita (receiving households)	67.88	105.36	74.30	112.47	167.51
Remittances/Consumption (receiving households; percent)	50.13%	54.31%	30.35%	36.02%	30.61%
Georgia (2002)[(i)]					
Consumption per capita (all households)	24.73	46.66	67.38	96.06	193.85
Share of receiving households	2.58%	2.15%	1.83%	1.91%	2.53%
Remittances per capita (receiving households)	35.83	35.76	35.18	50.49	76.57
Remittances/Consumption (receiving households; percent)	144.88%	76.63%	52.21%	52.56%	39.50%
Kyrgyzstan (2003)					
Consumption per capita (all households)	78.31	115.55	148.32	198.93	337.12
Share of receiving households (percent)	0.84%	1.63%	1.38%	3.41%	7.04%
Remittances per capita (receiving households)	7.73	7.14	10.80	41.76	46.02
Remittances/Consumption (receiving households; percent)	9.87%	6.18%	7.28%	20.99%	13.65%
Tajikistan (2003)					
Consumption per capita (all households)	67.20	103.88	139.03	188.13	344.35
Share of receiving households (percent)	8.01%	9.82%	9.33%	8.96%	7.66%
Remittances per capita (receiving households)	23.56	28.12	34.25	41.85	55.68
Remittances/Consumption (receiving households; percent)	35.07%	27.07%	24.63%	22.25%	16.17%

(i) Quarterly.
Sources: Authors calculations; World Bank, Household Data Archive for Europe and Central Asia.

There does not seem to be discrepancies between rural and urban areas for the reception of remittances. Figure 5 shows that the distribution of remittances in-country varies across countries. The majority of remittances are sent to rural areas in Tajikistan (60 percent of total remittances) and the Kyrgyz Republic (70 percent) according to information from these countries' household surveys.

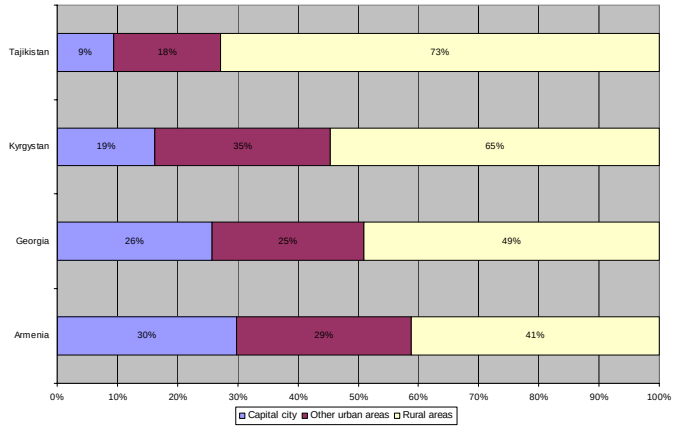
Figure 5 Distribution of Migrants' Remittances in Four CIS Countries (2002)



Note: Tajikistan data from 2003.
Source: World Bank Household Data Archive. World Bank Staff Estimates.

However, only about a third of remittances are send to rural areas in Armenia and Georgia. As Figure 6 highlights, this pattern of remittances mirrors the distribution of the populations of these four CIS countries. This suggests that there is not a rural versus urban divide in the determination of remittances levels.

Figure 6 Distribution of Population in Four CIS Countries (2002)



Note: Tajikistan data from 2003.
Source: World Bank Household Data Archive. World Bank Staff Estimates.

1.3 Financial Systems Development

In the four CIS countries under consideration the status and depth of development of the financial system, varies widely. Table 4 summarizes key indicators of the financial systems and intermediation levels in these countries.

In all four countries financial intermediation, as well as its contribution to the private sector, remains limited. Most of the banking systems, the core of the financial systems in these countries, are privately owned. All are experiencing strong growth in deposit bases and loan portfolios, nevertheless starting from very low levels. The legal and regulatory framework and the supervisory functions are generally satisfactory.

Savings and intermediation levels are low, with deposits to GDP ratios between 10 and 31 percent and loans to GDP ratios between 6 and 27 percent. Furthermore, intermediation is relatively expensive, with nominal (weighted) interest margins generally above the two digits. The product base of banks is also limited, especially in Central Asia.

Table 4 Key indicators of the financial systems

	Moldova	Armenia	Kyrgyzstan	Tajikistan
GDP (N-ccy)	36,755.4	2,228.0	100,115.5	7,300.0
GDP (in US$ million)	2,917.0	4,949.1	2,441.0	2,404.0
Per Capita GDP (in US$)	811.5	1,538.7	478.6	310.0
GDP Growth (real %)	7.1%	13.9%	-0.6%	7.5%
GDP Deflator	7.2%	3.1%	5.6%	7.0%
Unemployment	7.3%	8.1%	3.3%	n/a
Current Account Balance (% of GDP)	-9.8%	-4.2%	-8.1%	-3.6%
M2x/GDP (% of GDP)	43.1%	16.4%	21.3%	16.5%
Money Growth (% in 2005)	35.0%	37.8%	4.7%	21.3%
Banking Sector				
Number of banks	16	21	20	10
Foreign-owned Banks	2	1	7	1
Total Assets (% of GDP)	49.0%	20.2%	21.1%	22.3%
Total Loans (% of GDP)	27.2%	9.9%	7.7%	6.0%
Total Deposits (% of GDP)	30.6%	9.9%	14.1%	12.6%
Total Deposits by Individuals (% of GDP)	19.0%	4.3%	2.7%	n/a
Deposit Growth (% in 2005)	40.4%	17.8%	13.3%	22.1%
Branches	212	269	170	142
ATM Machines	n/a	116	8	17
Dollarization (FX Dep. Over Total)	38.6%	63.1%	79.6%	82.7%
Deposit Rates (US$)	5.2%	4.8%	1.6%	n/a
Deposit Rates (N-ccy)	10.6%	6.5%	4.0%	9.8%
Interest Rate Margins (US$)	5.5%	11.2%	17.1%	n/a
Interest Rate Margins (N-ccy)	6.8%	11.6%	20.9%	13.5%
Portfolio of NBFIs (% of GDP)	1.3%	0.4%	4.2%	0.7%
Clients (.000)	15.5	n/a	264.9	n/a

Source: Central Banks, SIMA and Surveys

The infrastructure to support lending and crediting is generally satisfactory in all four countries. There are credit information bureaus and collateral registries in Moldova, Armenia and the Kyrgyz Republic. However, enforcing contracts and the protection of creditors and property rights are complicated and problematic, and these make banks particularly risk-averse and increase intermediation costs.

Microfinance and NBFIs partly managed to fill the intermediation gap, especially the lowest segments of the population and in the rural areas, where banks do not seem to have engaged to satisfactory levels (limited branches, ATMs, limited housing and retail banking). Dollarization is a common issue in all countries. All countries have liberal foreign exchange regimes, and a relatively high level of dollarization depending on their economic structure and trade relations.

The main formal operators in remittances in the reference countries are: a) banks; b) specialized money transfer operators (MTOs); and c) the postal network. Informal channels are shuttle traders and migrants, which decide to repatriate remittances as they travel back to their homeland. These are discussed in Section 3. An assessment of the informal channels, in terms of volumes, frequency and direction is rather difficult and will not be discussed in this note.

SECTION 2: MIGRANTS' PERSPECTIVE: RESULTS FROM SURVEYS OF RETURNED MIGRANTS

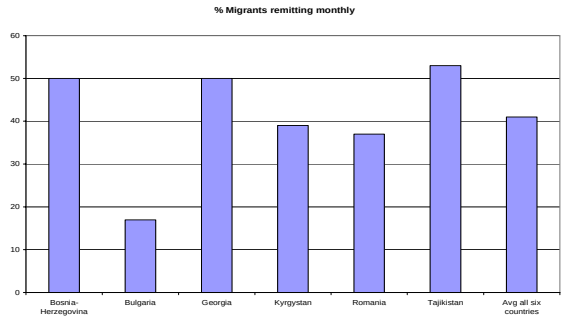
The section investigates the dynamics of remittance sending behavior from the migrants' perspective in six countries in the Eastern Europe and Central Asia region (ECA). It relies on the results from surveys undertaken with migrants who had returned home in three low-income CIS countries—Georgia, the Kyrgyz Republic, and Tajikistan—and, for comparison purposes, three southeastern European countries—Bosnia-Herzegovina, Bulgaria, and Romania.[8] We look at three key pieces of information from the surveys: (i) how migrants' transfer remittances (informal vs. formal channels); (ii) why formal or informal remittance sending channels are utilized; and (iii) reported costs for various channels.

Interestingly, the results find that cost is not a key driver for migrants' decisions regarding whether to use formal or informal channels. Although the surveys find that costs are important, the convenience of the transfer channel is the top determinant. However, it should be noted that caution should be taken when interpreting the survey results. The same survey was implemented in each country with a 'snowball' or network sampling methodology. This methodology can not ensure that the returned migrants surveyed are representative of all returned migrants from these countries. As a result, these results should be understood to provide an impressionistic and first cut approach at understand migrants' behaviors.[9]

2.1 Amounts of remittances sent and the relationship to income earned

A high proportion of migrants do not remit money back home. The reasons for not sending any money are not provided by the survey but may include factors such as low income, short duration of migration, preference for saving in the country of destination, migration with the family, etc. The percent of migrants remitting money varies widely among countries, from 17 percent in Bulgaria to 53 percent in Tajikistan (see Figure 7).

Figure 7 Percentage of Migrants Remitting Money

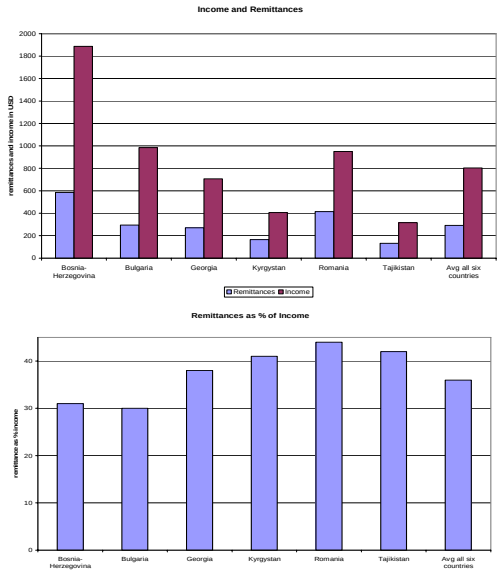


Source: Surveys

[8] We have no available data on Armenia or Moldova. Given the availability of data on Georgia, we present this here, together with the southeastern European countries as benchmarks.
[9] Further information on the survey is found in Appendix 3.

Migrants remit on average thirty six percent of their income (i.e. the average propensity to remit is 36 percent) in the six countries considered (see Figure 8).Although remittances and incomes vary greatly among countries, the average propensity to remit (i.e. remittances divided by income) does not vary very much, from 30 percent for Bulgarian immigrants to 44 percent for Romanian immigrants.

Figure 8 Average Monthly Income and Remittance (USD)



Most migrants remit small amounts of money. Table 6 shows that 59 percent of all migrants remit $200 or less every month. However, differences among countries are considerable: for the Kyrgyz Republic and Tajikistan the percent of migrants who remit up to $ 200 is 75 and 91 percent respectively, but for Bosnia-Herzegovina and Romania the corresponding percentages are 25 and 32 percent.

Remittances represent however a significant share of migrants' income. Table 5 shows that overall, 40 percent of all migrants have remitted 50 percent or more of their monthly income. Again, differences among countries are considerable: for the Kyrgyz Republic and Tajikistan, approximately 47 and 52 percent of migrants respectively have remitted 50 percent or more of their monthly incomes, but for Bulgaria and Bosnia-Herzegovina the corresponding percentages are 17 and 26 percent.

Table 5 Percent of monthly income remitted when abroad the last time.

% of income remitted	Bosnia-Herzegovina	Bulgaria	Georgia	Kyrgyz Rep.	Romania	Tajikistan	Average
10	20.4	26.7	5.3	6.4	6.3	5.8	9.6
15	10.2	11.1	6.5	3.6	4.1	4.1	5.9
20	12.2	18.9	11.2	8.1	5.9	7.0	9.5
25	8.4	6.9	9.2	4.8	4.8	6.9	6.8
30	7.2	10.6	11.5	9.1	14.3	10.6	10.4
35	4.0	2.3	4.9	5.2	4.5	4.8	4.6
40	5.8	5.1	7.1	9.6	11.8	7.6	8.0
45	5.6	0.9	4.2	6.4	3.4	5.0	4.7
50	17.6	6.9	14.7	19.6	10.0	24.8	17.4
>50	8.8	10.6	25.4	27.2	35.1	23.3	23.0

Source: Surveys

Table 6 Distribution of Remittances in USD

Avg Monthly remittance in USD	Bosnia-Herzegovina	Bulgaria	Georgia	Kyrgyz Rep.	Romania	Tajikistan	Average
< 50	1.2	0.4	2.8	13.6	0.5	17.2	7.6
50-100	9.5	8.3	19.9	30.6	10.9	36.7	22.3
101-150	4.4	18.8	14.1	13.9	5.4	17.4	12.4
151-200	10	16.2	20.1	16.9	15.2	20	16.8
201-250	2.1	0.9	5.8	4.8	5	3.6	4
251-300	7.9	19.7	12.8	8.4	15.2	3.3	9.7
301-350	7.7	12.7	11.2	3	12.9	1.2	6.9
401-500	15.8	2.2	6.5	3.9	12.7	0.3	6.5
501-650	4.1	9.6	2.3	1.3	7	–	3
651-800	9.7	3.5	1.6	0.7	6.6	0.1	3.2
801-1200	16.4	2.6	2.3	1.3	6.6	0.1	4.5
1201-1800	6.9	1.7	0.3	0.4	1.6	–	1.6
>1800	4.2	3.5	0.5	1.2	0.7	–	1.4

Source: Survey

2.2 Frequency, means and cost of remittance transfers

Most transfers of money take place once a month (see Table 7). Approximately 39 percent of all migrants remit every month and another 37 percent, every two months. However, differences among countries are considerable: migrants from Georgia and Romania sent money more frequently (54 percent every month) than those from the Kyrgyz Republic and Tajikistan (20 and 24 percent, respectively). Overall, 75 percent of migrants sent money home at least once every two months. How often migrants send money home may depend on such factors as regularity of income earned, the intensity of the needs of the family receiving remittances, the use of remittances, the safety of transfer or the means by which money is transferred.

Table 7 Frequency of Remittances

	% of Migrants						
	Bosnia	Bulgaria	Georgia	Kyrgyz Rep.	Romania	Tajikistan	Average
Once a month	47.3	49.3	54.4	19.7	54.5	24.3	38.7
Every two months	29.2	31.3	35.4	37.6	32.1	45.8	36.6
Every six months	18.1	15.4	7.3	29	12.2	19.8	17.7
Once a year	5.1	2.6	1.5	8.7	0.9	7.6	5
Less than once a year	0.4	1.3	1.5	1.3	0.2	2.7	1.4
Other	–	–	–	3.7	–	–	0.8

Source: Survey

The channels by which remittances are transferred vary, including formal and informal channels. Migrants use the organized money market (bank transfers, debit cards, check), the post office, rapid transfer systems (for example Western Union), friends and relatives traveling home, as well as individuals with whom they have no personal contact (i.e. bus drivers, train conductors). They also bring money with them when they visit home. Table 8 shows that the channels most often used for remitting are friend and relatives (approximately 30 percent overall), followed by bank transfers (25.3 percent) and rapid transfer companies (24.7 percent). It is impressive that a significant number of migrants trust their money to individuals with whom they have no personal contact (8.2 percent). It is likely that these are not accidental or occasional transfers, but rather organized informal networks that compete with the banking system and offer convenient services at lower cost.

Overall, official channels are used by 59 percent of migrants. Differences among countries are however important. For example, the largest proportion of migrants from the Kyrgyz Republic choose to transfer their money via the banking system (42 percent), migrants from Tajikistan choose rapid transfers (43 percent), and migrants from Bosnia-Herzegovina send their money through friends traveling home (45 percent), proportions based on the number of migrants not the value of remittances. If one can assume that the choice of channel does not depend strongly on the value of money remitted, the finding that 41 percent of migrants send money through unofficial channels suggests that the official estimates of remittances obtained from national banking systems are seriously underestimated.

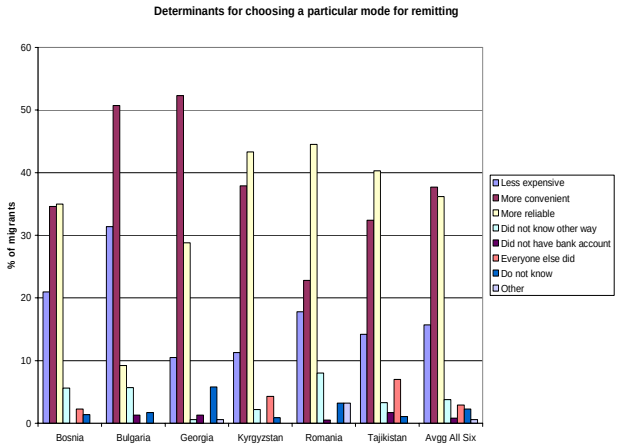
Table 8 Channels for remitting (% of migrants using specified channel)

Channel used	Bosnia	Bulgaria	Georgia	Kyrgyz Rep.	Romania	Tajikistan	Average
Transfer Check	0.2	0.4	0.5	–	–	–	0.2
Bank Transfer	14.4	22.8	17.5	42.4	24.9	24.9	25.3
Post Office	16.1	4.4	10.4	7.2	5.9	2	7.6
Through individuals and contacts	12	16.7	11.3	3.1	12.7	2.5	8.2
Friends Traveling Home	44.9	26.8	36.1	22.2	21.5	25.7	29.5
Informal Transfer Offices	–	1.3	1.9	0.1	0.7	1.9	1
Rapid Transfers (Western Union, etc)	1.7	21.1	21.2	22.8	30.1	43	24.7
Debit Card	–	3.1	0.5	0.1	0.9	–	0.5
Migrant when Travels Home	9.3	3.5	0.6	1.5	1.6	–	2.4
Other	1.4	–	–	0.4	1.8	–	0.6

Source: Surveys

Key factors in the choice of a distribution channels include convenience and reliability, followed by cost. It would seem reasonable to assume that the choice of channels for transferring remittances depends on the availability and convenience of using each channel, the cost involved and the safety of transfer. Migrants were asked to indicate the main reason for which they chose the mode of remittance transfer they actually used. Figure 9 shows that most migrants choose channels of transfer that they consider convenient (38 percent) and reliable (35 percent). The cost of transfer ranks third with only 16 percent of migrants choosing a mode of transfer on the basis of its price. Bulgaria is an exception, with cost second after convenience.

Figure 9 Determinants for choosing a specific mode of remitting



Source: Surveys

Migrants' choices are however often constrained. For instance, this may arise due to the location where many migrants live and work. Also many illegal migrants may have no access to some channels. These consideration may explain, at least partially, why convenience is so important and why so many migrants have chosen to send money home with friends and relative and even with people unknown to them, although the risk of loss may be higher than in the case of banks.

Cost may be less important a criterion than convenience because costs are low overall. Table 9 shows that some migrants (13 percent of the total) fare no cost in sending remittances. This suggests that a number of migrants sent money home with friends or relatives, or carried it themselves when visiting home. Another 19 percent of migrants answered that the cost of transfer was lower than three US dollars per transaction. Most of these migrants must have sent money home also with friends and relatives (Table 8 showing 29 percent of migrants send money home with friends and relatives). Table 9 shows that half of migrants pay less than eight US dollars per transaction and the other half more than eight US dollars. The differences in the distribution of cost are significant among countries. Migrants from Bosnia-Herzegovina, Bulgaria and Georgia seem to pay more and those from the Kyrgyz Republic, Romania and Tajikistan seem to pay less. Table 10 shows that the median cost as a percent of remittances varies from 4.7 percent for Tajikistan to 7.4 percent for Georgia. The average cost for all countries is 5.5 percent.

Table 9: Cost per Transaction for Sending Temittances (percentage of migrants incurring specified cost)

Cost per transaction in USD	Bosnia	Bulgaria	Georgia	Kyrgyz Rep.	Romania	Tajikistan	Average
0	0.4	16.4	3.8	–	26.7	22.4	13.1
(0, 3]	2.2	1.8	4.5	29.3	3.2	38.6	19.3
(3, 5]	2.2	1.8	6.3	23.2	11.1	11.1	11.5
(5, 8]	2.2	6.4	7.5	12.7	–	4.4	5.8
(8, 12]	12.4	7	28	11.1	13.3	15.1	15.2
(12, 20]	25.8	23.4	27.5	10	17	7.8	15.6
(20, 30]	10.7	18.7	11.3	5.9	17.9	0.5	8.5
(30, 50]	27.1	13.5	5.5	4.1	6.8	–	6.2
>50	16.9	11.1	5.8	3.7	4.1	–	4.7

Source: Surveys

Table 10 Average Cost of Money Transfer

Country	Average Cost		Median (excluding zero)	Average Remittance	Percent
	all	Excluding zero			
Bosnia	37	37	25	690	5.4
Bulgaria	22	26	23	401	6.5
Georgia	20	20	15	271	7.4
Kyrgyzstan	16	16	5	225	7.1
Romania	17	23	20	416	5.5
Tajikistan	5	6	3	129	4.7
Average	16	18	10	325	5.5

Source: Surveys / Note: Calculations are made under the restriction that average remittances exceed $10

SECTION 3: REMITTANCE INDUSTRY'S PERSPECTIVE: SERVICE OFFERINGS AND FEES

This section provides an assessment of the formal remittance operators in the reference countries: a) banks; b) specialized money transfer operators (MTOs); and c) the postal network. Informal channels are shuttle traders and migrants, which decide to repatriate remittances as they travel back to their homeland. We focus on the formal operators, as an assessment of the informal channels, in terms of volumes, frequency and direction, is beyond our scope. All the material, data and information reported in the following chapters were obtained through questionnaires and interviews with the Central Banks of the reference countries, and the banks, specialized money transfer operators (MTOs), the Postal networks and other intermediaries.

3.1 The Banks

Banks provide remittance and money transfer payments to their clients, both intra-national and through their correspondent accounts in the sending countries. Remittances and money transfers can be offered to both clients and non-clients for sending transactions, and to clients only for receiving ones. In general, the most active banks in the reference countries are the largest banks. This is mainly due to the number of clients, the reputation of the banks, the sophistication of their operating systems and their larger branch networks. In Moldova for example, where there is a three-tier licensing system, the six largest banks have about 80 percent of the system deposit base and transact more than 90 percent of the bank-remittances and money transfers.

Banks are generally active in money transfer services directly (bank-to-bank) and indirectly through money transfer systems, or specialized Money Transfer Operators (MTOs), such as Western Union, MoneyGram, Anelik or Contact. Banks and MTOs work under partnership arrangements in most cases. Banks provide direct money transfer and remittance services (i) internationally through correspondent accounts in foreign banks, and (ii) domestically through a national payments system operated by the respective Central Banks. Not all banks have set up specialized units or departments for remittances, like in Armenia for example, where Anelik Bank grew a profitable business and infrastructure specialized in remittances and money transfers. Very few banks have developed cross-selling products targeted to migrants and remitters: special savings or personal loans for relatives, house

Box 1: Cross-selling banking products to remitters

Cross-Selling: Mobiasbanca in Moldova has an exclusive offer for customers who use one of the money transfer systems available at Mobiasbanca. Receivers of money transfers can open 3 types of deposit accounts in Euro and USD:

- "Express" – allows for partial deposit and withdrawal. Can be opened for a period of 6 months with an interest of 7%;
- "Advance" – allows for advance payment of the interest. Can be opened for a period of 12 months with an interest of 7%;
- "Bonus" – adds 1% to the maximum interest. Can be opened for a period of 6 months with an interest of 7% or 12 months with an interest of 8%.

Source: Mobiasbanca's advertisement

improvement or working capital loans collateralized to remittance flows, remittance bonds, etc. One recorded exception is in Moldova (see box), where 7 commercial banks set up intra-bank and inter-banks specialized transfer systems in partnership with foreign banks, or through their subsidiaries in Moldova[10]. These systems generally do not require a bank account for money transfers, which is instead a requirement for most inter-bank transfers.

When a migrant remits money from a bank in Russia, in the United States or Western Europe, the correspondent account of the commercial bank is first credited by the remittance amount. Once the correspondent account is credited, a notification to the headquarters of the receiving bank is sent via the SWIFT[11] coding system (telex transmissions) that includes information on the account to be credited or the recipient of the transfer. Recipient accounts can be either deposit account, or transfer accounts, where money is held until withdrawn. Almost all banks[12] in the reference countries have SWIFT accounts (SWIFT requires an annual participation fee of about US$15,000 per year). Not using SWIFT sharply increases transaction costs, because it requires agreements with banks holding a SWIFT code and general paper-based transactions and communications.

The bank account of the recipient is then credited, or issues a money order payment in the name of the recipient. Funds can be transferred on a cash-to-cash, cash-to-account, or account-to-account basis. In theory, a migrant with an account in Russia could withdraw funds directly in any commercial bank of the receiving country from his/her Moscow bank account.

Box 2: Debit/Credit Card Systems

It has been questioned at length how debit cards could help extending the network and support remittance services. In the reference countries, card systems have been developed following different strategies. In Armenia and Kyrgyzstan, the central banks took the lead in establishing a banks' Nation-shared card processing center to process all transactions for all banks. In Moldova and in Tajikistan, individual banks purchased the systems independently and started issuing their own cards. In Tajikistan, there is only one bank (AIB) that operates and issues debit cards. It utilizes a processing system of a bank in Russia. This system can read both Maestro and the Russian Gold Crown (Chip based). Nation-shared card processing centers abate the fixed costs of the core systems, and enable to standardize tariffs and pricing across banks. A card processing system can cost between US$1.5 and US$ 2.5 million excluding all costs related to interfacing (banks' hardware and software). The network is constituted by the Automation Teller Machines (ATM), Post Terminal Machines (PTMs) and Point of Sales (POSs). POSs and PTMs are different from ATMs: they with fewer modules, and are much cheaper. They are both located in shops or department stores or other trafficked areas, and operated by retailers. POSs serve to make consumer payments with both credit and debit cards. Basically POSs check balances of the card holders before finalizing a purchase, or the limits per cardholder for credit transactions. PTM would instead read debit cards and enable cardholders to withdraw funds from the client account. The retailer would then provide cash to the client net of applicable fees against a credit to its own account. Fees for these operations vary considerably: between 2 percent for local currency and 4 percent for foreign currency withdrawals, if allowed. The bank would only charge for the money transfer between accounts (from the client to the retailer). PTMs are often favored over ATMs due to the low cost of the machines and for certain specific functions, like payment of salaries. Depending on the model, volumes and functions, an ATM can cost between Euro 25,000 and Euro 75,000 (or higher), while a PTM could cost US$ 1,000. POSs could cost around US$ 800. Connectivity is a decision factor: ATMs and POSs need online and fast connections for real-time operations, while PTMs could work off-line, if necessary. The retailer could clear all operations once a day, before closing of business, if

[10] These banks are Banca Nazionale del Lavoro (ITA), ImpexBank (RUS), Gazpromexpress (RUS), San Paolo-IMI (ITA), SberBank (RUS), Banca Antonveneta – StradaItalia (ITA), Is Bankasi AS Bank (TUR). More detailed information on the products offered by these banks and operators are provided in the Annexes.

[11] SWIFT is operated by a Belgian company, which operates the system and holds all the coding of all participating banks and other institutions throughout the world. SWIFT is de facto the largest and most used coding system in the world.

[12] There are few exceptions in Kyrgyzstan and Tajikistan.

The cost charged to remittance recipients can vary significantly from country to country, and from bank to bank: it is about 2 percent for non-clients in Tajikistan, and 1 to 2 percent for clients of the transferred amount, on average for clients, if in the same currency. Also in Tajikistan, the recipient of the funds must also pay a flat fee of about US$30, irrespective of the transferred amount. In Moldova for example, SWIFT transfers costs between Euro 9.6-16.0, and decrease as the transacted amounts increase above US$ 400 equivalent.

Pricing policies reflect the costs structure of the banks, which varies depending on their level of automation of the systems, equipment, personnel, and network. Retail banks, which generally profit from large client bases, tend to lower prices to attract clients and increase the critical mass of transactions for profit margins. However, this requires large investments in technologies, personnel and infrastructure, like branches, ATMs, and other cash service centers.

Managing a correspondent account is costly for banks: overnight rates in US$ can be below 1 percent on a correspondent account, which is lower than the funding costs of the banks. Naturally, banks pass these costs to the clients, especially for small transactions, although an estimate of these costs in relation to remittances is technically impossible. Managing foreign exchange is also costly. Banks generally buy cash from the market, from the respective Central Banks or from other commercial banks. Central Banks charge around 1-3 percent for cash in foreign currencies. Fees from other commercial banks are cheaper: in Tajikistan, for example, many commercial banks' couriers travel to the Kyrgyz Republic to buy foreign currencies in cash, as Kyrgyz banks have excess reserves (related to trade) in US$. Foreign exchange fees for remittances, and thus for clients, incorporate cash management costs and banks' marks-up: in general, the spread in foreign currencies for clients, and especially for small customers, ranges between 1 and 5 percent, depending on the liquidity of the market and the banks' pricing policies[13]. In most cases though, receivers of remittances cash in foreign currencies, and then exchange at pawn shops or foreign exchange bureaus, which generally apply lower spreads.

The speed of banks' transfer is quite rapid: the transaction can take a few seconds through the SWIFT system, as the electronic transfer is real-time. Time though is a function of back-office procedures and recording and accounting systems. As a result, it takes two-to-three business days to transfer funds on an account-to-account basis (one day more if from the United States, given the time difference).

[13] This is definitively not unusual for banks around the world. Even large Western investment banks would charge high foreign exchange spreads for their clients, including for Private Banking. In general, as a rule of thumb, the lower is the transacted amount, the higher would the spread. Anecdotal evidence from one Private Bank boutique in Switzerland shows that foreign exchange mark-ups vary from 1.21 percent for amounts up to US$ 50,000, to 0.16 percent for amounts between US$ 1.0 and US$ 2.0 million and higher.

The use of formal channels by remitters is constrained by three main factors. First, senders usually need to open an account with commercial banks in the sending countries, which may be problematic for some migrants. There are several issues related to opening an account in sending countries, and especially in Russia. Surveys of migrants in Tajikistan indicated that only 18 percent of migrants have bank accounts because a Tajik migrant needs to show a passport and a **"**migration card.**"** The latter can only be obtained with a valid working permit and is required to open an account with a Russian bank. As most Tajik migrants are temporary seasonal workers and have no work permit, account-to-account transfers are less frequent. In contrast, cash-to-account transfers through MTOs do not require particular documents, only a valid passport and the codes of the recipient bank and account. The same generally applies to Western European countries and the United States.

Second, foreign exchange regulations in some countries set limits on transfer amounts. In Russia, resident aliens cannot send more than US$5,000 per day, while non-residents do not have these limitations. The source of all cash deposited for money transfers above US$5,000 must be indicated in the memo of the transfer order. In Tajikistan, the origin of funds must be declared for transfers exceeding US$2,000 in cash. In the United States, under the AML/CFT regulations, cash transactions above US$ 10,000 must be recorded and reported to the authorities for investigation.

Lastly, the lack of confidence in banks and the generally low financial literacy of labor migrants are further obstacles. Lack of confidence in the banking systems is evident in Central Asia: low levels of deposits in both Tajikistan and Kyrgyzstan, and very small number of active bank accounts (less than 3 percent of the Kyrgyz population and businesses holds a bank account). Financial literacy also has an impact on remittances and the use and access to banking products. Anecdotal evidence also shows that Russian banks prefer not to serve Kyrgyz and Tajik migrants for remittances, mainly because of lack of language and basic banking skills. Russian banks indicated that it takes sometimes 30 minutes of a teller**'**s time to process a remittance of a few hundred U.S. dollars, which makes the transaction generally unprofitable.

3.2 Specialized Money Transfer Operators (MTOs)

Growth

There is an impressive multitude of specialized MTOs in the four reference countries, which make this segment of the financial system particularly dynamic and competitive. Many of these MTOs are the internationally (and historically) present Western Union and MoneyGram. Others are specialized MTOs from Russia, Armenia and other countries in the region.

Table 11 Number of Banks and MTOs in 2006

year 2006	**Banks**	**MTOs**
Armenia	21	11
Moldova	16	19
Kyrgyzstan	20	12
Tajikistan	10	11

Most of these MTOs operate in partnership with the commercial banks of both sending and receiving countries. Partnership arrangements, as explained later, are on a case-by-case basis, so MOTs could have partnership arrangements with different banks in both sending and receiving countries. Other MTOs use their own systems and network, depending on the channels and volume of business. The attached tables give a perspective of (i) the multitude of MTOs operating in the reference countries (Table 11), (ii) their partnerships with the commercial banks (Figure 10 on Armenia), (iii) competition among MTOs (Table 12 on Armenia) and (iv) their market shares (Table 13 for remittances from Russia and Table 14 for inflows to Moldova).

Figure 10 Money Transfer Systems and Partnership with Commercial Banks

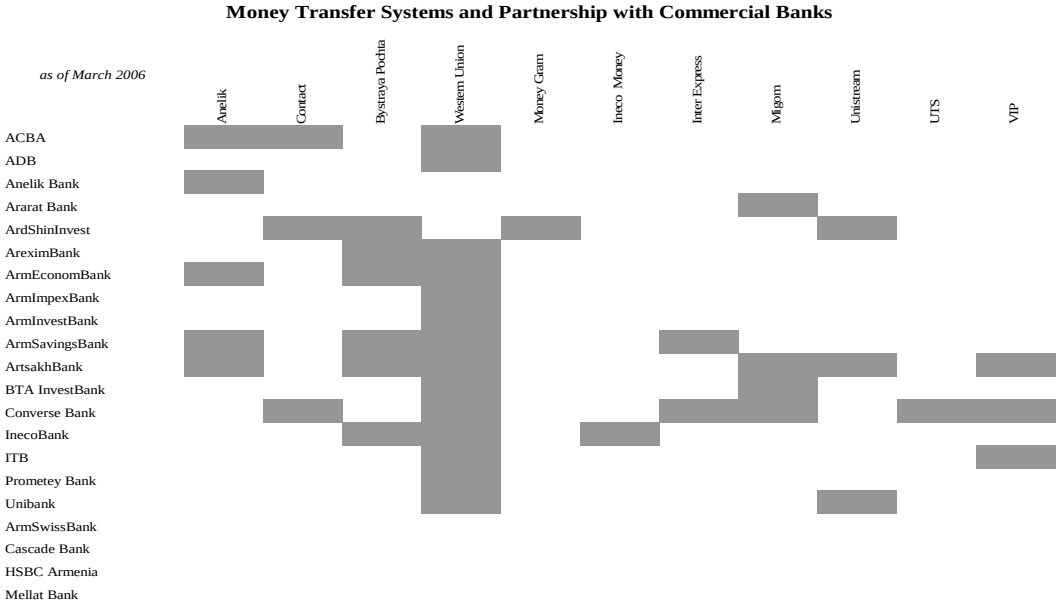


Table 12 Value of Transfers by "Selected" MTOs in Armenia

Value of Transfers by "Selected" MTOs in Armenia

in Million US$		2000	2001	2002	2003	2004	2005
Western Union	sent	5	4	7	7	6	7
	received	53	50	58	65	72	90
	Received/Sent (Ratio)	*11*	*11*	*9*	*10*	*12*	*12*
	Market Share	*61%*	*37%*	*25%*	*22%*	*19%*	*16%*
Money Gram	sent	3	1	1	1	1	2
	received	34	7	9	10	10	12
	Received/Sent (Ratio)	*12*	*7*	*12*	*14*	*8*	*8*
	Market Share	*39%*	*5%*	*4%*	*3%*	*3%*	*2%*
Anelik	sent		8	15	13	11	8
	received		77	126	121	83	83
	Received/Sent (Ratio)		*10*	*8*	*9*	*8*	*10*
	Market Share		*58%*	*55%*	*40%*	*23%*	*15%*
Unistream	sent			4	9	17	29
	received			30	77	112	208
	Received/Sent (Ratio)			*8*	*9*	*7*	*7*
	Market Share			*13%*	*26%*	*31%*	*39%*
Other	sent			0	2	20	25
	received			8	29	79	141
	Received/Sent (Ratio)			*28*	*12*	*4*	*6*
	Market Share			*3%*	*10%*	*24%*	*27%*
Total	sent	7	13	27	32	55	71
	received	86	133	231	302	356	534
	Received/Sent (Ratio)	*12*	*10*	*9*	*10*	*7*	*7*
Total transfers		**94**	**146**	**258**	**334**	**411**	**605**

Data Source: Questionnaire and interviews

Table 13 Remittances from Russia

Remittances from Russia

in US$ million	2003	2004	2005	2006 Q2
Money Tranfers of Individuals from Russia	n/a	n/a	12,507	7,992
to non-CIS countries	...	...	8,592	5,706
to CIS countries	...	...	3,915	2,216
Remittances from Russia	1,310	2,070	3,549	2,105
to non-CIS countries	...	...	323	234
to CIS countries	...	...	3,226	1,871
Share of MTOs	n/a	n/a	28.4%	26.3%
to non-CIS countries	...	...	3.8%	4.1%
to CIS countries	...	...	82.4%	84.4%

Data Source: Central Bank of Russia

Table 14 Market Shares in Moldova

Market Shares in Moldova

In million US$	Total Inflows	Spec. Money Transfer Operators	MTOs (to total)
1999	90	52	58%
2000	153	102	67%
2001	212	140	66%
2002	254	161	63%
2003	317	176	55%
2004	422	235	56%
2005	683	498	73%
2006 (QI)	152	106	70%

Growth in the number of MTOs has been steady since 2000, as the region slowly recovered from the financial turmoil of the Russian crisis of 1998. Literature has suggested that the increasing number of MTOs and their capacity to penetrate the market contributed to substantially lower the cost of remittances since 2000, to almost 1-to-3 percent of the transferred amounts.[14]

There are several factors contributing to the sharp growth and sudden emergence of new MTOs in the region, and the observed decrease in prices. First of all, the market enjoyed a fully liberalized regime. In 2002, for example, Western Union lost a court case with the Russian Antimonopoly Commission. According to the resolution, all contracts with exclusivity clauses signed by banks with Western Union were cancelled and revoked. At that time, Western Union had such contracts with more than 200 banks in Russia. Second of all, MTOs largely benefited from the introduction and development of new technologies, and in particular improvements in internet connectivity throughout the region. This enabled MTOs to transfer all their accounting and cash management modules from bank-based to internet-portal based. Third of all, the legal and taxation environment has improved significantly: none of the reference countries apply taxes on remittances and remittance transfers. Lastly, there were significant improvements in the economic environment and in the development of the financial and banking systems. Banks improved their technologies and invested in their networks, thus improving the outreach and penetration to low density clientele.

[14] See: Global Economic Prospects, 2006.

Box 3: The Business Models of MTOs

The business models of MTOs in the region and in the reference countries are relatively simple. The most common model is MTOs as stand-alone enterprises (Western Union for example) that develop their in-house software system and network of offices and branches. They often sign partnership agreements with commercial banks to access their physical infrastructures, thus the branch networks. In many cases, these MTOs also open stand-alone offices in critical and trafficked places, or within the premises of foreign exchange bureaus, pawn shops and other "money-points".

Under partnership agreements, these types of MTOs provide the software and hardware to their partners, and in turn the latter provide the needed staffing to process transactions and the physical infrastructure (retail spaces, connectivity, branch windows, sometimes fully dedicated to multiple or individual MTOs). These types of agreements are generally signed to cover the whole branch network of banks, or specific point of sales if the agreement is with foreign exchange bureaus, pawnshops and other. In most cases, MTOs provide training to the partner institutions' clerks. For standalone MTO offices, the MTO would cover all costs associated with the stations, i.e. rental, staffing and software and hardware, and cash management (purchase of cash from banks).

The most common type of partnership agreement is with commercial banks. Under these agreements, same banks and same branches can offer the services of several MTOs from the same windows. Each MTOs holds a bank account with the commercial bank for cash management and clearing purposes. Their account is credited in the sending bank/country whenever a remittance is originated. The sending bank credits the MTO account and transfers the funds to the receiving bank/country through the SWIFT system on the account of the same MTO. Sending and receiving banks can differ, so that the transfer resolves in an inter-bank transaction (clearing system). Transactions can be queued by the sending bank, so that SWIFT transfers are made at the end of the day through the settlement system, which is more secure and relatively cheaper.

In parallel, the MTO sends a message to the office of the MTO in the receiving city and country, to notify the origination of the remittance, the sending and receiving person. Some MTOs now offer additional services, such as small messages/greetings and SMSs. The transfer speed is almost real-time. Some MTOs though record the transaction with up to one-day delay, mainly due to the specific configuration of their accounting and processing systems. MTOs do not require a bank account, but simply a valid ID for both senders and receivers. Some MTOs can hold the remittances for more than 40 days if not cashed immediately. After 40 days, the MTO sends it back to the originating bank. Very few MTOs (only two) offer saving rates to the held remittances. Most MTOs operate in all currencies, and provide foreign exchange services through the hosting bank.

A different model of MTOs is used by a few large banks and bank groups in the Russian Federation and Armenia. Under these models, commercial banks have developed specialized software for handling remittances and individual transfers, a sub-system within their core banking system. The software is generally applicable and usable by other commercial banks. One example is Anelik Bank of Armenia, which developed the software and signed agreements with several commercial banks in the region. Another system is the one of Unistream, a consortium of Russian commercial banks that operates the same software for their inter- and intra-bank remittance and small money transfers.

Cost and Pricing Structure for MTOs

The success and pricing policies of MTOs vary widely, depending on the country, the partnership arrangements, the serviced remittance channels, the transferred amounts and the currency denomination, the services attached to the transfer and other. Fees are paid by the sender, and the receiver does not bear any transaction fee apart from the currency conversion, which is charged locally at the receiving bank or MTO. Figure 11 presents remittance costs among the three international MTOs. Table 15 is a snapshot of the pricing policies of the main MTOs in Armenia.

Figure 11 Remittance Costs

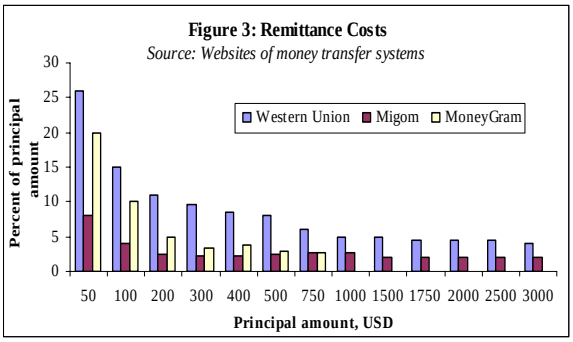


Table 15 Armenia MTOs

Armenia MTOs Offers	Fee	Coverage (countries)	Transfer speed
Western Union	4-26% depending on the amount transferred	200	real-time
MoneyGram	6.1-28% same day, 2.8-20% economy	170	10 min same day, 3-5 days economy
Anelik	1.5% in rubles, 3% in foreign currency	90	3-24 hours
Unistream	Russia - Armenia 1%, other CIS 1.5%	80	10 min
Contact	2% across Russia in rubles, 3% otherwise	70	4-24 hours
InterExpress	2.5% across Russia, 2.8% across CIS, 3% Vietnam, China	12	15 min
Bystraya Pochta	2%	13	1 min
Migom	2-4% depending on the amount transferred	CIS & Baltics	5-10 min
VIP	1.50%	12	5-10 min
InecoMoney	1-1.5%	7	5-10 min
UTS	Russia – 1%, Georgia - 1.5%, Ukraine & Moldova - 2%	5	15 min

Data Source: Interviews/Questionnaires

Overall, the cost structure of MTOs and their flexibility in delivering their services and in reaching out to potential clients make these operators particularly inexpensive. The main advantages of MTOs in terms of pricing policies and product development capacity can be summarized in the following:

- MTOs operate built-in-house communication and accounting systems, which run in parallel with the core banking systems of the partner and correspondent banks. In this way, MTOs can use low cost internet communication systems

and clear all cash management operations through the clearing system of the partner banks on a gross basis. In practice, sending MTOs queue payments throughout the day or even weeks, and make one single payment to the MTO branches through the clearing systems of the partner and correspondent banks. Receiving branches pay out remittances out of their bank accounts up to their account balances, and replenish the accounts through single transactions on their correspondent accounts. Thus, MTOs make profit on fees, the maximization of their cash and liquidity management practices, and the interest differential between the funding (remitted money is at zero cost) and the available cash reinvested in correspondent accounts and other assets placements (any delay in cashing out remittances generates profits for MTOs);

- MTOs have limited fixed costs compared to banks and other financial intermediaries. They generally operate through the banks' branches and the premises of pawnshops, foreign exchange bureaus, post offices, etc. MTOs also do not have specialized staff on their payroll: most of the operators are banks' clerks trained by the MTOs and dedicated to money transfers and remittances. Only when MTOs open their own offices they incur fixed costs such as premises. Anecdotal evidence[15] shows that the agreements with the commercial banks can vary, but they are generally set as fixed percentage of each transaction (between 25 and 50 percent according to interviews);

- The extent of their fixed costs associated with premises and staffing is a key determinant of the success of MTOs, which highly depends on the extent of the network and the geographical coverage. Furthermore, MTOs do not need to generate funding like banks (deposits) to operate, and thus have the competitive advantage (flexibility) of signing partnership agreements based on a selected number of branches and locations, and based on effective demand for money transfer services;

- MTOs are not affected by general issues such as access and confidence in the financial system and/or country risk. MTOs do not require clients to open accounts, because money transfers and remittances sit in transfer accounts of the receiving MTO branches and thus are cashable immediately by simply presenting a valid ID and the transaction reference number (generally provided to the sender). In practice, given that most MTOs process a remittance almost on a real time basis, both senders and receivers of funds are exposed to very limited risk of default of the service providers (bank, MTO or other); and

- Lastly, MTOs are extremely flexible in setting pricing policies: most MTOs in the reference countries are pricing flat fees irrespective of the transacted

[15] Banks and MTOs generally keep confidential that financial information related to partnership agreements with banks and other intermediaries. In one exception, Tajikistan, few banks were able to disclose them.

amounts and currency denomination. This facilitates transparency, and it is definitively a sharp divergence from the standard pricing policies of worldwide operators such as Western Union, MoneyGram or Migom (see Figure), which price remittance services based on the transferred amounts (the higher the value, the lower the proportional fee).

Rarely are banks and MTOs' clients well informed of the final cost of a remittance, as many small prices and fees must be added up. For example, a website of one large MTO in Armenia advertises remittance costs of 2 percent per transaction, irrespective of the transferred amount. However, the MTO further discloses that communication and processing fees will be added to the advertised 2 percent, without specifying such charges. Tariffs for money transfers on a bank account-to-account are also extremely variegated and difficult to trace. Foreign exchange fees, for example, are not necessarily related to market prices, but rather operational costs. Some banks offer services of multiple MTOs, which all have different pricing policies and services attached to remittances, and this might complicate the decision making process, especially for low-skilled or financial illiterate clientele.

3.3 The Postal Network

Postal networks have historically played a critical role in delivering a number of services throughout Central Asian countries, including mail and parcels, billing delivery and collections services, general fiscal and quasi-fiscal payments (salaries and pensions, tax collection), and savings where Postal Banks were established.

The main competitive advantage of the Postal Systems is their large branch network covering remote areas, where low density discourages banking and financial intermediation. In the Soviet system, in the absence of postal banks, postal networks were generally partnered with savings banks, which operated as the last links of the payments system infrastructure and provided the postal networks with cash and account management services.

Generally, the profitability of postal systems in the ECA region is plagued by the fixed costs of running large branch networks and the posts' low value generating activities. Large networks and high fixed costs (premises - although they do not pay rent to the State - vehicles and personnel) reduces the capability of postal systems to generate resources to re-invest into the infrastructure, and this makes them highly dependent on national budgets and political wills. As a result of these constraints, the infrastructure of the postal systems throughout the region is fast depleting. In the Kyrgyz Republic, for example, the postal system estimated that automating (computerizing) operations and the accounting system in the main branches and head office only would cost about US$ 25 million, close to 1 percent of GDP.

Postal systems face several competitive disadvantages in processing remittances, including:

a) Pricing: it can cost up to 12-15 percent of the transferred amount in Tajikistan, for example;

b) Time of service delivery: one-to-two weeks in Central Asia, and up to three days in Armenia and Moldova, depending on the remoteness of the sending and receiving post offices, and the existing infrastructure; and

c) Legal constraints: in all reference countries, with the exception of Armenia, the postal systems cannot operate in foreign currencies or hold foreign currency accounts with commercial banks, and this limits significantly their capacity to handle remittances, which are mostly foreign currency denominated.

Despite the above constraints, the postal systems in the region could play an important role in enabling better remittance outreach to the most remote areas (in both sending and receiving countries). The main issues seem to be related to the existing infrastructures and the costs associated with operations. A comparative analysis between HayPost and Anelik Bank, based on interviews with both operators, shows that HayPost's cost structure yields to lower transaction costs, and in fact the two entities price policies are basically identical. However, in countries like Tajikistan or Kyrgyzstan, where the infrastructure is particularly weak and labor and premises costs are extremely low, remittances cost between 10 and 15 percent and the speed is 15/21 calendar days.

Table 16 Estimating the cost of remittance transaction from Moscow to Yerevan

Estimating the cost of a remittance transaction from Moscow to Yerevan

Components of cost	Cost, US dollars		Notes
	STEFI	Anelik	
Sending staff	0.53	0.53	10 minutes of staff time at $3.2 per hour
Receiving staff	0.26	0.26	10 minutes of staff time at $1.6 per hour
Fixed costs	0.50	2.20	STEFI: $10,000 system cost recovered over 10 years; $6,500 annually maintenance cost, 900 branches with 1 transaction per day Anelik: $316,446 maintenance cost in 2005, 144,078 transactions annually.
Rent	-	1.00	
Administrative costs	0.50	0.50	
Total cost	1.80	4.49	

Source: World Bank staff calculations

In fact, in all reference countries, the postal systems have signed partnership agreements with specialized MTOs, which basically rent windows in the post offices and branches throughout the countries. In these cases, postal systems use their traditional postal services to process remittances, and use their commercial bank accounts to transfer

the funds from one country to another. In addition, postal systems share the fees of remittances with the originating postal offices. Remittances processed directly by the Postal systems, thus not through MTOs hosted by the posts, have remained limited in volumes (in Tajikistan, the postal system processed less than 2 percent of all remittances in 2005).

The Moldovan and the Armenian posts have modernized some of their operating systems, and are now engaging directly in remittance services. In Armenia, HayPost launched its money transfer system in 2005 and is successfully gaining market share thanks to its competitive offer: it charges 2 and 4 percent of the transaction amount to individual and legal entities respectively, while the transaction time is 15 minutes. Clients can also send a message of up to 140 words. The Moldovan postal system, with its 1150 post offices, is also launching a similar system, although to date there are no indications on its achievements in terms of increases in volumes and transactions.

Box 4: the Armenian postal system

Haypost CJSC is a national postal operator in Armenia. HayPost entered the money transfers market in 2005, after it was granted a license for implementation of money transfers systems by the Central Bank. In addition to the "Contact" system, starting from 2005 HayPost also employs international money transfer systems such as STEFI (Secured Transfer of Electronic Financial Information) and the UK-registered Travelex. STEFI, maintained and managed by Universal Postal Union headquartered in Berne, Switzerland, currently covers thirty-one countries and territories, including Armenia, Azerbaijan, Belarus, Kazakhstan, Moldova, Russia, and Ukraine in the ECA region. Generally the cost of adopting the STEFI solution averages 20,000 USD with an additional 13,000 USD annual fee for maintenance, upgrades and support. However, the least developed countries benefit from a 50 percent cost reduction.

Although the fees charged by HayPost are relatively higher than the ones charged by other money transfer operators, there are expectations for increases in the market share of HayPost mainly because: a) the new systems would enable to enhance effectiveness and efficiency of the network; and b) HayPost is currently managed by a private company. In 2005, Converse Invest assumed the trust management of HayPost for five years. Converse Invest receives 20 percent of HayPost profits, with the remainder remitted to the state. Converse Invest is an investment company registered in Latvia and founded by the Armenian Converse Bank. Converse Invest invited the French La Poste for participation in the project of modernizing HayPost and the Dutch financial company ING was invited by the Central Bank of Armenia.

SECTION 4: CONCLUDING REMARKS AND THE ROLE OF POLICY

Despite the rapid growth experienced in the remittance industry in ECA, there remains ample room for further improvement, especially by inducing greater access to the formal sector by remitters and their relatives. Common issues faced by the remittance industry in Easter Europe are (a) the high level of informality of money transfers, (b) the generally low access to formal remittance services by the poorer, and (c) the low capacity of the economies to capitalize on remittance transfers. All are correlated to financial sector development at both the infrastructure and institutional levels.

Remittances channeled through formal institutions have a positive impact on financial intermediation and on financial penetration (including among previously un-banked clients), and vice a versa. A number of studies[16] analyzed the effects of remittances on financial sector development and macro and micro policies in other regions of the world. Some of these studies focused on Latin America and showed positive correlations between the levels of deposits and credits to GDP and the level of remittances: analytical results in some developing countries observed increases of 5 percent in the level of bank deposits to GDP per 1 percent increase in remittances to GDP. In the case of Mexico, even though remittances are only 2 percent of GDP, bank accounts and savings related to remittances represent 10 percent of GDP. This is because Mexican banks handle more than 70 percent of the whole remittance transfers, thus indicating a high degree of penetration of banks in this particular segment. Furthermore, studies showed evidence that banks and other intermediaries benefiting from remittance transfers better reach out to un-banked and unknown clients. Lastly, the extent of the financial network of a country has a large positive impact on the choice between formal or informal remittance transfers and the level of intermediation: higher degrees of sophistication and extension of the banking networks are positively correlated with lesser levels of informality in remittances, and higher levels of bankability.

It is thus of paramount importance for policymakers, operators and the donor community to encourage the formalization of remittance transfers and the introduction of migrants and remitters to banking, intermediation, savings and investments, as well as to develop the financial sector infrastructure.

Policy makers could concentrate in the following policies, ranging from those with an indirect to those with a direct impact on remittances:

Improve Data on Remittances

- **Build the statistical frameworks and convey surveys.** Statistics related to immigration and remittances must be strengthened, including the official statistical frameworks and surveys at points of entry, with the diaspora and with

[16] Among others, see ample literature by Beck, Demirguc-Kunt, Martinez Peira in 2005 and 2006; World Bank Report No. 37026 on the impact of remittances in Latin America (August 2006); Orozco and Fedewa (2005); and others.

households. Building better statistics data bases on remittances would indeed not only enable to better understand remittance flows and in particular their impact on the economy and financial intermediation, it would also facilitate the cross-selling of other financial products to remitters and their relatives (see below). For instance, the National Bank of Armenia (NBA) has started strengthening its statistical framework to support its monetary policy formulation and execution. The NBA's objective is to analyze remittance flows and their potential impact on the Armenian system in case of turmoil in the main sending countries (contagion effect of a Russia crisis on remittance flows). The NBA conducted a survey in 2006 with households in both Armenia and the United States, where the largest Armenian diaspora resides[17]. At the same time, the IMF has started redesigning the statistical framework for remittances, to support central banks around the world in better assessing the micro and macro impact of remittances. Furthermore, the Central Bank of Russia has started releasing comprehensive historical data on remittances[18].

Promote Formal Remittance Channels

- **Build the financial sector infrastructure.** Efforts to develop the framework and infrastructure for intermediation would improve access to financial services by the population and decrease transaction costs. In turn, better access to banking services would increase intermediation (both deposits and credits) with positive and multiplying effects on the economy.

- **Increase confidence in the banking system.** Increased confidence in the banking system will entice greater use of formal channels for the transfer of remittances. Increasing confidence in the banking system requires adequate banking sector regulation and supervision, as well as a credible regulatory and supervisory body. If well designed, conceived and implemented, a deposit insurance scheme may also help restore confidence in the formal financial systems, especially for remitters and their relatives, who are the first beneficiaries of deposit insurance given their small deposits.

- **Develop the payments system**. Improving the payments systems is also needed to facilitate remittances and money transfers. Efficient payments systems decrease transaction costs, increase the security of payments and enable banks and operators to attract savings and to develop services and products. It is worth mentioning that relatives of migrants and remitters in general can access the services of NBFIs and microfinance organizations in the receiving countries, and the latter do not necessarily need access to the payments system to receive the funds. Banks could still remain the main points of access to the payments system, while NBFIs, microfinance institutions and the post offices could operate as pure delivery entities. For instance, Armenia and Moldova have made strenuous efforts to develop modern payments systems infrastructures, and Kyrgyzstan is currently

[17] A summary of the results and findings of the survey are available at: www.cba.am/
[18] Available on the website of the Central Bank of Russia (www.cbr.ru/eng/) under the statistical appendix.

implementing an ambitious program to develop a modern, secure and automated payments system.

Promote Competition and Transparency

- **Eliminate protectionism and promote a diversified financial sector.** Policymakers should also focus on ensuring maximum competition so as to reduce remittance costs, thus eliminating barriers to entry for foreign banks and/or other protectionist policies. Going a step further, financial sector legislation could recognize money transfer companies as a separate category and type of financial intermediary and policymakers could adjust licensing requirements to facilitate entrance. However, it should be noted that policymakers will also have to ensure compliance with AML/CFT policies.

- **Increase market transparency.** Experience in the four reference countries shows that remitters and migrants face a variety of options in sending money to the families and relatives, but information on pricing and general services is generally difficult to access or to thoroughly understand[19]. Under these circumstances, the respective central banks and governments should endorse market transparency practices and require banks and MTOs to fully and thoroughly disclose all transaction costs in a readable and understandable manner. The dissemination could take place through newspapers, magazines and other media, a topic also explored under the public awareness point below. Notably, this effort should be coordinated with the governments and supervisory authorities of the sending countries.

Maximize Developmental Impact

- **Encourage investments in home country.** A strong investment climate in a migrant's home country can be an important factor in its decision to remit. Thus, policy measures aimed to improve the investment climate and develop investment opportunities would help attract greater remittance flows. Going beyond this, special incentives for investment could be offered to encourage migrants to send remittances to finance investments. Other than direct contributions through migrant associations, a number of schemes like tax breaks for investments could be explored.

- **Promote the development of specialized products for migrants and the cross-selling of financial products.** Migrants, remitters and their relatives can be

[19] The British Government through the Department of International Development (DFID) has launched a program to assist migrants in the United Kingdom (www.sendmoneyhome.org). The program would enable through a website to assess "the cheapest way to send money home" using formal channels. The website also provides additional information related to timing, the infrastructure in the UK and other major European countries, as well as the receiving countries. None of the reference countries are though listed in the website, which seems to still be at the building stage.

creditworthy clients for banks and intermediaries, provided that intermediaries have sufficient access to historical information on their past and potential cash flows. Furthermore, studies have shown that remittances and personal money transfers are relatively stable and actually increase in frequency during economic downturns. Thus, intermediaries could develop other financial products linked to remittance transfers and lower the cost of remitting money for these potential new clients[20] Credit services could include housing and home improvement loans, small working capital loans for trade, credit card overdrafts, but also cash advances to purchase airline tickets and for the first months of accommodation in the receiving countries[21]. To encourage this, policy makers need to continue improving financial information available to financial intermediaries on their clients. In particular, databases on migrants and remitters cash flows and money transfers should be linked to the credit information bureau systems. Access to this information would reduce credit transaction costs for intermediaries (credit assessment and processing), and open a market to generally underserved and unbankable clients.

- **Promote financial literacy and public awareness.** The lack of financial literacy is a severe obstacle to the formalization of remittance flows, especially in Central Asia. Literature is showing that there is strong positive correlation between financial literacy and educational levels, and the total amounts and frequency of remittances and transfers. Furthermore, interviews and surveys on Tajikistan have shown that shuttle migrants (seasonal and short term), which represent 40 percent of the originators of remittances, have increasing difficulties in accessing remittance and money transfer services in Russia. Apart from the impossibility of opening a bank account, most shuttle migrants do not speak Russian and cannot fill up the documents and forms provided by the MTOs. Thus, governments should endorse, facilitate and support public awareness campaigns, which should include information on money transfer costs, requirements and accessibility, as well as the additional services provided by the domestic and international financial sector operators. Public awareness should target seasonal and shuttle migrants and their relatives throughout the travel cycle, from planning to return. Different experiences have been tried in several countries, including flyers at airports, rail stations, department stores, as well as television and newspapers adds during the peaks of the labor migration cycle.

[20] For instance, in Kyrgyzstan, retail loans yield 25 percent in one year. We could assume (1) a low probability of default of individuals (non-performing loans in microfinance are about 5 percent), (2) a mark-up of 10 percent by commercial banks or microfinance lenders, at zero recovery, (3) a portfolio increase of 20 percent due to cross-selling, and (d) an increase by 20 percent in operating expenses due to the increased volume of work. A bank or a microfinance company, under these assumptions, would increase its ROE by 12 percent for a portfolio 5 times its capital base.

[21] As an example, a special purpose second tier mortgage finance company – SHF - was established in Mexico in 2002. SHF raises long-term finance on the domestic capital market. The funds are then on-lent to non-deposit taking mortgage banks (Sofoles) which extend mortgage loans to individuals. This program was extended to blue collar migrant workers in the United States with a view to channeling a portion of their remittances into investment (versus pure consumption). Under this program known as "*Mi Casa*" housing program, migrant workers can borrow up to $160,000 (or 90% of the value of the house) for a period of up to 20 years with a fixed term interest rate (with the house being used as collateral).

- **Facilitate the securitization of remittance flows.** Remittances can be used as a future receivable and be collaterized by financial institutions to raise additional capital. Such securitization can provide banks with additional resources to finance productive projects. This has been successfully implemented in a number of countries, including Turkey and numerous banks throughout Latin America.

Encourage the use of technological advances

- **Explore the use of cell phones for remittance transfers.** The Philippines stand out in the use of cell phones for remittances as Box 5 further explores. The possibility to rely on mobile phone technologies depend on the ICT technology available in the country at hand, the extent of the mobile phone network, and the penetration of mobile phones in the countries. Furthermore, to cash-out on a mobile phone, a remitter or a receiver needs a Point-of-Sales (POSs), which can cost between $800 and $1,500 per piece. Mobile phone operators would also need to partner with mobile operators in the sending countries, in this case Russia.

Box 5: Remittance Transfers By Phone

Another impressive development is happening in the Philippines. G-cash -- a mobile phone operator and subsidiary of Global Telecom in the Philippines, has started offering cardless banking service that allows subscribers to use their mobile telephone device as a payment mechanism or "electronic wallet". G-cash has taken advantage of the large number of Filipinos working abroad who regularly remit funds back to the Philippines. Overseas Filipino workers represent the third largest global remittance market (after India and Mexico) for inbound remittances. The demographics of these workers fit the traditional prepaid mobile profile of cash-based, "unbanked" customers. Only about a quarter of 89 million Filipinos are considered to be "banked," whereas wireless penetration has reached 40 percent of the population. The operator earns revenue on a per-transaction basis, based on SMS traffic. Foreign exchange and other commissions are earned by the banks and agents. When remitting funds from abroad, the funds are transferred directly to the recipient's mobile phone account in the Philippines, which can be "cashed" at selected outlets. SMS based prepaid remittances have also started to develop in other remittance corridors.

Telcel, the Mexican market leader, has established 20,000 points of sale in the U.S. at which Mexican immigrants can send money and airtime home to relatives; Operators in Suriname are looking at the remittance market between Suriname and the Netherlands, etc. Mobile telephone based remittances could become the most efficient (real time) and cost-effective channel for small money transfers in un-banked countries.

Finally, while domestic policies will have to be prioritized according to the individual country characteristics, international co-operation is important in leveraging the advantages of remittances independent of the country context. Domestic policies frameworks and prioritization largely depend on the individual country, with the establishment of a national policy on remittances being a potential jump-starting point. At the international level, a conscious effort will be needed to promote policy dialogue among countries at the ends of remittance corridors and other stakeholders. This dialogue will be necessary in order to promote transparency, improve data compilation and in harmonizing electronic transfer systems.

APPENDIX 1. SOURCES FOR MIGRATION DATA

Table 2.1: Population Change in the ECA States, 1989-2004 (beginning-of-year; thousands)

	Total population (1)		Absolute change			Percent change		
	1989	2004	Total	Natural increase	Migration	Total	Natural increase	Migration
Russia	147,400	144,534	-2,866	-8,635	5,769	-1.9	-5.9	3.9
Ukraine	51,707	47,442	-4,265	-3,482	-782	-8.2	-6.7	-1.5
Belarus	10,152	9,849	-303	-332	29	-3.0	-3.3	0.3
Moldova (4)	4,338	4,247	-91	147	-238	-2.1	3.4	-5.5
Latvia (13)	2,667	2,319	-347	-149	-199	-13.0	-5.6	-7.4
Lithuania (8)	3,675	3,446	-229	6	-235	-6.2	0.2	-6.4
Estonia (14)	1,566	1,351	-215	-62	-153	-13.7	-4.0	-9.8
Armenia (12)	3,449	3,212	-236	399	-635	-6.9	11.6	-18.4
Azerbaijan	7,021	8,266	1,245	1,476	-232	17.7	21.0	-3.3
Georgia (11)	5,401	4,544	-857	242	-1,099	-15.9	4.5	-20.4
Kazakhstan (3)	16,465	14,951	-1,513	1,892	-3,406	-9.2	11.5	-20.7
Kyrgyzstan (10)	4,254	5,037	783	1,174	-390	18.4	27.6	-9.2
Tajikistan (7)	5,109	6,640	1,531	2,302	-771	30.0	45.1	-15.1
Turkmenistan (2)	3,518	5,158	1,640	1,269	371	46.6	36.1	10.6
Uzbekistan	19,882	25,707	5,825	7,125	-1,300	29.3	35.8	-6.5
Poland	37,885	38,191	306	973	-667	0.8	2.6	-1.8
Czech Republic (1!	10,360	10,211	-149	-168	19	-1.4	-1.6	0.2
Slovakia	5,264	5,380	116	168	-53	2.2	3.2	-1.0
Hungary	10,589	10,117	-472	-498	26	-4.5	-4.7	0.2
Albania	3,182	3,103	-80	681	-760	-2.5	21.4	-23.9
Bulgaria	8,987	7,801	-1,185	-497	-688	-13.2	-5.5	-7.7
Romania	23,112	21,713	-1,399	-154	-1,245	-6.1	-0.7	-5.4
Slovenia	1,996	1,996	0	5	-5	0.0	0.2	-0.2
Croatia (6)	4,495	4,442	-54	-35	-18	-1.2	-0.8	-0.4
FYR Macedonia	1,881	2,030	149	225	-76	7.9	12.0	-4.0
Bosnia-Herzegovir	4,435	3,785	-651	..	..	-14.7	..	..
Serbia and Monte	10,445	10,662	217	398	-182	2.1	3.8	-1.7

Sources and notes: UNICEF, TransMONEE database and national statistical offices.

Table 2.2: Population by Place of Birth in the FSU, 1989

Place of permanent residence:	Persons born in RSFSR:	Persons born in Ukrainskaia SSR:	Persons born in Belorusskaia SSR:	Persons born in Uzbekskaia SSR:	Persons born in Kazakhskaia SSR:	Persons born in Gruzinskaia SSR:	Persons born in Azerbaidzhanskaia SSR:	Persons born in Litovskaia SSR:
RSFSR	135,549,786	4,595,811	1,408,619	529,814	1,825,035	423,040	478,594	116,115
Ukrainskaia SSR	5,211,922	44,332,132	419,031	137,095	343,730	79,571	84,629	26,258
Belorusskaia SSR	786,672	268,015	8,883,290	14,828	61,894	14,141	11,153	17,403
Uzbekskaia SSR	915,978	199,096	27,169	18,108,456	202,204	35,511	26,989	2,577
Kazakhskaia SSR	2,450,213	510,702	136,939	139,498	12,714,676	44,485	40,361	10,088
Gruzinskaia SSR	191,274	65,974	9,654	4,074	14,685	5,038,710	16,573	954
Azerbaidzhanskaia SSR	161,999	31,650	7,840	6,910	14,921	24,831	6,604,318	549
Litovskaia SSR	173,938	47,453	88,093	4,608	14,391	2,235	2,407	3,299,039
Moldavskaia SSR	248,674	266,585	15,640	5,979	21,091	7,882	3,703	1,041
Latviiskaia SSR	384,423	93,528	116,621	5,241	14,240	3,225	4,827	37,197
Kirgizskaia SSR	348,471	53,652	10,056	69,560	125,534	6,597	3,548	784
Tadzhikskaia SSR	234,030	43,446	7,977	86,619	27,788	2,350	4,337	498
Armianskaia SSR	53,766	13,294	2,297	2,116	4,257	60,756	125,123	322
Turkmenskaia SSR	175,788	33,182	9,630	36,860	16,309	2,736	19,916	947
Estonskaia SSR	300,430	46,322	25,299	2,771	8,072	2,328	2,343	3,386

Place of permanent residence:	Persons born in Moldavskaia SSR:	Persons born in Latviiskaia SSR:	Persons born in Kirgizskaia SSR:	Persons born in Tadzhikskaia SSR:	Persons born in Armianskaia SSR:	Persons born in Turkmenskaia SSR:	Persons born in Estonskaia SSR:	Persons born abroad and persons not indicating birthplace:
RSFSR	228,795	99,932	260,914	153,806	151,484	140,551	65,485	994,088
Ukrainskaia SSR	186,983	20,965	38,745	36,207	36,498	32,406	10,994	454,868
Belorusskaia SSR	7,502	10,496	4,792	5,305	2,912	5,098	3,246	55,059
Uzbekskaia SSR	6,426	3,038	79,663	84,089	12,280	52,226	1,551	52,824
Kazakhskaia SSR	27,499	5,274	93,616	21,958	10,756	42,141	2,428	213,830
Gruzinskaia SSR	2,243	902	1,486	1,529	37,742	1,466	644	12,931
Azerbaidzhanskaia SSR	1,830	606	987	1,008	137,027	7,819	243	18,640
Litovskaia SSR	1,935	12,247	1,105	1,626	895	3,668	1,663	19,499
Moldavskaia SSR	3,739,090	1,024	1,846	1,379	1,318	1,962	606	17,540
Latviiskaia SSR	4,212	1,974,518	2,115	4,097	1,399	1,811	5,401	13,712
Kirgizskaia SSR	2,052	817	3,585,832	11,215	1,701	4,059	353	33,524
Tadzhikskaia SSR	1,830	890	14,926	4,649,781	2,302	5,825	565	9,439
Armianskaia SSR	668	220	645	1,534	2,570,422	1,977	148	467,231
Turkmenskaia SSR	2,608	964	3,755	3,358	4,436	3,204,771	376	7,081
Estonskaia SSR	1,635	6,467	1,187	904	758	1,056	1,154,585	8,119

Sources: EastView Publications and CIS Statistical Committee, USSR Census Results 1989 CD-ROM.

Table 2.3: Population by Nationality in the CEE-CIS States, 1989/1991 and 1999/2002 (thousands)

	Population by nationality (percent)		Population by nationality (thousands)		Change from 1989/1991 to 1999/2002	
	1989/1991	1999/2002	1989/1991	1999/2002	Thousands	Percent
Russia	100.0	100.0	147,400	145,164	-2,236	-1.5
Russians	81.3	79.8	119,866	115,869	-3,997	-3.3
Tatars	3.7	3.8	5,522	5,558	36	0.7
Ukrainians	3.0	2.0	4,363	2,943	-1,420	-32.5
Other	12.0	14.3	17,649	20,794	3,145	17.8
Ukraine	100.0	100.0	51,707	47,843	-3,864	-7.5
Ukrainians	72.4	78.5	37,419	37,542	123	0.3
Russians	22.0	17.4	11,356	8,334	-3,022	-26.6
Other	5.7	4.1	2,932	1,967	-965	-32.9
Belarus	100.0	100.0	10,200	10,045	-155	-1.5
Belarussians	77.5	81.2	7,905	8,159	254	3.2
Russians	13.2	11.4	1,342	1,142	-200	-14.9
Other	9.3	7.4	953	744	-209	-21.9
Moldova	100.0	100.0	4,338	4,293	-45	-1.0
Moldovans	64.4	69.8	2,795	2,997	202	7.2
Ukrainians	13.8	12.9	600	552	-48	-8.0
Russians	13.0	11.3	562	484	-78	-13.9
Other	8.8	6.0	381	260	-121	-31.9
Latvia	100.0	100.0	2,667	2,377	-289	-10.8
Latvians	52.0	57.7	1,388	1,371	-17	-1.2
Russians	34.0	29.6	906	703	-202	-22.3
Other	14.0	12.8	373	303	-70	-18.7
Lithuania	100.0	100.0	3,675	3,484	-191	-5.2
Lithuanians	79.6	83.4	2,924	2,907	-17	-0.6
Russians	9.4	6.3	344	220	-125	-36.2
Poles	7.0	6.7	258	235	-23	-8.9
Other	4.0	3.5	148	122	-26	-17.7
Estonia	100.0	100.0	1,566	1,370	-196	-12.5
Estonians	61.5	67.9	963	930	-33	-3.4
Russians	30.3	25.6	475	351	-124	-26.0
Other	8.1	6.5	128	89	-39	-30.5
Armenia	100.0	100.0	3,449	3,213	-236	-6.8
Armenians	93.3	97.9	3,218	3,145	-73	-2.3
Russians	1.6	0.5	54	15	-39	-72.1
Azeris	2.6	..	89	..	..	..
Other	2.6	1.6	88	53	-35	-40.0
Azerbaijan	100.0	100.0	7,038	7,953	915	13.0
Azeris	82.5	90.6	5,805	7,206	1,401	24.1
Russians	5.6	1.8	392	142	-250	-63.8
Armenians	5.5	1.5	391	121	-270	-69.0
Other	6.4	6.1	450	484	34	7.5
Georgia	100.0	100.0	5,443	4,372	-1,071	-19.7
Georgians	69.6	83.7	3,787	3,661	-126	-3.3
Russians	6.3	1.6	341	68	-273	-80.1
Other	24.1	14.7	1,314	643	-671	-51.1
Kazakhstan	100.0	100.0	16,185	14,953	-1,232	-7.6
Kazakhs	40.4	53.4	6,535	7,985	1,450	22.2
Russians	38.5	30.0	6,228	4,480	-1,748	-28.1
Germans	5.9	2.4	957	353	-604	-63.1
Ukrainians	5.5	3.7	896	547	-349	-38.9
Other	9.7	10.6	1,570	1,588	18	1.1
Kyrgyzstan	100.0	100.0	4,290	4,823	533	12.4
Kyrgz	52.0	64.9	2,230	3,128	898	40.3
Russians	21.4	12.5	917	603	-313	-34.2
Uzbeks	12.8	13.8	550	665	115	20.9
Other	13.8	8.8	594	427	-167	-28.1

Table 2.3: Population by Nationality in the CEE-CIS States, 1989/1991 and 1999/2002 (thousands)--cont.

	Population by nationality (percent)		Population by nationality (thousands)		Change from 1989/1991 to 1999/2002	
	1989/1991	1999/2002	1989/1991	1999/2002	Thousands	Percent
Tajikistan	100.0	100.0	5,109	6,127	1,019	19.9
Tajiks	62.1	79.9	3,172	4,898	1,726	54.4
Uzbeks	23.5	15.3	1,198	937	-261	-21.8
Russians	7.6	1.1	388	68	-320	-82.5
Other	6.8	3.7	350	224	-125	-35.9
Turkmenistan	100.0	100.0	3,534	4,418	884	25.0
Turkmen	71.8	77.0	2,536	3,402	866	34.1
Russians	9.4	6.8	334	299	-35	-10.5
Uzbeks	9.0	9.2	317	407	90	28.3
Other	9.8	7.0	347	310	-37	-10.6
Uzbekistan	100.0	100.0	19,905	24,231	4,326	21.7
Uzbeks	71.0	77.8	14,142	18,861	4,719	33.4
Russians	8.3	5.0	1,653	1,202	-451	-27.3
Tadzhiks	4.7	5.0	934	1,204	271	29.0
Kazakhs	4.1	4.0	808	966	158	19.5
Other	11.9	8.2	2,367	1,997	-370	-15.6
Czech Republic	100.0	100.0	10,302	10,230	-72	-0.7
Czech	94.8	90.4	9,771	9,250	-521	-5.3
Slovak	3.1	1.9	315	193	-122	-38.6
Other	2.1	7.7	217	787	570	263.0
Slovakia	100.0	100.0	5,274	5,379	105	2.0
Slovak	85.6	85.8	4,519	4,615	96	2.1
Czech	1.1	0.8	59	45	-15	-24.8
Other	13.3	13.4	696	720	24	3.5
Hungary	100.0	100.0	5,390	5,348	-42	-0.8
Hungarian	97.8	92.7	5,269	4,958	-311	-5.9
Other	1.7	6.3	89	339	249	278.6
Albania	100.0		3,182			
Albanian	98.0		3,118			
Greek	1.8		59			
Other	0.1		1			
Bulgaria	100.0	100.0	8,473	7,929	-544	-6.4
Bulgarian	85.8	83.9	7,272	6,655	-617	-8.5
Turkish	9.7	9.4	822	747	-75	-9.2
Gypsies	3.4	4.7	288	371	83	28.8
Other	1.1	2.0	91	156	65	71.6
Romania	100.0	100.0	22,810	21,681	-1,129	-4.9
Romanians	90.7	89.5	20,683	19,400	-1,284	-6.2
Hungarians	7.2	6.6	1,639	1,432	-207	-12.6
Gypsies	0.7	2.5	167	535	369	221.1
Other	1.1	1.2	257	253	-4	-1.5
Slovenia	100.0	100.0	1,913	1,964	51	2.6
Slovenes	88.3	83.1	1,690	1,631	-58	-3.5
Croats	2.8	1.8	53	36	-17	-32.6
Serbs	2.5	2.0	47	39	-8	-17.8
Others	6.5	13.1	123	258	135	109.1
Croatia	100.0	100.0	4,784	4,437	-347	-7.2
Croats	78.1	89.6	3,736	3,977	241	6.4
Serbs	12.1	4.5	582	202	-380	-65.3
Others	9.8	5.8	466	259	-208	-44.5
FYR Macedonia		100.0		2,023		
Macedonians		64.2		1,298		
Albanians		25.2		509		
Turks		3.9		78		
Romas		2.7		54		
Other		4.1		84		

Table 2.3: Population by Nationality in the CEE-CIS States, 1989/1991 and 1999/2002 (thousands)--cont.

	Population by nationality				Change from 1989/1991 to 1999/2002	
	(percent)		(thousands)			
	1989/1991	1999/2002	1989/1991	1999/2002	Thousands	Percent
Serbia and Montenegro						
Serbia	100.0	100.0	9,779	7,498	-2,281	-23.3
Serbs	65.9	82.9	6,447	6,216	-231	-3.6
Hungarians	3.5	3.9	344	292	-52	-15.0
Albanians	17.1	0.8	1,674	60	-1,614	-96.4
Roma	1.4	1.4	140	105	-35	-25.1
Other	29.1	11.8	2,848	885	-1,963	-68.9
Montenegro	100.0	100.0	615	651	36	5.8
Montenegrians	61.9	61.9	380	403	22	5.8
Serbs	9.3	9.3	57	61	3	5.3
Albanians	6.6	6.6	40	43	3	6.2
Other	22.2	22.2	137	144	8	5.7

Sources and notes:

Data are from censuses conducted in the CEE-CIS countries between 1989 and 1991 and again between 1999 and 2002.

APPENDIX 2. SURVEY INSTRUMENT UTILIZED FOR RETURNED MIGRANTS

Returned migrants were surveyed in six countries: Bosnia and Herzegovina, Bulgaria, Georgia, Kyrgyz Republic, Romania, and Tajikistan. The survey instrument was a comprehensive, 77-item, questionnaire that addressed a full range of the returned migrants' experiences before, during, and after migration. Questions covered the financial, social, family and personal aspects of migrants' experience both during and after migration. The full questionnaire and survey results will be available on the ECA website (www.worldbank.org/eca).

The survey was designed to provide an impressionistic, rather than representative picture of returned migrants' experiences. For the purposes of this survey, a "returning migrant" was defined as anyone who has been abroad for more than three months with the purpose of employment, and has found him/herself in their home country during the survey. The survey also provides some information on the number of migrants who have returned permanently as opposed to those who have expressed desire to migrate again. Though the same survey instrument was utilized in each of the six countries, local teams relied on slightly different methodologies to select the sample of returned migrants to interview. In most cases, this involved some form of 'network' or 'snowball' method in which returned migrants were identified through references from other returned migrants or affiliated formal and informal institutions. The preference for this methodology stemmed from the fact that no systematic view, including prior studies on migrant flows and experience or the possibility to use household surveys, were found to support a more comprehensive methodology. In some cases national censuses have allowed for some blueprint on this selection.

Though in most cases, efforts were taken to ensure that a national sample in taken and various regions of the six countries were sampled, the extent to which the survey is representative of the universe of returned migrants in these countries can not be measured. The survey generated relatively large sample sizes—about 1200 returned migrants in each country—yet the results must be interpreted with caution.