

# Migration, remittances and assets in Bangladesh: Considerations about their intersection and development policy recommendations<sup>1</sup>

## Introduction

This report presents an analysis of the results of a survey conducted on more than 10,000 households in Bangladesh.<sup>2</sup> The study shows relevant information that can enhance the conditions of people who migrate and search for greater opportunities to achieve development.

The importance of this survey is unique in many ways. It is first and foremost recognized for its sheer sample size. Furthermore, it offers data beyond the simple aggregate macroeconomic figures which do not adequately capture the context of the intersection or crux between migrant economic activities and household dynamics, which in turn can provide a substantial basis for macroeconomic analysis.

The main findings resulting from this report show that:

- Over 70% of migration takes place in the Arab oil exporting countries;
- Just over 90% of migrants say they send remittances to their families;
- More than 70% of migrants use formal payment methods, such as transferring from money transfer operators who pay in Bangladesh through banking institutions;
- Only 20% of migrants own bank accounts, despite government efforts to require migrants to have accounts;
- Over 50% of remittance recipient households have bank accounts<sup>3</sup>;
- On average, migrants send just over US\$ 1,100<sup>4</sup> annually in a frequency of 4 times per year;
- The remittance dependency ratio among receiving households is 61%, an amount similar to that of other regions in the world;
- The large majority of households receiving remittances own less than two assets;
- Paying a loan is among their primary obligation rather than accumulating other assets.

These findings identify a migrant population whose income is higher than per capita income in the country, but whose limited assets can make them vulnerable to external shocks (such as a decline in overseas employment). Asset building<sup>5</sup> (particularly financial assets) is a key factor found intersecting between remittances and development, as it guarantees the means to achieve financial independence. Research has shown that remittance recipient households typically are able to save above the average population but keep their resources informally.<sup>6</sup> In the short term, their condition improves and keeps

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<sup>1</sup> Manuel Orozco, report commissioned by the International Organization of Migration. March 20<sup>th</sup>, 2010.

<sup>2</sup> The survey was conducted by Mitra and Associates in 2009 to 10,565 households and commissioned by the International Organization of Migration. The analysis in this document is based from the survey data. The summary report is “Bangladesh Household Remittance Survey, 2009”.

<sup>3</sup> In addition, over 60% of household members have a bank account, signifying that 1.2 people in a household own accounts.

<sup>4</sup> All USD calculations have been made approximately at the rate USD 1 = BDT 70.3

<sup>5</sup> We define assets as a stock of financial, human, natural or social resources that can be acquired, developed, improved and transferred across generations.

<sup>6</sup> Orozco, Manuel. Asset accumulation Orozco, Manuel. “Migrant Foreign Savings and Asset Accumulation.” Reducing Global Poverty: The Case for Asset Accumulation, Edited by Caroline O.N. Moser. Washington, DC: Brookings, 2007.

them out of poverty, but in the long term, without appropriate and systematic means to achieve economic independence, their ability to get out of poverty does not change.

From a policy standpoint, it is important to ensure the means by which assets can be formed and means to that end include promoting financial independence. The report recommends strategies that expand payment transfers through rural financial institutions that design appropriate financial products and that introduce financial education as a strategy that link prevailing government efforts to support migrants, with financial institutions.

The report contains three sections. The first section takes a brief overview of migration trends, and basic remittance characteristics exhibited by migrants, followed by an explanation of the regulatory environment governing money transfers and by the survey results on how transfers take place in reality. The second section takes a substantive look at additional remittance receiving characteristics. In particular, this section seeks to explore the relationship between remittance dependence and demographic, migration related and other factors. This part also attempts to analyze how remittances relate to asset building or wealth generating opportunities.

## **1. Migration and marketplace remittance in Bangladesh**

This section briefly reviews the migratory patterns of Bangladeshis, the basic remittance characteristics and the (regulatory and competitive) marketplace in which they occur. Bangladesh experiences many types of human mobility, both internal and international. Amongst international flows, the region shows three distinct trends -- emigration for settlement to Europe, Australasia and North America; contract labour migration to Middle-Eastern and a few South-East Asian countries; and the movements of people in border areas such as India.<sup>7</sup>

Established patterns of migration have diversified more recently as Bangladeshis are moving away from the border into relatively prosperous parts of north and northwestern India. Specifically, a steady stream of migrants is moving into affluent urban areas, such as New Delhi and Mumbai (formerly Bombay) where there is a constant demand for cheap labour.<sup>8</sup> There are also a significant number of migrants who are working in host countries without official government sanction; some estimates are that the number of undocumented workers is close to the numbers of legal or documented ones.<sup>9</sup>

The Global Migrant Origin Database estimates 6,832,522 Bangladeshi living abroad, representing less than 5% of the total population and less than 10% of the labour force. The Bangladesh Bureau of Manpower, Employment and Training (BMET) indicates that there were 5.8 million Bangladeshi workers working abroad, 31% of which were in Saudi Arabia and 24% in the UAE.<sup>10</sup>

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<sup>7</sup> <[http://www.migrationdrc.org/research/regions/bangladesh\\_southasia.html](http://www.migrationdrc.org/research/regions/bangladesh_southasia.html)>

<sup>8</sup> Ramachandran, Sujata. "Indifference, Impotence, and Intolerance: Transnational Bangladeshis in India," *Global Migration Perspectives*, No. 42 September 2005.

<sup>9</sup> Kibria, Nazli. "Returning International Labor Migrants From Bangladesh: The Experience and Effects of Deportation" Working Paper #28, July 2004.

<sup>10</sup> Bangladeshi worker working abroad. <http://www.bmet.org.bd/BMET/statisticalDataAction#>

### *Brief characteristics of remittance transfers from Bangladeshi migrants.*

When looking at the survey results for this study, we find that the large majority of households (over 70%) responding to have an migrant abroad claimed to be in the Gulf Corporation Council (GCC) countries. Moreover, 90% of these households said they received remittances from their migrant relatives.

It is worth noting the significantly large percentage of remittance senders given that it is higher than in most countries. Most experiences show that the percent of migrants remitting ranges from 60 to 80%.<sup>11</sup> However, in this situation the high percentage may be associated to contract labour going to the oil exporting countries with the purpose of sending remittances while working.

The average amount remitted was sent mostly from males and was just near Taka 82,000 or US\$1,200. As will be shown below, these transfers take place predominantly through financial banking institutions; however, most migrants do not have bank accounts, whereas a larger percentage of recipients do.

Ownership of a bank account and assets are proven development indicators that intersect with remittances. They have an effect in reducing poverty as well as increasing wealth. Thus, it is important to understand the relationship between remittances and finances, for both senders and recipients. Section B looks first at the marketplace of remittances.

### ***The marketplace for remittances: regulation and competition***

The rules by which foreign currency transfers often determines the way in which the market operates and the extent to which people can have financial access. Strict rules allowing only banking financial institutions to pay money transfers may have negative effects on formal transfers as well as on financial access when there is poor banking presence in rural areas or on the outbound the market for transfers is diffused and composed of a wide range of players seeking different partners. Here we review the rules governing foreign currency payments in Bangladesh; in particular, we look at some key issues: regulations as to which institutions are permitted to pay inbound transfers, and how regulations govern financial crimes, such as money laundering.

#### *The regulatory environment*

Bangladesh's financial system consists of Bangladesh's Bank (BB) as the central bank, 4 State Owned Commercial Banks, 5 government owned specialized banks, 30 domestic private banks, 9 foreign banks and 29 non-bank financial institutions. The financial system also includes insurance companies, stock exchanges and co-operative banks. As the central bank, the Bangladesh Bank has a legal authority to supervise and regulate all the banks.<sup>12</sup>

There is no specific law or act that solely regulates the remittances sector in Bangladesh; however, there are two regulatory instruments that apply to remittances, namely "The Foreign Exchange Regulation Act of 1947 and the Money Laundering Prevention Act of 2002".<sup>13</sup> The Foreign Exchange Regulation Act of

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<sup>11</sup> Orozco, Manuel. *Sending Money Home*, IFAD, 2008 . See also the latest study by the Global Development Network, *Development on the Move: Measuring and optimizing migration's economic and social impacts*,

<sup>12</sup> Central Bank of Bangladesh – Banks and FI's

<sup>13</sup> "Efficiency of Migrant Workers' Remittance: The Bangladesh Case" - Tasneem Siddiqui - University of Dhak - Asian Development Bank – Manila, August 2004

1947 is the primary regulatory instrument of Bangladesh related to all sorts of foreign exchanges operations, including foreign currency transfers, such as remittances. The act was launched in March 11th, 1947, but has been modified several times up to June 30th, 1996 (BB, 1998).

The Act provisions authorized dealers in foreign exchange. It restricts foreign exchange dealings, such as buying, borrowing, selling, lending, conversion, etc. by any person other than an authorized dealer. The authorized dealers, banks and foreign exchange bureaus, have to comply with general and/or specific directions and instructions issued by Bangladesh Bank from time to time. The authorized dealers shall, before undertaking any transaction in foreign exchange on behalf of any person, require that the person declares that the transaction does not involve any violation of the Act. Bangladesh Bank is the implementing agency of the Act. It has a specific department entitled 'Foreign Exchange Policy Department' for supervising all kinds of foreign exchange matters including foreign remittances.

The Money Laundering Prevention Act 2002 received the consent of the President on April 5th, 2002 and became a law. The act was amended in 2003 (BB, 2003). It defines 'money laundering' as illegally earning or gaining resources directly or indirectly and as perpetrating or assisting in illegal transfer, conversion or concealing position of legal or illegal resources earned or gained directly or indirectly.

The Bangladesh bank or a person empowered by the Bangladesh Bank can investigate money laundering crimes. All money laundering investigations are initiated by the Central Bank. If a case concerns a bank official, BB conducts the whole investigation. But if the alleged perpetrators are general people, BB gives power to police/CID/Bureau of Anti-corruption etc. to investigate the case.

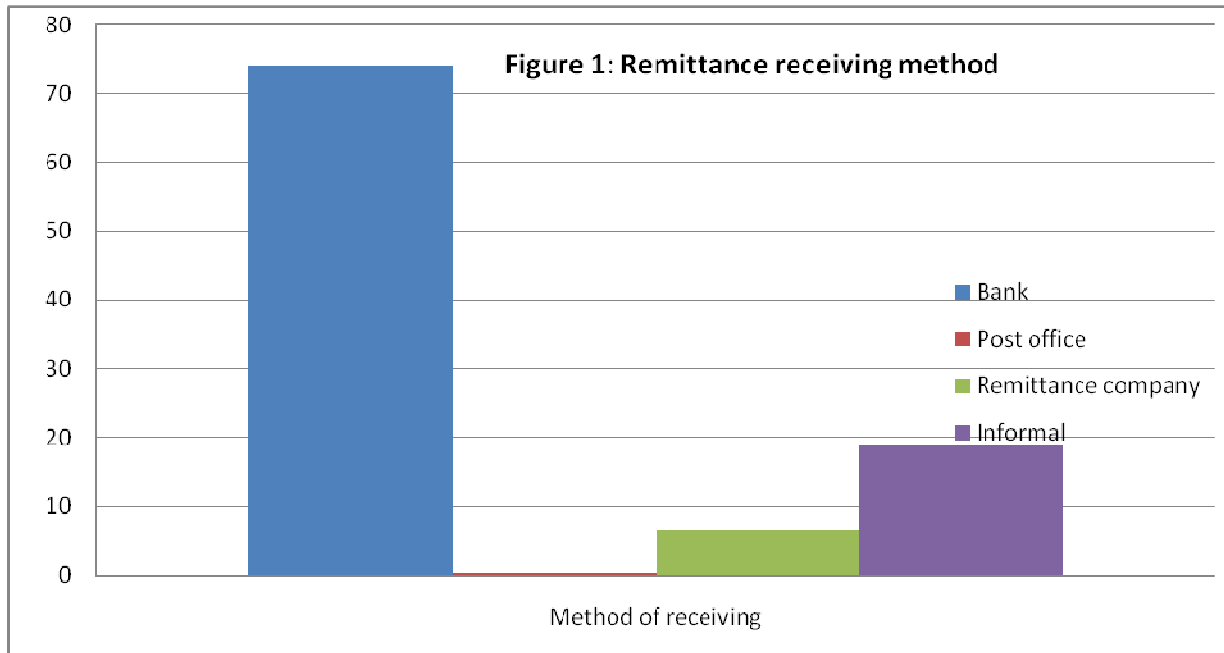
#### *The marketplace in practice.*

These regulations contribute to shape the marketplace by the extent of compliance to the legal context. As in other countries, money transfers take place formally or informally, that is through the system as regulated by the Bangladesh Bank or outside it. According to survey results, the main channel people choose for receiving remittances to Bangladesh are banks. Banks dominate the remittances market with a 74% of market share, followed in low percentages by more informal means and remittances companies.

Considering that nearly three quarters of transfers are from the Middle East, this finding is consistent with prevailing regulations and with World Bank research showing that inbound payments from the GCC are done through banks. The size of the informal system is relatively small, but consistent to other countries that receive remittances in South East Asia such as the Philippines, or Indonesia.<sup>14</sup>

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<sup>14</sup> It is important to consider respondent's questions with some nuance because technically there are no remittance companies paying money in Bangladesh, as they have to do it through banks or foreign exchange bureaus. This percentage would then either increase informality (assuming the person uses a small but unregulated business) or increases bank use (as the respondent may have meant to say, the remittance company from the transfer originated).



Source: IOM. Bangladesh Household Remittance Survey 2009. Dhaka, 2009

Transfer choices, however are not shaped only by rules, but by demographic characteristics or other considerations. Looking at the transfer choices is important to learn whether there exist specific determinants other than regulations that explain the option of the use of a formal mechanism. To that effect a regression model tries to estimate relationship between using formal channel of sending/receiving money and its determinants.

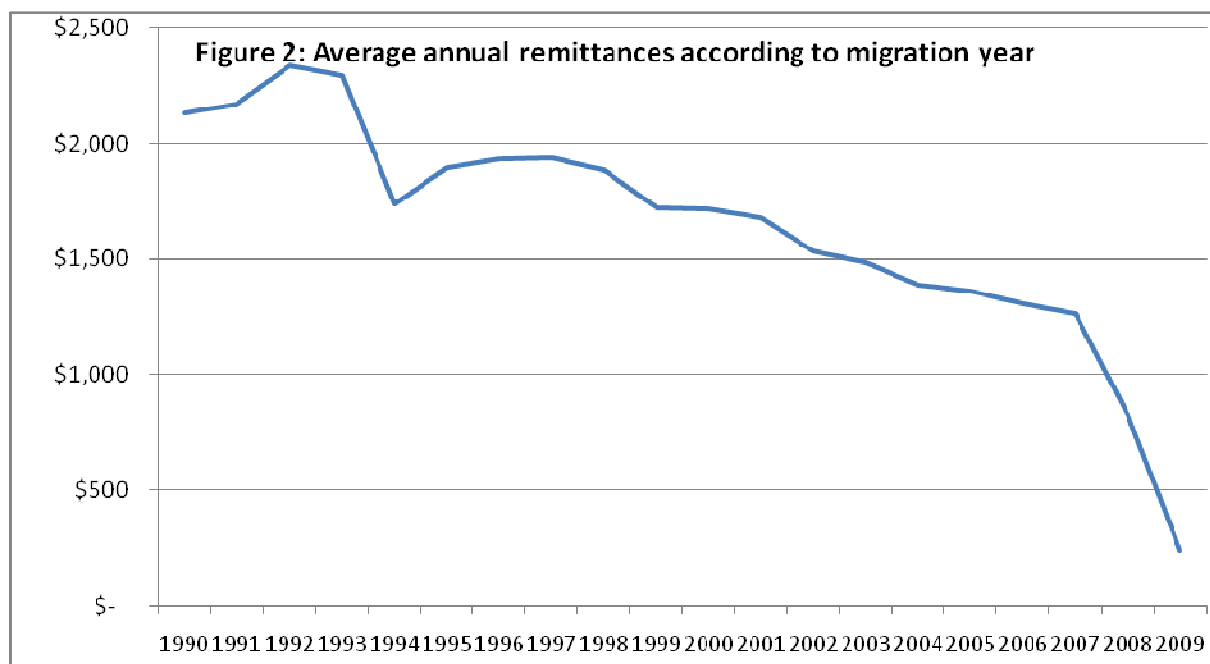
The model results show that the neither frequency of transfers or age seems to determine whether or not the receiving method is formal. The probability of receiving money formally increases when the amount of remittances increase. Also, a migrant's remuneration increases the choice of method by one percent. These two values may indicate that an amount transferred via banks may represent less risk or restrictions to the sender. Salary increases are associated with more frequent usage of formal ways of receiving money since higher income implies affordability of safer and faster ways of remitting money. Higher level of education also positively affects the probability of formal sending/receiving. Higher level of education would imply the improved awareness of formal ways of sending money and risks of using informal ways. The model results are presented below.

## 2. The intersection between remittances, income and assets

This section looks at the characteristics and determinants of receiving money from overseas work by migrant relatives. The overwhelming majority (90%) of Bangladeshis interviewed for this study indicated they have a relative abroad who sends them remittances. On average, those surveyed reported that they receive a median transfer value of US \$284 approximately 4 times per year, for a total of US\$1,138 per year.<sup>15</sup> They depend on remittances for 61% of their total household income. This dependency ratio is similar to other nationalities.

The survey results show a relationship between the average amount of remittances received and the length of time migrating abroad. On average, the longer the relative has lived abroad, the higher the total value of the remittances they currently send each year. According to the survey results, 41% of respondents said their relative left Bangladesh in the last three years, since 2007.

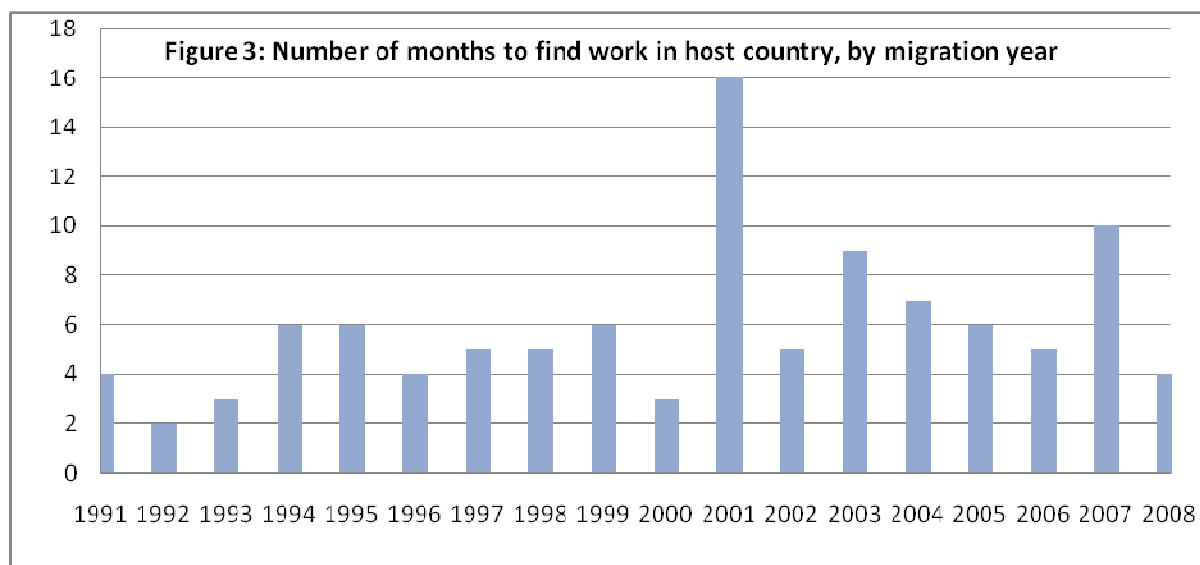
Families whose relative left in 2007 received an average of US\$1,274 in the last 12 months, while those whose relatives left five years earlier in 2002, for example, received US\$1,535 on average, a 21% increase over five years.



Source: IOM, 2009 Survey.

This trend is common among almost all migrant groups, who send more remittances when they are more established in their host country. Indeed, the families surveyed reported that it took their relative an average of 6 months to find work in the host country after migrating. It was particularly difficult for migrants who left in 2007, taking them an average of 10 months to find work (see Figure 3).

<sup>15</sup> In general, when reporting earning figures, we use median rather than mean values to control for unexplained large amounts that can artificially increase average values. The mean an arithmetic operation is sensitive extreme numbers (low or high). The median is the middle value in a list of records, and thus a point where half the values are above and half the of the others are below



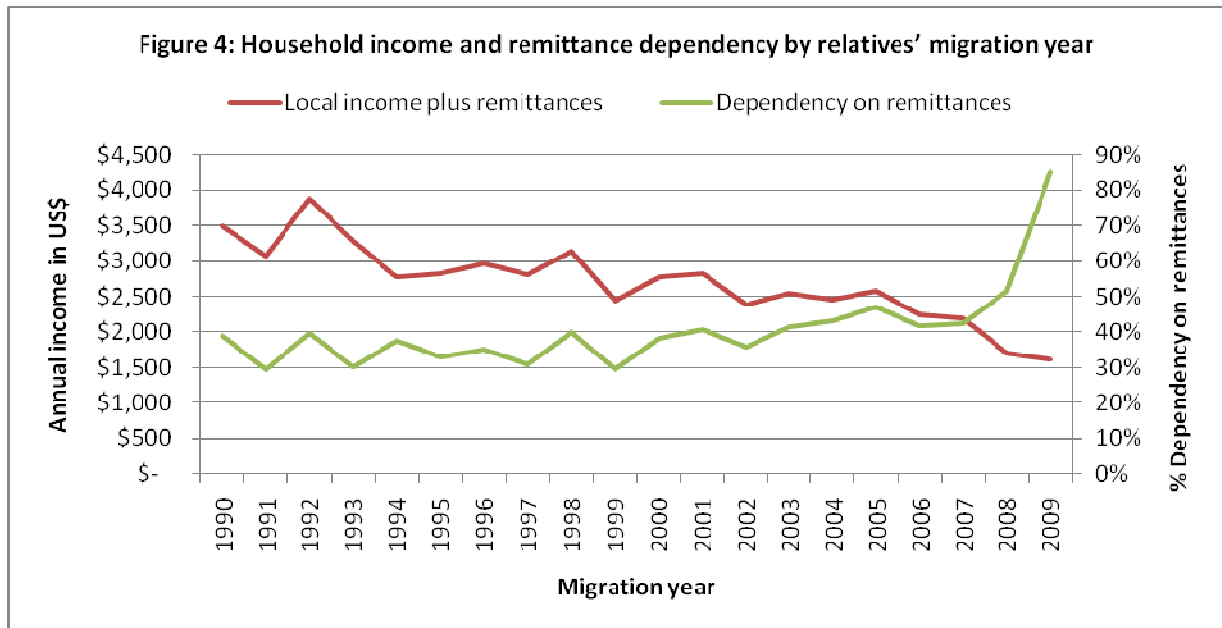
Source: IOM, 2009 survey.

In addition to receiving remittances, respondents reported significant income from local sources such as agriculture, business, and wages. Non-recipients reported higher local income in each category than recipients. However, after including remittances, the combined income of recipients is US \$2,455 on average, compared to US \$1,597 for non-recipients. Another finding is that the level of dependency on remittances as a portion of their total household income (61 per cent on average among all recipients), also decreases with the number of years the family members have been emigrating. The longer people are receiving money, the lower their dependence. Moreover, those households with relatives who have just emigrated are more likely to be dependent on that income.

**Table 1: Average annual income (US \$) by source**

	Remittance Recipient	Non-Recipient
Agriculture	\$375	\$435
Business	\$224	\$391
Wages	\$247	\$429
Other	\$114	\$204
<b>Total local income</b>	<b>\$961</b>	<b>\$1,459</b>
<b>Remittance income</b>	<b>\$1,494</b>	
<b>Total household income</b>	<b>\$2,455</b>	<b>\$1,459</b>
Dependency on remittances	61%	

Source: IOM. 2009 Survey.



Source: IOM. 2009 Survey.

Gender plays an important role in household income, remittances, and dependency levels. While female migrants send in average less money back home than their male counterparts (US \$964 versus US\$1,503, respectively), families with female recipients have higher local household incomes (US \$1,197 versus \$957), making them less dependent on remittances (see Table 3).

**Table 2: Recipients' annual household income (US\$) by migrants' gender**

Gender	Local household income	Remittances	Combined income	Remittance dependency
Male	\$957	\$1,503	\$2,460	61%
Female	\$1,197	\$964	\$2,161	45%

These transfers on the sending side exhibit similar characteristics to other groups of migrants who remit to their families. On the receiving side, males continue to be the heads of households who receive more. The difference may relate to the short term nature of migration and the intention to send as much as earned to the home country relative.

Table 3a. Migrants sending money from

<i>Spain – Italy to...</i>	<i>Female</i>	<i>Male</i>
Morocco	897.14	1334.13
Dominican Republic	2294.00	2611.00
Colombia	2613.20	3117.26
Romania	2353.12	1765.79
Bolivia	2438.91	2534.33
Ecuador	2783.04	3071.42
Paraguay	3563.33	2166.67
Other Africa	.	.
Honduras	2209.09	1932.00
Peru	2467.96	2616.81
Philippines	3683.33	3707.41
Nigeria	1279.09	862.50
Uruguay	3000.00	2400.00
Costa Rica	.	2000.00
Paraguay	12000.00	.
<i>U.S. to ...</i>	<i>Male</i>	<i>Female</i>
Bolivia	2632	4897
Colombia	2452	2584
Dominican Republic	2408	2822
El Salvador	3732	3025
Ethiopia	2831	1769
Ghana	2712	2409
India	1824	2098
Mexico	2402	2333
Nigeria	2888	2790
Paraguay	2938	2130
Philippines	3857	4140
Honduras	5788	5169
<i>Russia to</i>	.	.
Georgia	1500	1200
Azerbaijan	1800	1500

Source: Orozco, Manuel. Data collected by the authors through various surveys, 2008.

Table 3b. Households receiving money in

<i>Africa</i>	<i>Male</i>	<i>Female</i>
Uganda	729.15	609.93
Egypt	1426.70	1167.69
Chad	651.98	793.58
Burundi	788.53	282.32
Nigeria	609.95	1487.59
Somalia	1654.84	1620.06
Tanzania	663.06	626.66
Cameroon	807.61	606.02
Burkina Faso	497.61	153.76
Ethiopia	1149.74	621.04
Zimbabwe	524.80	693.59
Benin	1928.55	940.80
Zambia	759.59	724.96
Rwanda	440.92	224.25
Kenya	77.31	873.73
Morocco	799.23	1227.65
Somaliland	976.18	906.77
RDC	271.77	356.74
<i>Latin America</i>	<i>Male</i>	<i>Female</i>
Guatemala	2321.12	3405.62
El Salvador	4859.29	4053.96
Nicaragua	3650.33	3043.67
Dominican Republic	2874.60	2638.38
Cuba	935.42	1009.07
Ecuador	3111.12	2866.36
Guyana	3827.66	6540.05
Colombia	6319.73	10914.25
<i>South East Asia</i>	<i>Male</i>	<i>Female</i>
Indonesia	2422	2166
Malaysia	2062	1603
Philippines	6054	4331

Source: Orozco, Manuel. Data collected by the authors through various surveys, 2006-2008.

Education also shows a relationship with dependency on remittances. Migrants with higher education levels send larger volumes of remittances and their families have higher household income than their

less-educated peers. The higher the migrant's education, the lower their family's dependency on remittances (please see table 4). In this case, receiving remittances and education are typically related variables across other nationalities that receive money.

**Table 4: Remittance dependency level based by migrant's education level**

Education level	% Dependence on remittances
No schooling	71%
Class I-IV	72%
Class V	64%
Class VI-IX	61%
SSC	56%
HSC	55%
Graduate	56%
Masters	48%
Other professional	50%
Others	52%

Source: IOM. 2009 Survey.

According to the survey, the top four destinations of Bangladeshi migrants are Saudi Arabia, UAE, Malaysia and Kuwait. Migrants in the GCC states of Kuwait, Saudi Arabia, and UAE send more remittances than those in Malaysia. One explanation identified from the data is that earnings are higher than in Malaysia (See Table 6).

These numbers are relatively similar to official statistics of the overseas contract worker population handled by the Bureau of Manpower Employment and Training.<sup>16</sup> Note that while in the last few years contract labour migration to Kuwait has diminished, the historic flow to that country has prevailed and expressed among households in this survey.

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<sup>16</sup> According to the Bureau, in 2009 there were 475,278 Bangladeshi workers overseas, 80% of which were in the Middle East countries.

**Table 5: Income and remittances by sending country**

Country of Destination	Local household income	Remittances	Combined income	% Dependency on remittances
Kuwait	79,678	115,840	195,518	59%
Saudi Arabia	57,323	109,567	166,891	66%
UAE	57,933	92,554	150,488	62%
Malaysia	60,390	75,323	135,713	56%

Source: IOM. 2009 Survey.

*a) Determinants of remittance dependence*

The variables highlighted above are important indicators suggesting a relationship with remittances. That is, they may have a role in explaining their purposes of remitting and in turn the level of remittance dependence. Remittance dependence is measured as a share of total income in a household within a year.

A household exclusively dependent on remittances (or on a single source of income), may be one where an immigrant relies on foreign work to take care of the household at home, but it may make the family vulnerable to external shocks related to sudden reduction in demand for foreign labour. Therefore, it is important to analyze what factors explain any variation in the level of dependency on remittances and consider policies that can focus on mitigating dependence, such as asset building. This dependency is not substantively large, and as mentioned above, it is consistent with other societies. However, there is a group, twenty five percent of people, whose remittance dependency is 90 percent.

Using the variables available in the survey, we try to analyze what factors may explain remittance dependence. The model below was identified as an approach of what makes remittance dependence, and includes demographic features, household characteristics and other earnings and assets. An OLS regression is used employing the ratio of remittances to income as the dependent variable.

According to the regression model, we find that migrant characteristics like age, education, and number of children are statistically significant in explaining variation in remittance dependence. The older an immigrant the higher the dependency of his household is on remittances received. Education has a negative impact on dependency, with one extra level of educational attainment reduced dependency by 2.3 per cent. This finding shows that less educated migrants originate from poorer households and the money sent makes up the larger share of the total household income earned in that household than in richer homes. The same applies to migrant's remuneration. The number of children in the household was a variable used as a proxy for a household size and came out to be highly significant in explaining a variation in dependence ratio. Every additional child increases dependency ratio by one per cent.

Total income of the household came out to be highly significant and negatively affecting remittance dependence. One per cent increase in total income leads to 51% drop in dependency ratio, thus confirming that the lower income families are more reliant on remittances from abroad. Higher dependence is also associated with higher amount remitted at a time; however, the causality apparently is reverse: each additional five percentage rise in dependence ratio leads to increase in amount of

remittances received by nearly 2 per cent. The model also shows that assets, such as account ownership, are not statistically significant; pointing to the importance of considering asset building strategies to reduce or manage dependence (see results in the Appendix).

#### *b) Remittance recipients and assets*

As mentioned in the introduction, the relationship between remittances and development often lies at the intersection with finance and asset building. Studies on poverty have looked at the ways in which the poor manages to move out of poverty by building assets while coping with their vulnerable situation. Moser's definition and analysis of asset accumulation as a differentiated practice from livelihood strategies and social protection is an important consideration when thinking about the ways in which a "a stock of financial, human, natural or social resources that can be acquired, developed, improved and transferred across generations" (Ford 2004, as cited by Moser 2006) enables people to have a better quality of life. Asset accumulation is directly intertwined with financial access.<sup>17</sup> Finance and access to financial resources are cornerstone components of material asset accumulation. Together they provide the means with which to strengthen or enhance a person's and/or society's material base, specifically by mobilizing existent assets in order to generate new resources and wealth, including education, health, real state, and business. Overall, a strong financial basis provides opportunities to build wealth, and thus promote development.

An adequate stock of capital hence ensures the positive capital output ratio necessary to generate additional wealth. Our research on remittance transfers shows the existence of an organic relationship between remittances and finances. Four important findings are identified: first, financial institutions, particularly in countries that are remittance dependent, rely heavily on incoming transfers as part of their revenue base. Second, when comparing remittance recipients to the population, this earlier group tends to save more, have higher savings and own more bank accounts relative to their total cohorts. Third, remittances emerge as a statistical determinant of savings and bank account ownership. Fourth, the level of supply of financial services among banking and other depository institutions is relatively low vis a vis the demand and use of financial activities, partly explaining why people keep their savings informally.

Remittance recipients have a higher propensity to own bank accounts or save than non-recipients, a situation partly resulting from the fact that **remittances increase the amount of disposable income available to households**.<sup>18</sup> For example, in Latin America, remittance recipients tend to own more bank accounts than non recipients (see Figure 1). Moreover, at least fifty percent of people who receive remittances save, and depending on the country, their stock of accumulated savings resulting from the inflow of migrant remittances amounts to at least US \$1,000.

Remittance flows fulfill the function of contributing to building assets, both liquid and fixed. More importantly, this pattern is not exclusive of urban households, but also occurs in rural communities worldwide. Take the case of Africa (Table 6), for example, where remittance recipients in rural Africa

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<sup>17</sup> Assets are defined as stocks of human and material resources that contribute to wealth creation. Assets are fixed (such as property) and liquid (cash)

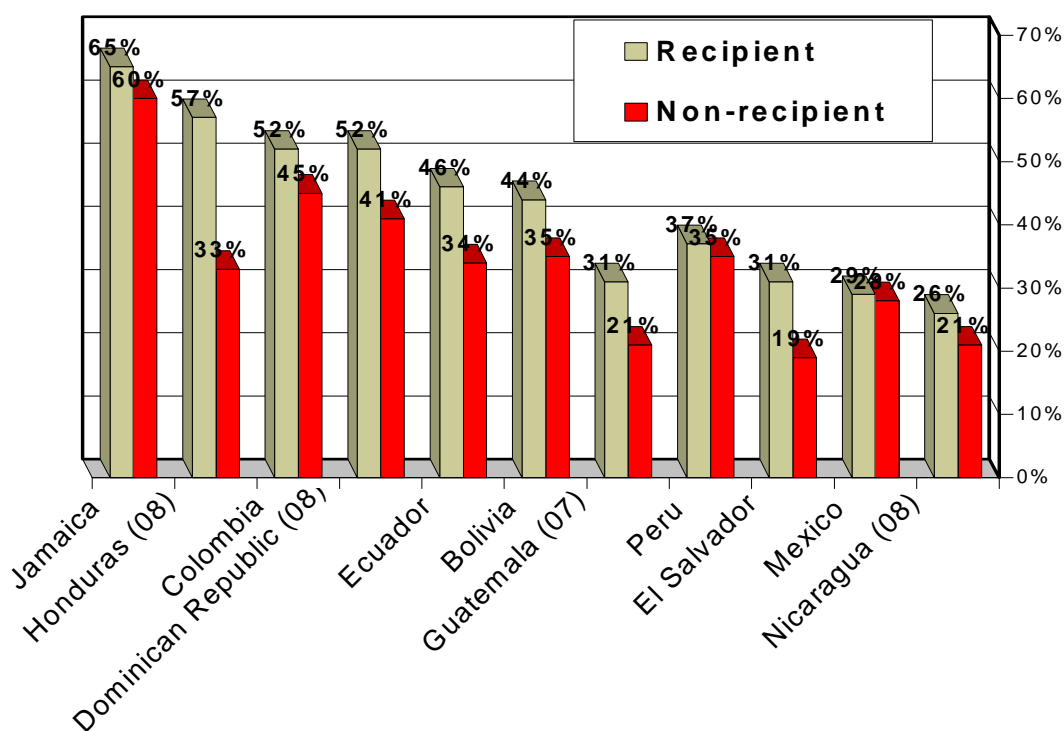
<sup>18</sup> For a review of empirical research on remittances and financial access visit: [www.thedialogue.org/page.cfm?pageID=80](http://www.thedialogue.org/page.cfm?pageID=80)

exhibit a higher savings ratio than non recipients. On average, they save nearly twice as much as non-recipients. A similar reality is found in Latin America and the Caribbean, Central Asia and the Caucasus and other Asian countries like Philippines, Indonesia, or Bangladesh.

Table 6 : Ratio of remittance recipients and non recipients of stock of savings

	Ratio
Nigeria	3.2
Zambia	2.4
Kenya	2.1
Ethiopia	2.1
Senegal	2.0
Zimbabwe	1.9
Tanzania	1.9
Benin	1.8
Somalia	1.8
Cameroon	1.7
Uganda	1.5
Egypt	1.2
Chad	1.2
Burundi	1.1
Morocco	1.0
Burkina Faso	1.0
Rwanda	0.9
Somaliland	0.9

Figure 5: Latin America: People with bank accounts among recipients and non recipients of remittances



Source: Orozco, Manuel. Sending Money Home, 2009. IFAD.

Although this is part of a global pattern, one major challenge is that most of these savings are informal. In Latin America, for example, the percent of remittance recipients who save and have their savings in a savings deposit account is less than 20%.

Table 7: Most saving practices among remittance recipients are informal (%)

	Cuba	D.R.	Nic.	Hon.
<b>Average amount saved (US\$)</b>	500	1,400	900	1,300
<b>Cash investment in a business</b>	34	17	15	13
<b>Medical insurance</b>	0	13	0	6
<b>Savings account in bank, MFI, cooperative</b>	12	15	18	16
<b>Mutual fund</b>	0	1	30	6
<b>Purchase of goods (house, car)</b>	28	3	2	4
<b>Purchase of animals</b>	6	0	2	2

Source: household surveys carried out by the author in each country in 2008.

From a policy standpoint is important to ensure that assets can be formed, maintained, strengthened and multiplied.

*Remittances and assets in the Bangladesh context*

The survey data in Bangladesh shows findings that confirm these issues and reinforce the importance of strengthening these links to expand the development impact.

Bangladeshi families use a portion of their income to purchase or invest in assets. Families that receive remittances are much more likely than non-recipient households to own assets in every category included in the survey. However, the number of assets owned is relatively small. On average, remittance recipients reported using their income to purchase or invest in nearly two assets (1.87).<sup>19</sup> The most common investments are buying land, building a house, and making home improvements, with over 20 percent of remittance recipients investing in these assets. A migrant's gender is related to the number of assets their family back home has purchased; families who receive remittances from male migrants have invested in 1.88 assets, whereas those who receive from female migrants have invested in just 1.53 assets. This situation is not unique to Bangladesh: remittances by virtue of increasing income and savings do have an effect in helping to build assets, but the pattern is more prevalent among men than women. As a policy matter, this is a key issue because the majority of recipients are women who either are heads of households or are among the primary care taker of the house.

**Table 8: Asset purchases by gender**

	Remittance-sending migrants		Non-remitting migrants	
	Male	Female	Male	Female
Buy land	22%	10%	4%	7%
Build house	26%	17%	5%	0%
Buy house	2%	1%	1%	0%
Improve house/apt	22%	13%	4%	0%
Buy/start/expand business	6%	8%	2%	0%
Pay off loans	72%	71%	10%	7%
Buy animals/livestock	8%	8%	1%	0%
Buy agricultural equipment	4%	4%	1%	0%
Buy a means of transportation	5%	8%	1%	0%
Send another family member abroad	11%	9%	4%	0%
Other investment	9%	6%	2%	0%

Source: IOM. 2009 survey; Note: paying off loans is not an asset in itself, but was included as one financial activity that can indirectly contribute to build assets.

<sup>19</sup> An index count of asset ownership was created to identify the number of assets own by households.

**Table 9: Remittance recipient household asset ownership by migrants' education level**

Education level	Mean number of assets
No schooling	1.84
Class I-IV	1.90
Class V	1.86
Class VI-IX	1.84
SSC	1.95
HSC	1.86
Graduate	2.00
Masters	1.75
Other professional	1.84
Others	1.57

Remittance recipients with a higher total income are more likely to invest in assets. The average total income of remittance-receiving families (income from local sources plus remittances) is US \$ 2,455, but those who have purchased assets have a much higher income. For example, those who built a house have combined annual income of US\$3,200, those who bought land have US\$3,446, and those who bought a house have US\$4,279.

**Table 10: Income and remittance dependency by assets purchased (US\$ per year)**

	Local income	Remittances	Combined income	Remittance dependency	Assets purchased
Buy land	\$1,134	\$2,312	\$3,446	67%	3.47
Build house	\$1,069	\$2,132	\$3,200	67%	3.3
Buy house	\$1,437	\$2,842	\$4,279	66%	3.87
Improve house/apt	\$1,001	\$1,869	\$2,870	65%	3.23
Buy/start/expand business	\$2,011	\$2,454	\$4,465	55%	3.44
Pay off loans	\$801	\$1,510	\$2,311	65%	2.16
Buy animals/livestock	\$979	\$1,738	\$2,718	64%	3.65
Buy agricultural equipment	\$1,418	\$2,056	\$3,474	59%	4.09
Buy a means of transportation	\$1,417	\$2,404	\$3,821	63%	4.12
Send another family member abroad	\$1,131	\$2,568	\$3,699	69%	3.75
Other investment	\$941	\$2,065	\$3,006	69%	3.69

Migrant remittances predominantly fulfill the role of guaranteeing consumption needs, but through the transfers of money and the effect they have in increasing income in the household, organically create the conditions to build assets, particularly over time, first through savings and second by acquiring assets or investing in them. Therefore, it is important to know the migrant and household characteristics which lead to higher asset building level. Using the share of remittances-based spending in total spending on asset purchase as the dependent variable an OLS regression is run.

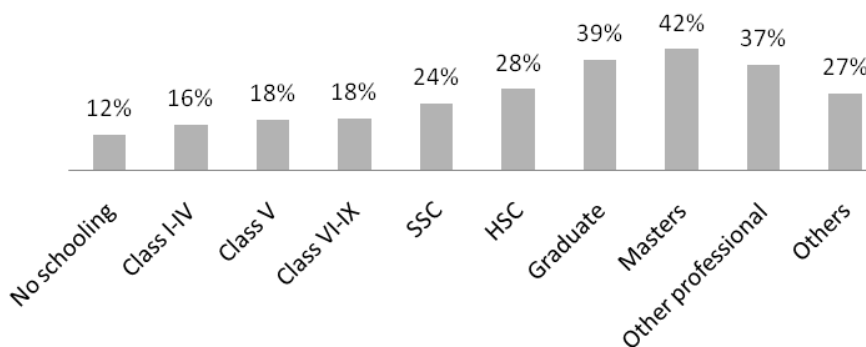
Education contributes to accumulation of assets as well as total household income and amount remitted. However, household size is negatively associated with asset building, confirming that the larger the household, the higher the consumption needs in it, thus reducing the chances to build assets. The same is true for remittance dependency ratio, which is in a way can be a proxy for poverty level and together with household income suggest that the higher level of poverty diminishes the ability of a family to accumulate wealth. Account ownership is positively associated with asset building. Those migrants who own a bank account have 14 per cent higher share of remittances in total asset spending than those who do not. Loan ownership does not decrease an ability of the household to build assets. The most likely explanation is that the typical loan owned is that to pay off the debt to migrate for work.

*c) Immigrants and bank account ownership*

An immigrant bank account ownership is also a key factor that offers clues about the long term self-sustainability of a person as productive years decrease over time. The survey results show that a small percentage of migrants have bank accounts (20%) but the majority of such accounts are savings accounts. The average age for those immigrants that have bank accounts is 36 years old. An older migrant is more aware of the banking benefits and facilities for themselves as well as their families. Moreover, those who are older are more likely to own an account than those who are younger.

Although the large majority (90%) of Bangladeshi migrants interviewed have had some type of schooling, when comparing education to bank account ownership, the survey shows that ownership increases with higher level of education.

**Figure 6: Level of education and bank account ownership**



*Determinants of immigrant bank account ownership.* Bank account ownership can lead to many positive implications for a migrant including relative ease in starting up of a new business, getting loans for financing large purchases, sending money through formal methods, meaning safety and speed of

transactions.<sup>20</sup> Therefore, it is important to understand the factors explaining why some migrants have bank accounts while others don't.

A regression model explored the possible relationships with account ownership. The regression illustrates that migrant specific characteristics such as age and education are significant in defining migrant's bank account ownership in his home country. The probability of having account increases with age but decreases at much later age. Education is clearly an important explanatory variable. Research shows that opening and maintaining a bank account requires financial literacy, that is, an advanced level of reading and writing skills, as well as knowledge of basic mathematics.<sup>21</sup> From the model, it can be concluded that every next acquired level of education will lead to increase in account ownership probability by a factor of 1.35. Another variable is additional time spent abroad. Every other year spent abroad increases the probability of owning an account by a factor of 1.026.<sup>22</sup>

Another determinant variable of account ownership is the amount of remuneration received by the migrant. Salary is positively associated with bank account ownership. Such statistic is consistent with research in other regions that shows similar results: with higher salary, bank account ownership increases.<sup>23</sup> The same positive relationship can be observed in case of remittances transferred. The migration method is positively associated with possessing an account suggesting that people who prefer to migrate using official channels are more likely to have an account. This number may indicate that that recruiting agencies recommend migrants to open bank accounts for the ease of transactions (See Appendix).

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<sup>20</sup> Orozco, Manuel et al. "Transnational Engagement, Remittances and Their Relationship to Development in Latin America and the Caribbean." Institute for the Study of International Migration, Georgetown University, July 2005.

<sup>21</sup> Orozco, Manuel. "Planting the seeds of financial inclusion: financial literacy for remittance recipients in Moldova." Budapest: Interational Labour Organisation, June 2008.

<sup>22</sup> It is important to highlight that the number of years abroad may not necessarily mean that such immigrant has been living abroad for that long, but that he is a seasonal migrant who migrates every year since the year he reported.

<sup>23</sup> Orozco, Manuel and Nancy Castillo. "Latino migrants: A profile on remittances, finances, and health." Washington, DC: Inter-American Dialogue, April 2008.

### 3. Policy recommendations and considerations for policy intervention

The findings resulting from this study show a dependency in receiving remittances typical of most societies with migrant populations, but with significant limitation in owning assets.<sup>24</sup> Although migrant families may hold bank accounts, their savings are limited and actual asset ownership is limited to less than two assets. This situation is compounded when a migrant's income becomes the main source of earning. The lack of asset ownership and dependence on migration as a source of income has implications on poverty reduction and economic independence.

Solutions to these situations deal with mechanisms that can mitigate dependence through sustainable asset building strategies. Lessons learned in development policy fields and research show that increasing financial access to migrants and recipients of remittances is a key area of policy of intervention.<sup>25</sup> Three immediate areas of attention that can mitigate poor asset building and strengthen economic independence are: i) support to microfinance institutions to participate in the money transfer market, ii) design financial products that meet the demands of migrants and recipients, and iii) provide financial advice as a means to increase financial access. Below we review these initiatives and the implications for Bangladesh.

#### *a) Policy approaches to the Bangladesh context*

Looking at the context emerging from the data, we find some key issues. Three proposed solutions that can deliver short term successful results include: liberalization of the payment markets, financial product design, and financial literacy. Those recommendations are reviewed below, and attention is paid in particular to the strategy on financial education.

##### *i) Market competition on the inbound*

Although the money transfer market is predominantly controlled by banking financial institutions, the reality of migration in rural areas of Bangladesh highlights the importance of allowing microfinance institutions in paying money transfers. Enabling these institutions to do so, will contribute to expand payments in rural areas in closer proximity. The size of major MFIs in Bangladesh is at least three times that of the largest banks in the country. Moreover, these institutions could expand their financial services to recipient households. INAFI Bangladesh, for example, has implemented several projects providing financial services to remittance recipient households.<sup>26</sup> This recommendation is not new as other studies have suggested the importance of doing so.<sup>27</sup> The critical issue is to accompany the regulatory reform with technical assistance to enable these institutions to be competitive to be in the market.<sup>28</sup>

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<sup>24</sup> Fieldwork in other countries shows that typically 60% of remittance recipient households have a stock of savings over US\$1,000 and own a more diversified set of assets.

<sup>25</sup> Orozco, Manuel. "Migrant Foreign Savings and Asset Accumulation." *Reducing Global Poverty: The Case for Asset Accumulation*, Edited by Caroline O.N. Moser. Washington, DC: Brookings, 2007.

<sup>26</sup> Rasheed Al Hasan, *Harnessing Remittances for Economic Development of Bangladesh*, INAFI Bangladesh Working Paper Series, No. 1. See also *Institutional Support for Productive Utilisation of Migrant Workers Remittances*, 2009.

<sup>27</sup> Buchenau, Juan. *Migration, Remittances and Poverty Alleviation in Bangladesh: Report and Proposal*, UNDP, 2008.

<sup>28</sup> Orozco, Manuel. See MFIs study 2008. Orozco, Manuel. "Remittances and Microfinance in Latin America and the Caribbean: Steps Forward on a Long Road Ahead." *microReport #118*. Washington, DC: United States Agency for International Development, September 2008.

*ii) Asset building possibilities for recipients and migrants: technical assistance on product design*

Bangladesh's experience with migration extends beyond issues of labour mobility agreements. Its government also has designed a range of financial incentives on migrants to invest in the home country (examples include the U.S. Premium Dollar Bond and the Non-Resident Foreign Currency Deposit). However, as the results showed, migrant account ownership is significantly low and asset ownership is significantly limited. There is no evidence yet suggesting that these financial instruments are being systematically acquired by migrants.

Part of the reason may be that the performance of government and banking institutions on providing financial tools in Bangladesh continues to be limited. Missing technical assistance to microfinance institutions to offer financial products to migrants and recipients may also be associated to this issue. Poor financial product design that caters to recipients is another explanatory factor.

Therefore, technical assistance is important means to identify the range of financial products people need, the venues by which people can access them, and the marketing tool needed to reach out to this population.

International development institutions have successfully funded financial institutions to cater to remittance recipients and migrants in order to bring their resources into the financial system. Some efforts have been made in Bangladesh, and continuing such initiatives while improving results is of significant importance. However, initiatives need to be realistic rather than ambitious. Introducing sophisticated financial instruments into a society whose experience and exposure, as well as capacity is limited, will unlikely bring positive results. Adopting conventional and basic financial instruments such as affordable saving or microinsurance has proven to be more successful than the use of far more advance financial commodities.

*iii) A strategic approach to asset building through financial education.*

Education and financial literacy in particular, is also another important factor determining asset building. The survey results showed that account ownership, assets, and remittances increased with the level of education. More importantly, experiences elsewhere show increasing asset building through financial access by resorting to financial literacy. Here successful strategy on financial advising can be recommended that combines formation, information and conversion based on the experience of the Inter-American Dialogue working in several countries worldwide.

Table 11: Education and bank account ownership, assets and remittances

	Bank account			
	Migrant	Recipient	Assets	Remittances
<b>No education</b>	12.3%	77.5%	1.7	78113
<b>Class I – IX</b>	17.6%	80.3%	1.75	90851
<b>HSC - SSC</b>	25.2%	88.1%	1.8	116795
<b>Formal education</b>	39.6%	93.1%	1.82	156428

Source: IOM. 2009 Survey.

The lack of financial education is common worldwide, and results in limited decision making capabilities, such as the preference to invest the sum of one's savings into a property instead of searching for financing and continuing to capitalize on one's savings. The economic crisis that currently affects the global economy has affected migrants and their ability to remit as well as remittance recipients and their ability to save. Giving them the tools to manage their money, motivating them to protect their savings to extend their durability and identify the ways to deal with their debt is a critical strategy of business and development.

In prior work, it was observed firsthand the demands and preferences of financing investments by both remittance senders and recipients. For example, migrants or their families can have an interest in investing, but their demand for financing is limited, partly for lack of experience in the management of their finances.<sup>29</sup> The most common practice is to set money aside but keep at home (to put cash "*under their pillow*"), instead of depositing it in a financial institution. That level of response is indicative of the personal experience and circumstances that reflect both their lack of access to the formal financial system and their lack of financial literacy.

However, even those who have access to the system do not appropriately appreciate the importance of financing an investment through the banking system. This situation has been observed in times of recession when many homes have used their savings to substitute falling income in order to continue remitting. The lack of value is a symptom both of the lack of understanding of existing options and of financial literacy. Its implications directly and indirectly reduce the financial market of investment both in supply and demand.

Financial education is generally a way to teach concepts whose use has been limited. The financial education programs generally promoted by industrialized countries have led to good results in improving financial access and helping people realize their economic independence,<sup>30</sup> but few have focused on the education of migrants and remittance recipients to expand their knowledge of financial instruments. However, the few experiences that exist in offering financial education to recipients and remitters on savings and investment have been successful and beneficial both for both parties.

In particular, they promote the method of financial education that is directly linked to financial services. This has been a successful strategy and its implementation has been carried out in other countries as well.

One successful strategy has been carried out in the Caucasus, Latin America and the United States. The strategy consists of education and counseling with a focus on the remittance recipient who has a relative abroad. The counseling is carried out with financial institutions that offer useful products for recipients like savings accounts and credit options. The result is the conversion from remittance client to bank client through the cross sales of financial products. The programme model utilizes a one-on-one education format in participating financial institution branches and consists of three parts: 1) the counseling, education, or training of the adequate use of budgeting, saving, credit, and insurance; 2) presentation of financial products that the institution offers; and 3) the extension of those services and products through direct contact with the institutional staff. This method dedicates approximately 30 minutes to the client.

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<sup>29</sup> Orozco, Manuel. "Asegurando futuros: el interés de inversión y estrategia de comercialización para los salvadoreños en el exterior" May 7, 2009.

<sup>30</sup> See the experience in Ireland, the United State or Canada, among others, and the experience reported by IADI, International Association of Deposit Insurers.

The model implicitly includes the sales of financial products of interest while an educator or financial promoter offers a client basic information about finances. In previous projects we have identified that remittance clients, migrants or recipients, express a desire for financial counseling. In interviews, people of all socioeconomic background express the importance of first having a good orientation and explanation of products and how to obtain them. Similarly, financial education in the format of counseling helps the remittance recipient understand the benefits of maintaining a balance between his income and expenses and valuing a) financing for their family member abroad and b) their own financing at home (sometimes with indirect help from their relative abroad).

The results of this model show that about 20% of those educated also take on a financial activity with the participating entity. For example, in 2008, a pilot project was undertaken in Moldova for six months with the collaboration of the International Organization for Migration and four banks. Of the 7,000 recipients that were educated, 80% expressed interest in obtaining financial services. Additionally, the evaluation form showed a correlation between those who obtained a savings account and having knowledge of financial topics.<sup>31</sup>

Another example is seen in the FEDECACES project in which the institution provides credit to improve housing for remittance recipients in El Salvador. The institution gives seminars on financial education to promote the product. The seminars are breakfasts or cooperative coffee events and are more attractive than simply giving a pamphlet to a recipient to take home. The clients that receive education invite other clients to participate. Additionally, other financial institutions are learning that it is necessary to take an intermediate step between the demands for products and having all the knowledge and the will to take on the subject; and that step could be financial education.

#### *Financial literacy in Bangladesh: a public private partnership strategy*

The government of Bangladesh has established a number of institutional mechanisms to deal with migrant workers through the Ministry of Expatriates' Welfare and Overseas Employment (MoEWOE), and the Bureau of Manpower Employment and Training (BMET). Moreover, the banking system taps into millions of monthly transactions, which predominantly reflect an ongoing engagement between sender and remittance recipient clients. A partnership between the government and banking sector can leverage on existing resources and institutions in order to implement a nationwide financial literacy training that can add value to current training efforts, and strengthen the existing financial products provided by the government. Because the BMET provides training to workers in more than thirty disciplines and orientation seminars, including a substantive component on financial education would enhance the mobilization of migrant savings. Moreover, expanding the financial education in partnership with banks paying remittances adopting a strategy such as that explained above, would increase financial access to those receiving remittances.

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<sup>31</sup> Orozco, Manuel. Planting the seeds of Financial inclusion: financial literacy for remittance recipients in Moldova, ILO, 2008.

### ***The case of Georgia.***

Through a project funded by the European Bank for Reconstruction and Development, the IAD trained 33 financial educators who during a six month period provided financial advising to nearly 19,000 remittance recipients. Over 3,000 people were converted into bank clients over the course of six months who opened deposit accounts averaging US\$500 each. Like in other remittance recipient countries, 64 percent of people receiving remittances were women and averaged 38 years of age. Prior to the financial advising 42% had no financial products. Although 37% had a checking account, only 7% owned a savings account. Most people with checking accounts used mostly to withdraw a remittance transfer as a means to cash the transaction. The majority of reasons why they didn't have an account was because they didn't know (40%) or have not asked or tried to ask (33%). Through the sessions, 71% said they did not budget at all, though those who already had a bank account, were more likely to have some form of budgeting. Despite that these people did not budget, 62% of them were saving money.

Upon receiving financial literacy, clients recognized the benefits of the exercise as a realistic and practical mechanism to improve their finances and achieve financial independence. Nearly half of people said they would create a budget that include savings, 36% said they would open a savings account, whereas 13% opened deposits right after the financial advising. In addition, during the six month course an additional 10% of clients opened accounts and bringing an estimated US \$ 10 million in deposits within that period.

**Table 12: Behavior change among people receiving financial advising in the Republic of Georgia, 2010.**

	<b>Percent of clients</b>
Use the saving methods taught during the session	53.5
Investigate their options	56.6
Create a budget	45.2
Create a budget that includes savings	39.7
Look through the pamphlet	41.7
<b>Will open a checking account</b>	<b>22.4</b>
<b>Will open a savings account</b>	<b>36.0</b>
<b>Immediately opened an account</b>	<b>13.0</b>
No change	5.4

Source: Orozco, Manuel. Financial literacy project in Georgia.

## Appendix – Regression models and statistical determinants

### A. Determinants of use of formal channels

A logit regression model is used to estimate a relationship between using formal channel of sending/receiving money and its determinants:

$$\text{Formal channel} = a_1 + b_1(\text{Age}) + b_2(\text{Education}) + b_3(\text{Frequency}) + b_4 \ln(\text{Earnings}) + b_5 \ln(\text{Remittances}) + b_7(\text{Migration method}) + e$$

Variables:

Age: emigrants' age;

Frequency: number of times people send money;

Remuneration: income earned by migrants;

Remittances: amount sent;

Migration method: method by which the person emigrated (through contract or on his own)

**Table 1. Parameter estimates for sending by formal channel from the logistic regression.**

Parameter	Maximum Likelihood Estimates	Odds Ratio Estimates
Age of migrant	-0.00706; (0.0890)	0.993
age2	0.000236 (0.5126)	1.000
Education	0.3858; (49.7942)***	1.471***
Frequency sent	-0.00317; (0.6434)	0.997
Amount remitted	0.2840; (31.9927)***	1.328***
Earnings	-0.2323; (13.6268)***	0.793***
Formal migrating method	0.3050; (9.1478)***	1.357****
Constant	-2.1477***	
Likelihood Ratio Chi-Square	264.1335***	

**Notes:** Wald Chi-Square values are reported in brackets; \*\*\* denotes statistical significance at the 1 percent level, \*\* at the 5 percent level, \* at the 10 percent level

*B. Determinants of remittance dependence*

An OLS regression is applied using the ratio of remittances to income as the dependent variable.

$$\begin{aligned}
 & \text{Remittance dependence (annual remittances / annual income)} = a_1 \\
 & + b_1 * \text{Migrant characteristics (age, education, marital status, children, employment, skilled worker)} \\
 & + b_2 * \text{household characteristics (household total income)} \\
 & + b_3 * \text{Remittance (salary, account ownership, remittances)} + e
 \end{aligned}$$

**Table 2: Parameter estimates income dependence on remittances.**

Variable	OLS Estimate
Age	0.02253; (9.27)***
age2	-0.0002539; (-8.57)***
Educ	-0.02343; (-5.29)***
married	0.20557; (-0.98)
children	0.01355; (5.74)***
working	0.00602; -0.31
Skilled	-0.008; (-1.28)
ltotal_income	-0.50752; (-51.74)***
Lsalary	-0.01406; (-3.56)***
Saving_acc	0.01001; -1.45
lsavings	-0.00259; (-0.78)
lamt_remit_single	0.02699; (6.76)***
Constant	0.93539; -4.25
R-Square	0.3841
Number of Observations	5445
F-Statistic	260.56

**Notes:** T-statistics are reported in brackets; \*\*\* denotes statistical significance at the 1 percent level, \*\* at the 5 percent level, \* at the 10 percent level using two-tailed tests.

C. *Determinants of remittance spending on assets*

Using the share of remittances-based spending in total spending on asset purchase as the dependent variable an OLS regression is run.

*Asset building = a1*

*+ b1\*Migrant characteristics (age, education, marital status, children, employment, skilled worker, account ownership)*

*+b2\*household characteristics (household total income, loan ownership)*

*+ b3\*Remittance (remittances, dependency ratio) + e*

**Table 3. Parameter estimates for Asset Building using linear regression.**

Variable	OLS Estimate
Age	-0.01725; (-1.27)
age2	0.0004096; -2.5
Education	0.07658; (3.15)***
Number of children in household	-0.04; (-3.01)***
Skilled migrant	-0.00457; (-0.13)
Remit_dependency	-0.44777; (-7.35)***
Amount remitted	0.32108; (25.50)***
Total_income	0.42884; (20.95)***
Account ownership	0.14293; (3.77)***
Loan ownership	0.01509; -0.43
Constant	3.65874; (9.80)***
R-Square	0.3254
Number of Observations	5340
F-Statistic	234.16***

**Notes:** T-statistics are reported in brackets; \*\*\* denotes statistical significance at the 1 percent level, \*\* at the 5 percent level, \* at the 10 percent level using two-tailed tests.

*D. Determinants of account ownership*

The following OLS regression model was run to explain which migrant specific characteristics can lead to account ownership.

$$\begin{aligned}
 \text{Account Ownership} = & a1 \\
 & + b1*(\text{Age}) \\
 & + b2*(\text{Education}) \\
 & + b3*(\text{Time}) \\
 & + b4*\ln(\text{Remuneration}) + \\
 & b5*\ln(\text{Remittances}) \\
 & + b6*\ln(\text{household Income}) \\
 & + b7*(\text{Migration method}) + e
 \end{aligned}$$

**Table 14: Estimation results for account ownership using logistic regression.**

Parameter	Maximum Likelihood Estimates	Odds Ratio Estimates
age	0.2369; (114.2452)***	1.267***
agesq	-0.00270; (86.8717)***	0.997***
educ	0.2980; (51.4849)***	1.347***
time	0.00256; (6.7677)***	1.003***
timesq	-1.6E-6; (0.3733)	1.000
lsalary	0.3304; (42.7751)***	1.391***
ltotal_income	0.0909; (5.3666)**	1.095***
lamt_remit	0.0871; (8.1786)***	1.091***
leav_formal	0.1733; (5.3811)**	1.189**
Constant	-12.1200; (315.3323)***	
Likelihood Ratio Chi-Square	821.3873***	

**Notes:** Wald Chi-Square values are reported in brackets; \*\*\* denotes statistical significance at the 1 percent level, \*\* at the 5 percent level, \* at the 10 percent level