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### WIDER

World Institute for Development Economics Research

# Discussion Paper No. 2003/89

## **Remittances by Emigrants**

### Issues and Evidence

## Andrés Solimano \*

December 2003

### Abstract

Remittances, after foreign direct investment, are currently the most important source of external finance to developing countries. Remittances surpass foreign aid, and tend to be more stable than such volatile capital flows as portfolio investment and international bank credit. Remittances are also an international redistribution from low-income migrants to their families in the home country.

Worldwide, remittances are relatively concentrated in a group of developing countries: the top 20 recipient-countries of workers' remittances capture around 80 per cent of total remittances by workers to the developing countries. The three main source countries of remittances are the US, Saudi Arabia and Germany, while in terms of value, the three main recipient countries are India, Mexico and the Philippines.

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Keywords: remittances, capital flows, development finance

JEL classification: J30, G15, F22

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The international market for remittances is segmented and costly for migrants, as money transmitter operators charge high fees and use overvalued exchange rates. Commercial banks in both source and recipient countries account for only a small share of the global remittances market.

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Figures and tables are given at the end of the study.

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### 1 Introduction

Remittances from migrants are a growing and relatively stable, market-based external source of development finance. Remittances bring foreign exchange, are a complement for national savings, and provide a source of finance for capital formation (mainly small-scale projects). Through these mechanisms, remittances can support economic growth in recipient countries. As remittances depend on the flows of people that are often less volatile than capital flows, remittances are expected to be more stable than such capital flows as portfolio investment and international bank credit. Remittances are also an international redistribution from low-income migrants to their families in the home country. These transfers act as the international mechanism of social protection based on private transfers. The sustainability of remittances over time depends on various factors such as migration pressures in the sending countries and the evolution of migration policies in advanced economies.

Currently, remittances—after foreign direct investment—are the most important source of external finance for developing countries, and they surpass foreign aid. Remittances are relatively concentrated in a group of developing countries: the top 20 countries receiving worker remittances capture around 80 per cent of the total worker remittances to the developing world. In terms of value, the three main recipient countries are India, Mexico and the Philippines, while the three main source countries are the US, Saudi Arabia and Germany. The concentration of remittances in a group of recipient countries dampens somewhat the reach of remittances to the developing world, although it is worth noting that the main recipients are the large, low-to-middle-income developing countries.

The international market for remittances is segmented and inefficient, as reflected by the high costs of intermediation. Money transmitter operators dominating the market charge high fees and use overvalued exchange rates. Commercial banks in both the source and recipient countries have a low share of the global remittances market. But empirical evidence shows that the costs of remittances are lower when sent through banks than through money transfer operators.

There is, however, room for leveraging a greater value for remittances if international money transfers were conducted at lower costs. The amount of remittances is below the socially optimal level required for a more competitive cost structure in the market for remittances. The development potential of remittances is thus diminished under current market realities.

The paper is organized in seven sections in addition to the introduction. Section 2 discusses global and regional trends in remittance flows and their growing importance as a source of external transfers to developing countries. Section 3 examines measurement issues and discusses the main micro-motives for remittances and their implications for stability across cycles, while section 4 analyses the development impact of remittances (effects on savings, investment, growth, poverty, income distribution). Section 5 overviews the international market for remittances and provides evidence on the costs of sending remittances to various country groups. Section 6 highlights the policies for cutting the costs of sending remittances and thus enhancing their development impact. Section 7 concludes.

#### 2 Global and regional trends in remittance flows

In a world of volatile capital flows, remittances<sup>1</sup> are a stabilizing component of external resources transfers to the developing world. Remittances are the financial counterpart of the outflow of people, which has been growing in the last two decades in response to expanding opportunities in advanced economies compared to developing countries. Remittances to the developing world have increased steadily from around US\$15 billion in 1980 to 80 billion in 2002. This represents an annual rate of increase of 7.7 per cent (see Table 1). At the regional level, the highest rate of increase in the flow of remittances is to Latin American and the Caribbean with 12.4 per cent per annum, followed by East Asia and the Pacific with 11 per cent per year. The lowest annual growth rate in remittances is to Sub-Saharan Africa (SSA) with 5.2 per cent. As shown in Table 1, in 2002 Latin America and the Caribbean has the highest level of remittances, totalling US\$25 billion, followed by South Asia with US\$16 billion and the Middle East and North Africa (MENA) with US\$14 billion. SSA has the lowest level of remittances, US\$4 billion.

In terms of the distribution of remittances by levels of per capita income, the developing-country group received 65 per cent of world remittances. In turn, the lower-middle income and low-income groups received a higher proportion than the upper middle-income countries (Table 2).

In 2002, worker remittances for the developing-country group represented on average 1.3 per cent of GDP, 55.9 per cent of FDI (foreign direct investment) flows and nearly 140 per cent of the aid flows (Table 3). These coefficients vary from region to region. The share of worker remittances in GDP (gross domestic product) is the highest in the MENA region (3 per cent in 2002) and the lowest in East Asia and Pacific region (0.7 per cent). Remittances as a proportion of FDI are the highest in the MENA region (466.7 per cent in 2002) and the lowest in East Asia and Pacific (19.3 per cent). In turn, the share of remittances in foreign aid is the lowest in SSA, reflecting both lower remittances and high aid flows to this region.

In terms of total resource flows, remittances<sup>2</sup> are the second largest component of external resource flows to developing countries after FDI (Table 4 and Figure 1). Remittances have been larger than aid flows as a source of external development finance since 1997. In 2001, foreign aid represented 18 per cent of total external finance flows while remittances were 25 per cent. Interestingly, as mentioned earlier, remittances are much more stable than other capital flows, mainly bank credit and portfolio investment, identified as the volatile components of external resource flows. The quantitative importance of these components of private capital flows is still significant (nearly 30 per cent, on average, of total resource flows to developing countries between 1991 and 2000), and these components are an important source of macroeconomic volatility. Often private capital flows do *lead* the macroeconomic cycles. In contrast, remittances can be even counter-cyclical, as emigrants send money home during bad times to provide income support.

<sup>1</sup> Remittances are defined as the sum of workers remittances and compensation of employees.

<sup>&</sup>lt;sup>2</sup> Remittances here are calculated as the sum of 'workers remittances' and 'compensations of employees'.

At the individual country level, remittances are relatively concentrated in the group of 20 developing countries that capture around 80 per cent of total remittances to the developing world (Figure 2). In 2001 the main recipient of worker remittances was India, receiving an annual flow of US\$10 billion, followed by Mexico with 9.9 billion and the Philippines with 6.4 billion. At the lower end of this group of 20 developing-country recipients of worker remittances are Thailand, China and Sri Lanka. The country ranking, however, changes when remittances are measured as shares of GDP, while the top three economies are Tonga, Lesotho and Jordan with remittances ranging between 20 and 40 per cent of GDP. At the lower end are the Philippines, Uganda, Ecuador and Sri Lanka, with shares between 7-9 per cent of GDP (Figure 3).

On the other side, the top 20 *source* countries of remittances in 2001 are headed by the United States with US\$28.4 billion, followed by Saudi Arabia with 15.1 billion and Germany with 8.2 billion (see Figure 4). At the lower end of the top 20 sending countries are Czech Republic, Venezuela and Norway (all three with US\$0.7 billion in 2001).

Next we turn to the motives for remittances that can shed some light on the empirical behaviour of remittances reviewed in this section.

### 3 Measurement, micro-motives for remittances and cyclical behaviour

In this section, we review (i) measurement issues; (ii) the micro-motives to remit, and (iii) the stability of remittances during the cycle.<sup>3</sup>

### 3.1 Definition and measurement issues of remittances

The economic significance of remittances often goes beyond what is suggested by the official balance-of-payments statistics in the sending and receiving countries. The important concept for measuring the economic impact of remittances is the resource transfer-monetary or in-kind-made by a migrant to his home country. Monetary transfers in dollars directly increase the availability of foreign exchange in the migrant's country of origin, whereas remittances in-kind save foreign exchange for the recipient country. This distinction is important, as there are several modalities for sending remittances. Some of these are recorded while others are not. For example, when remittances are sent through the formal channels, they are recorded in the receiving country's balance-of-payments current account. Conversely, remittances sent informally in cash, for example through couriers, are unrecorded in official statistics. Remittances can be in-kind, for example goods sent to households in the home country. Only part of the later are recorded as imports. Migrants may also make donations in the host country to institutions like the church or other charitable organizations formed by co-nationals. They can also make numerous payments (insurance premiums, tuitions for schools, payments for international airfares directly to the airlines) on behalf of relatives or friends from their home country.<sup>4</sup> Although most of these payments should, in the economic sense, be treated as 'remittances', they rarely are recorded as such. In sum,

<sup>&</sup>lt;sup>3</sup> This section draws, largely, on Solimano (2003).

<sup>4</sup> See Brown (1997).

these considerations need to be borne in mind in attempting to assess the true magnitude of remittances transfers based on official statistics which, as noted above, tend to *underestimate* their full economic impact.

In general, data on remittances are available from three items in balance-of-payments reports at country level: (i) worker remittances (money sent by workers abroad for more than one year); (ii) compensation of employees (gross earnings of foreigners residing abroad for less than a year; and (iii) migrant transfer (net worth of migrants moving from one country to another) (see Gammeltoft 2002).

#### 3.2 Microeconomic motivations to remit

The analytical literature<sup>5</sup> on motives for remittances can be summarized in four approaches.

#### The altruistic motive

Under the altruistic model, the migrant sends remittances back home because he cares about the well-being of his or her family in the home country, and the remittance induces satisfaction to the emigrant for his concern for the welfare of his relatives. Furthermore, it is an empirical regularity that the migrant generally has a higher education level than the family members who stay at home. When a migrant goes to a country where the average wage and per capita income are higher than at home, his income level, once he secures a job, can be expected to be better than comparable workers at home. The main prediction of the altruistic model is that remittances tend to decrease over time,<sup>6</sup> as the attachment to family gradually weakens when members are in different countries for extended periods. Furthermore, the migrant may plan to stay abroad for an extended period (or eventually retire there), subsequently bringing his family to his adopted country. This, of course, reduces remittances. The converse case is the return-migration in which the migrant brings fresh funds on his return home, raising remittances the one time.

### The self-interest motive

Opposite to the altruistic motivation is the emigrant who sends remittances to the home country mainly for economic reasons and financial self-interest. In this scenario, the successful emigrant saves money in a foreign country, creating the need as to how to accumulate wealth (in which assets) and where (in which country). An obvious place to invest at least part of the assets is in the home country, buying property, land, financial assets, etc., where these assets may earn a higher rate of return than in the host country, albeit with a greater risk profile. Furthermore, these assets can be administered on behalf of the migrant by the family, who acts as a trusted agent. Expectations of an inheritance from the emigrant's parents may be another motivation for remittances. In this case, family members who have contributed to the increasing family wealth (for example, by sending remittances) are the obvious candidates of future inheritance.

<sup>&</sup>lt;sup>5</sup> References of this literature are Stark (1991); Brown (1997); Poirine (1997), Smith (2003).

<sup>6</sup> See Stark (1991, ch.16).

#### Implicit family contract I: loan repayment

Economic theory on the remittances process has developed explanations which take the family-rather than the individual-as the main unit of analysis.<sup>7</sup> The theory assumes that a family develops an implicit contract with the individual (the migrant) who chooses to live abroad, and those who stay at home. The implicit contract has an intertemporal dimension, say various years or even decades, as the time-horizon, and combines elements of investment and repayment. In the loan repayment theory, the family invests in the education of the emigrant and usually finances the migration costs (travel and subsistence in the host country). This is the loan (investment) element of the theory. The repayment part comes after the migrant settles abroad, his income profile starts to rise over time and he is in a position to start repaying the loan (principal and interests) back to the family in the form of remittances. Thus the family invests in a higher yielding 'asset'-the migrant who earns a higher income in a foreign country than other family members living and working at home. This model predicts various time profiles of remittances, depending, among others, on the length of time it takes for the migrant to become established in the foreign labour market and on the duration of his stay abroad. The quicker the migrant's integration into the labour market of the new country, the faster the flow of remittances. Amounts to be transferred will depend, among other things, on the income profile of the migrant. In this model, remittances do not need to decrease over time as they do in the altruistic model.

### Implicit family contract II: co-insurance

Another variant of the theory of remittances as an implicit family contract between the migrant and those at home is based on the notion of risk diversification. The idea is simple: insurance markets and capital markets in the real world are incomplete, and risks cannot be diversified because of the absence of financial assets that edge risk. In addition, constraints to borrowing, a particularly serious problem for poor migrants, limit the ability to smooth consumption or finance investment. Assuming that economic risks between the sending and foreign country are not positively correlated, then it becomes a convenient strategy for the family as a whole to send some of its members abroad (often the most educated) to diversify economic risks. The migrant, then, can help to support his family in bad times at home. Conversely, for the migrant, having a family in the home country is insurance against the bad times that may also occur in the foreign country. In this model, emigration becomes a co-insurance strategy, with remittances playing the role of an insurance claim. As in any contract, there is the potential problem of enforcement (for example, ensuring that the terms of the contract are respected by all parties). However, in principle, enforcement can be expected to be simpler due to the fact that these are implicit family contracts which are helped by family trust and altruism (a feature often absent in legally sanctioned contracts).

### **3.3** Stability of remittances in the economic cycle

As mentioned in the previous section, worker remittances are more stable than portfolio investments and bank credit. Remittances can even be counter-cyclical. The different motives reviewed above can shed some light in explaining this behaviour. In the model of remittances based on altruism, the migrant can increase his remittances when there is an economic downturn in the home country (as income of the migrant's family

<sup>&</sup>lt;sup>7</sup> See Poirine (1997) and Brown (1997) for elaborations on this specification of remittances.

declines). In this case, a remittance would be the equivalent of a private 'welfare payment' sent from abroad to help smooth consumption of the recipient at home. However, business cycles may be internationally synchronized. The growing economic interdependencies of globalization make this a more plausible case. In this situation, a recession in the receiving country may be positively correlated with a recession in the source country, so that the ability of the immigrant worker to send remittances may be hampered by economic conditions in the host country. This is a real possibility, although the sender may also draw on existing savings to maintain a steady flow of remittances.

If remittances were driven by the portfolio decisions of the migrant (remittances driven by investment), again the relevant issue would be the correlation between the rate of return of the assets in the host country and the rate of return on the assets at home. Here international correlation of the business cycle matters, as does the degree of financial integration between the source and the receiving country. In the model of remittances as mechanisms of co-insurance, risk diversification may call for a steady flow of remittances if business cycles are not fully correlated between the source and the receiving country.

#### 4 The development impact of remittances

Remittances have a potential positive impact as a development tool for the recipient countries. The development effects of remittances can be decomposed into its impact on savings, investment, growth, consumption, and poverty and income distribution. The *impact on growth* of remittances in the receiving economies is likely to act through savings and investment as well as short-run effects on aggregate demand and output through consumption. Also the indirect effect of migration on output depends on the productivity level of the emigrant in the home country before departure. The total saving effect of remittances comes from the sum of foreign savings and domestic savings effects. Worker remittances are a component of foreign savings and they complement national savings by increasing the total pool of resources available for investment. Part of the savings effects of remittances takes place in the 'community'. In fact, migrants associations, often called hometown associations (HTAs) in the United States, organize migrants from various Latin American countries such as El Salvador, Guatemala, Honduras, Mexico and the Dominican Republic. HTAs regularly send donations to finance investment for community projects and local development in the home countries.<sup>8</sup> Migrants associations of former El Salvadorians send home donations of about US\$10,000 per year. These are small numbers but in the recipient countries these sums can still have an impact. Migrant associations of Mexicans send home between US\$5,000-25,000 per year (see Ellerman 2003). In the Mexican state of Zacatecas, the federal and local government match every dollar donated by HTAs to local projects (it may be a two-for-one or three-for-one) oriented to small infrastructure projects: water treatment, schools, roads, parks, etc. Through this programme, more than 400 projects in Zacatecas have been completed in eight years. Total investment made by migrants to these projects amounts to around 4.5 million dollars (World Bank

<sup>&</sup>lt;sup>8</sup> See the study by Micklewright and Wright (2003) prepared within this project on the role of private donations, mainly from foundations and other vehicles, as a source of development finance.

2002). Through these associations, public savings are mobilized along with remittances to finance small community projects.

The previous discussion suggests that the direct effects of remittances on *investment* are bound to be on small community projects. Ratha (2003) cites positive effects of remittances on investment in such receiving countries as Mexico, Egypt and SSA, where remittances have financed the building of schools, clinics and other infrastructure. In addition, return-migrants bring fresh capital that can help finance investment projects.

Remittances also finance consumption; thus, private savings will increase proportionally less than an increase in income from external remittances. A study of remittances for Ecuador (Bendixen and Associates 2003) shows that around 60 per cent of remittances to that country are spent on food, medicine, housing rent and other basic commodities. The study shows that less than 5 per cent of remittances are used for the acquisition of residential property.

The combined effects of remittances on investment and consumption can increase output and growth. The sustainability of this effect is an open discussion. If remittances are a response to recent migration, remittances may be transitory and thus their effect on investment, consumption and growth can be more of a temporary nature. In contrast, if migrants form associations and their commitment to their home country becomes 'institutionalized', then the positive developmental effects of their remittances may become more permanent.

The indirect growth effect of remittances on *growth (or output)* depends on the type of emigrant leaving home, the state of the labour market and the productivity of the emigrant. If the emigrant is unskilled with low productivity, or an unemployed worker, reflecting slack and excess supply in the labour market, then the effect of emigration on output in the home country is bound to be small. In contrast, if the emigrant is a highly skilled worker, an information technology expert or an entrepreneur with a high direct and indirect contribution to output, the adverse growth effect of high-skilled emigration is bound to be large (see Solimano 2001, 2002).

One negative effect of (substantial) remittances is the possibility that they produce the so-called 'Dutch disease' effect.<sup>9</sup> In countries receiving substantial sums of remittances, there is a tendency for the real exchange rate to appreciate which then penalizes non-traditional exports and hampers the development of the tradable goods sector.

Remittances may also have a *poverty reducing and income distribution effect*. As mentioned before, the recipient of remittances is often a low-income family whose offspring has left the country to work abroad. In a way, emigration is a response to escape poverty at home<sup>10</sup> and to improve the income-earning capacity of the emigrant by attempting to enter a foreign labour market in a richer country. At the same time, remittances serve to alleviate the poverty of the migrant's family in the home country by supplementing its income through transfers. The negative side of this is that remittances

<sup>&</sup>lt;sup>9</sup> This effect is extensive to all kinds of transfers, not only to remittances.

<sup>&</sup>lt;sup>10</sup> However, extreme poverty may also impede emigration, as the very poor may not be able to finance the costs of migrating to a foreign country.

may create a 'culture of dependence' on the income from remittances. This, in turn, can impair the efforts of the recipients of remittances to escape poverty through education and work. The distributive effect of remittances is another dimension of the development effects of remittances.<sup>11</sup> Stark (1991) studies the effects of remittances on domestic inequality in two Mexican villages near the border with the US in which villagers engage in internal rural-urban migration as well as in migration to the United States. The study finds that remittances from internal migrants are correlated more with the years of schooling than remittances from international migrants to the United States, as the later often go to low-skilled labour-intensive jobs. Stark (1991) generalizes that the inequality impact of changes in remittances depends on the remittance recipients' position in the village's income distribution scale, the share of remittances in the village incomes and the distribution of the remittances themselves. These variables in turn depend on the distribution of human capital (education and skills) among the villagers and the migration opportunities of the villages. Another piece of evidence is provided by Ratha (2003) who reports that for Pakistan, a household data survey shows that the share of income originating from external transfers increases with the income level (the highest share of income receives the largest share of external income from remittances). However, income distribution between countries may eventually improve with remittances, as income is redistributed from source countries with a higher income level to receiving countries with a lower income per capita. As seen in section 2, remittances represent a very significant share of GDP in several low-income countries.

A final remark here: the development effect of remittances depends on the 'life-cycle' of the whole migration process at the country level. In fact, for growing economies with rising per capita incomes, differentials across countries in the income per head will diminish, reducing the incentives for emigration. Thus the relative importance of remittances is likely to decline as a country moves up ladder of development. This is valid mainly for remittances from low-skilled migrants, however. In the case of highly skilled well-educated individuals, migration flows at the high per capita income levels are likely to continue, an observation seen within the European Union or between Europe and the US. In this case, remittances may continue although their economic effects are probably quite different than those discussed earlier when the recipients of the remittances are developing countries.

#### 5 The international markets for remittances

Remittances are channelled through financial entities such as money transfer operators (MTOs), post offices, travel agencies, couriers, informal financial institutions, etc. MTOs owned and run by immigrants (or naturalized citizens of the same ethnic or national group) are denominated as 'ethnic stores'. Commercial banks are also in the remittances business, but generally they are not important players. These financial intermediaries often charge fees for money transfers well above the marginal cost of those transfers (see Orozco 2003). The most important MTO at the global level is Western Union with branches in many countries, followed by MoneyGram and Thomas Cook. The less competitive, more concentrated and more segmented the market for remittances, the higher the costs of the remittances. There are a number of reasons why

<sup>&</sup>lt;sup>11</sup> The distributive effects of remittances in the home country are more ambiguous. The issue is investigated in Barham and Boucher (1998).

the international market for remittances tends to be a thin and poorly competitive (only few players dominate the market and costs of intermediation are high). First, the legal status of the migrant sending the remittance is not always regularized. Some migrants have resident (working) visas, others are waiting for their visas to be processed and others are simply 'illegal'. Commercial banks are reluctant to enter the financial services market for low-income migrants whose immigration status often is not regularized.<sup>12</sup> The result is a less competitive market, where furthermore migrants are not well integrated as customers in the formal banking circuits. Second, it is important to note that worker remittances are small-scale transactions. In Latin America, the typical remittance per migrant is in the range of US\$200-300 per month.<sup>13</sup> As individual transactions are small, service standardization is needed for the remittances market to become a profitable activity at competitive fees. In this context, high fees may compensate for the cost of small transactions.<sup>14</sup> Finally, other factors that affect the market for remittances include exchange rate risk, government regulations for foreign exchange transactions in the receiving country and regulations in the sending country such as licensing costs.

#### Costs of remittances

Let us turn now to the efficiency of the market for remittances to the Andean region. If the costs of remittances are above marginal cost (including a normal return to capital) of sending money, then the amount of the remittances is below the socially optimal level. As a consequence, consumption, investment and output opportunities foregone in the receiving country cannot be realized.

The work by Orozco (2001, 2002) highlights two main cost components in sending remittances:

Total charges for remittances = explicit fee + exchange rate spread.

Companies charge a (explicit) fee that can be a percentage of the amount remitted or a fixed amount (often in dollars). The fee usually depends on the services offered (speed of delivery, home delivery, etc.). The exchange rate spread is the difference between the exchange rate applied by the money transmitter company to convert dollars into local currency and the market (e.g. inter-bank) exchange rate. Money transfer companies usually offer a less favourable exchange rate to the sender than the market rate. This is an additional source of profits for the money transmitter companies and an additional cost component for the user.

The average cost of sending US\$200 as a remittance through a commercial bank to selected non-Latin American countries is 7 per cent compared to 12 per cent of sending money through main money transfer operators such as Western Union and MoneyGram

<sup>12</sup> In the United States, banks request people (migrants) a tax identification number, TIN, as a requisite to open a bank account. In addition, recently some banks accept consular identification cards for opening bank accounts. Many migrants are fully compliant with tax payments even though their immigration status is not fully regular.

<sup>13</sup> See Orozco (2002) and Solimano (2003).

<sup>&</sup>lt;sup>14</sup> In the aggregate, however, this is a sector that mobilizes a large volume of resources: aggregate remittances for Latin America were on the order of 32 billion dollars in 2002 for the main 12 recipient countries in Latin America (see MIF 2003).

(Table 6).<sup>15</sup> Clearly sending money through the bank is less expensive than sending it through the MTOs. Banks also offer a variety of money transfer services and charges decline substantially when the remittance is deposited in the account of the same bank at both source and destination countries. Foreign exchange spreads represent around 14 per cent of the total costs of remittances to non-Latin American countries. However, the country averages mask significant cross-country differences in the costs of sending remittances. For example, according to Table 7 drawn from Orozco (2003), the costs of sending money through the banks are the lowest for Pakistan and the highest for the Philippines. These costs are much more uniform but also higher when money is sent through major MTOs (in the range of 9.5-13.8 per cent).

The cost of sending money from the United States to Latin America is in the range of 8-9 per cent (see Table 8). Interestingly, as a share of the total costs, the component of exchange rate spreads is twice as high for sending remittances to Latin American than to non-Latin American destinations. In fact, the exchange rate spread component for the latter is around 14 per cent of the total costs for sending remittances while it is nearly 28 per cent for Latin American recipients. Finally, let us look at the costs of remittances for the Andean region: Bolivia, Colombia, Ecuador, Peru and Venezuela. Table 9 provides the average cost or charge of sending remittances of US\$200, 250 and 300 to these five countries. The data are based on a survey conducted in January 2003 of MTOs and ethnic stores in the United States that are engaged in the remittances industry with the countries in question.<sup>16</sup> Table 9 gives the costs of a money transfer to be delivered in dollars and in local currency. The percentage charges are systematically lower across countries for remittances made in dollars rather than in local currency, the difference ranging from 3 to 5 percentage points. For remittances of US\$200-250, there is a wide range of costs, from 5.6 per cent to 13.8 per cent, and for remittances of US\$300, the costs vary between 5.1-12.7 per cent. In general, charges decline with the amount remitted, but there are significant differences for individual countries. Ecuador has the lowest charges and Venezuela the highest. An important factor explaining the lower charges for money remitted to Ecuador is that the exchange rate spread component of the total costs (for the sender) disappears since the US dollar is the official currency. This is an important result: Ecuador, the Andean economy that adopted the US dollar, faces lower costs of remittances than an economy with a national currency.<sup>17</sup>

#### 6 Policies to reduce costs of remittances and enhance their development impact

As we have documented in this paper, the cost of sending money transfers to developing countries is high, and this leads to an inefficient level of transfers. How to reduce the costs of sending money abroad? How to increase competition in the international market for transfers? How to enhance the development impact of remittances in the receiving countries? Measures are needed at both the sending side as well as the recipient side.

<sup>&</sup>lt;sup>15</sup> Table 7 reports the countries and companies studied to determine the costs of remittances according to major source/destination countries and type of financial operator.

<sup>16</sup> See Solimano (2003).

<sup>17</sup> See Beckerman and Solimano (2002) for an analysis of the macroeconomic and social impact of official dollarization in Ecuador.

#### 6.1 The sending-country perspective

The 'formalization' of the legal status of the migrant would certainly promote greater access by the migrant to a variety of bank services, including remittances services. This should lower the costs of remittances. For example, the use of ATM cards for making transfers rather than the current, more costly methods can be an effective mechanism for reducing the costs of remittances.

Another factor that apparently is preventing a competitive atmosphere in the remittances business in the US is the cost of procuring a license for becoming a money transmitter operator, which is about US\$100,000 in each state where operations are conducted. Prospective money operators find this cost high.

It is important also to avoid increases in transaction costs, or to add to the regulations governing worker remittances as a result of the mounting controls on financial intermediaries for preventing money laundering or the financing of terrorism.

In sum, we believe that increasing the efficiency of the market for remittances requires:

- i) The costs of licensing for new operators to be contained or reduced so as to make the process of certification of new financial intermediaries in the remittances business less costly and more expedite.
- ii) The process of granting residence visas and/or citizenship to be expedited so as to avoid long visa processing periods for migrants (which can currently take up to several years, at least in the US). This would help to regularize the immigrant sector, inviting commercial banks to target the financial needs of the migrants.
- iii) Domestic banks (particularly those with an international scope) to be encouraged to develop new product lines for migrants such as chequing or savings account, remittances services, etc. The creation of 'banks for migrants' is an idea worth exploring.

The remittance-sending nations would benefit from a more efficient and less costly market for remittances. Currently, a significant slice of remittances goes to the operators as profits rather than to the families of the migrants in developing countries. This has adverse efficiency effects and is regressive. In addition, by reducing the amount of transfers that effectively gets to the receiving countries, the pressures to reduce official development assistance diminishes, thereby weakening the 'substitution effect' of remittances for development assistance.

### 6.2 The recipient-country perspective

From the viewpoint of recipient countries, leveraging remittances and enhancing their productive use for development are two important issues. There are various mechanisms for leveraging remittances in the receiving countries: governments and local financial institutions can issue bonds for emigrants, who would earn an interest rate, creating a more attractive instrument for channelling remittances.

Another possibility is for domestic banks to offer migrants foreign currency accounts that are freed from exchange rate taxes and other regulations. In addition, housing and education accounts can be created to channel remittances to various productive uses in the home country, such as investment in durables (housing) and education (investment in human capital).

The development of alliances between domestic banks in the receiving countries and banks, credit-unions and MTOs in the sending nations can help to increase the efficiency and reduce costs in the remittances market. Mechanisms to ensure a productive use of remittances include the mobilization of hometown associations (HTAs) similar to those that have evolved in the United States in recent years (Mexican migrants have been very active in creating HTAs and are being helped by their government for this purpose).

Finally, taxing remittances in the sending countries or in the receiving economies does not seem to be a good idea.<sup>18</sup> These, in general, are international transfers sent by low-income groups, mainly migrants, so on equity grounds, it is debatable whether these income flows must be taxed. In the receiving countries, remittances are a source of foreign exchange, a complement to national savings and a transfer to low- and medium-income groups. It is unclear what is the social gain if governments were to interfere directly with these income flows. However, governments can play a positive role in fostering a better financial infrastructure for remittances.

#### 7 Concluding remarks

This paper examines several developmental and financial dimensions of remittances from international migrants. Remittances are currently the second most important source of development finance at global level after FDI. Also, they are more stable than private capital flows such as portfolio investment and bank credit; the sustainability of remittances as a source of income for developing countries depends also on the cycle of migration (recent versus older migration) and the immigration policies of the recipient nations. Remittances have become a very significant source of development finance for several developing countries. They are a source of foreign exchange; they support the consumption levels of low-to-middle-income families and constitute a direct source for funding small, community-oriented investment project finance tied to migrants associations that send donations home to fund these type of projects (the so-called 'community remittances'). From a social point of view, remittances can have a positive poverty-reducing effect, as the families receiving remittances from the migrants are often low-income people, although the syndrome of depending on the income of remittances by the recipients should be avoided. Properly mobilized remittances can contribute to increased investment in basic infrastructure such as water, roads, lowincome housing, school-buildings, investment in human capital (education) and help to finance micro and small-scale firms. For remittance-sending countries, remittances represent a market-based international transfer to developing countries that indirectly reduces the demand for official development assistance.

<sup>18</sup> Another possibility is to make remittances tax deductible.

Currently, the potential development impact of remittances is in part impaired by the existence of a costly, concentrated and poorly competitive international market for remittances. Empirical evidence shows that the costs of remittances are high and above the marginal costs of (electronically) transferring funds, provided a basic financial infrastructure is in place. In general, the costs of remittances tend to be lower if sent through commercial banks rather than through international money operators. In addition, there are differences in the costs of sending remittances to non-Latin American countries compared to Latin American countries, and the exchange rate spread component of the costs of remittances is higher for remittances sent to Latin American countries than to non-Latin American countries. Our empirical analysis, based on a detailed survey of money transmitter operators in the US and operating within the Andean region, shows that the total cost of remittances for these countries vary from 5 to 12 per cent of the value remitted depending on the type of currency to be delivered, the destination country, the type of financial operator involved and other factors. Reducing the costs of sending remittances by, say, 5 percentage points could increase by a few billion the amount of remittances received by the developing countries.

What can be done to increase competition and reduce costs in the remittances market? In the sending countries, a regularization of the legal status of migrants would make the migrant sector more attractive for formal financial institutions as suppliers of financial services, including remittances, for migrants. This would increase competition and reduce costs. On the other hand, the costs of licensing for new operators and the regulatory framework should avoid imposing extra burdens on the sector. The same consideration should be extended to efforts to control money laundering or the financing of terrorism. Clearly a better financial infrastructure for channelling remittances is needed. On the recipient side, the issuance of remittance bonds, opening of foreign currency accounts for migrant workers in the home country, the creation of facilities for voluntary donations to projects are all measures to leverage remittances for development. In turn, the creation of education and housing accounts at home for migrants could help to enhance the productive and social use of the remittances proceeds. Also enhancing the return of emigrants that can bring fresh capital, new ideas and international contacts can be a promising way to attract remittances for growth and development in receiving countries.

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#### **Figures and tables**

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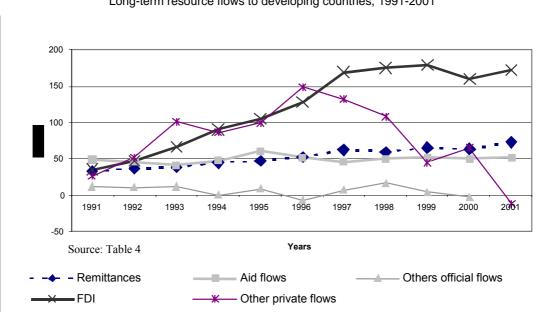
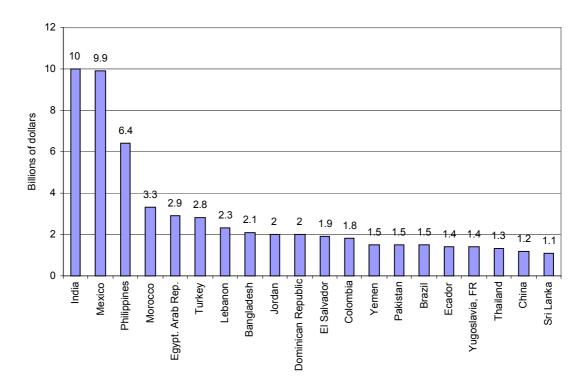


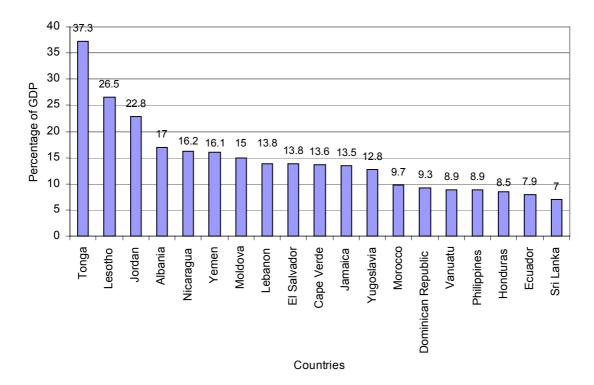
Figure 1 Long-term resource flows to developing countries, 1991-2001

Figure 2 Top 20 developing-country recipients of workers' remittances, 2001



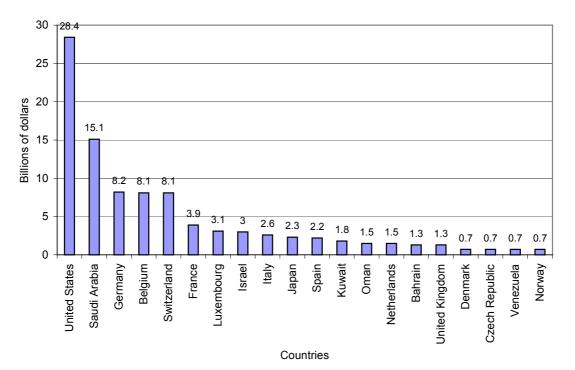
Source: World Bank (2003).

Figure 3 Top 20 developing-country recipients of workers' remittances, 2001



Source: World Bank (2003).

Figure 4 Top 20 country sources of remittance payment, 2001



#### Table 1 Remittances received by region, 1980-2002 (in billions of US\$)

| Countries  | 1980 | 1    | 1985 | 1    | 1990 | 1   | 995  | 1996 |      | 1997 | 1   | 998  | 1999 | 9     | 2000 | 2    | 001  | 20<br>(es | 02   | nnual rate of<br>growth (%)<br>1980-2002 |
|--|------|------|------|------|------|-----|------|------|------|------|-----|------|------|-------|------|------|------|-----------|------|--|
| East Asia and Pacific                            |      | 1.1  |      | 2.3  |      | 3.6 | 8.3  |      | 9.5  | 1    | 4.2 | 8    | 3    | 10.6  |      | 10.3 | 1    | 0.4       | 11.0 | 11.0                                     |
| Share (%) of remittances in developing countries | 7.1  |      | 12.7 |      | 12.4 |     | 17.3 | 18.1 |      | 22.6 |     | 13.9 | 16.  | .4    | 15.9 |      | 14.4 | 1         | 3.8  |  |
| Europe and Central Asia                          |      | 2.1  |      | 1.7  |      | 3.2 | 5.5  |      | 6.2  |      | 7.1 | 9    | 2    | 8.1   |      | 8.7  |      | 8.9       | 10.0 | 7.4                                      |
| Share (%) of remittances in developing countries | 13.5 |      | 9.4  |      | 11.0 |     | 11.5 | 11.8 | 3    | 11.3 |     | 15.5 | 12.  | 5     | 13.5 |      | 12.3 | 1         | 2.5  |  |
| Latin America and the Caribbean                  |      | 1.9  |      | 2.6  |      | 5.7 | 12.8 |      | 12.8 | 1    | 3.6 | 14   | 8    | 16.9  |      | 19.2 | 2    | 22.6      | 25.0 | 12.4                                     |
| Share (%) of remittances in developing countries | 12.3 |      | 14.4 |      | 19.6 |     | 26.7 | 24.3 | 3    | 21.7 |     | 24.9 | 26.  | .1    | 29.7 |      | 31.3 | З         | 31.3 |  |
| Middle East and North Africa                     |      | 3.8  |      | 4.6  |      | 9.3 | 8.6  | ;    | 9.1  |      | 9.4 | 10   | 3    | 10.5  |      | 10.9 | 1    | 3.1       | 14.0 | 6.1                                      |
| Share (%) of remittances in developing countries | 24.5 |      | 25.4 |      | 32.0 |     | 18.0 | 17.3 | 3    | 15.0 |     | 17.3 | 16.  | 2     | 16.9 |      | 18.1 | 1         | 7.5  |  |
| South Asia                                       | 5.3  |      | 5.8  |      | 5.6  |     | 10.0 | 12.3 | 3    | 14.6 |     | 13.3 | 15.  | .1    | 13.5 |      | 14.9 | 1         | 6.0  | 5.2                                      |
| Share (%) of remittances in developing countries | 34.2 |      | 32.0 |      | 19.2 |     | 20.9 | 23.4 | ł    | 23.3 |     | 22.4 | 23.  | 3     | 20.9 |      | 20.6 | 2         | 20.0 |  |
| Sub-Saharan Africa                               |      | 1.3  |      | 1.1  |      | 1.7 | 2.7  |      | 2.7  |      | 3.8 | 3    | 6    | 3.5   |      | 2.0  |      | 2.4       | 4.0  | 5.2                                      |
| Share (%) of remittances in developing countries | 8.4  |      | 6.1  |      | 5.8  |     | 5.6  | 5.1  |      | 6.1  |     | 6.1  | 5.   | 4     | 3.1  |      | 3.3  |           | 5.0  |  |
| Developing countries                             |      | 15.5 | 1    | 18.1 | 2    | 9.1 | 47.9 | )    | 52.6 | 6    | 2.7 | 59   | 5    | 64.7  | . (  | 64.6 | 7    | 2.3       | 80.0 | 7.7                                      |
| Industrial countries                             |      | na   |      | na   |      | na  | 37.2 |      | 35.7 | 4    | 0.5 | 41   | 0    | 40.2  | 4    | 40.1 | 3    | 39.3      | na   | na                                       |
| All countries                                    |      | na   |      | na   |      | na  | 85.1 |      | 88.3 | 10   | 3.2 | 100  | 5    | 104.9 | 1(   | 04.7 | 11   | 1.6       | na   | na                                       |

Note: Remittances are calculated as the sum of workers remittances and compensation of employees;

na - not available.

Source: IMF (2003).

| Countries                             | 1995  | 1996  | 1997  | 1998  | 1999  | 2000  | 2001  |
|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Upper middle income                   | 13.7  | 13.6  | 14.3  | 16.3  | 15.7  | 16.6  | 17.2  |
| Share of remittances in all countries | 16.1  | 15.4  | 13.8  | 16.2  | 15.0  | 15.9  | 15.4  |
| Lower middle income                   | 20.7  | 21.2  | 24.2  | 24.1  | 27.2  | 28.3  | 30.0  |
| Share of remittances in all countries | 24.3  | 24.0  | 23.5  | 24.0  | 26.0  | 27.0  | 26.9  |
| Low income                            | 13.5  | 17.8  | 24.2  | 19.1  | 21.8  | 19.7  | 25.1  |
| Share of remittances in all countries | 15.9  | 20.2  | 23.5  | 19.0  | 20.8  | 18.8  | 22.5  |
| All developing                        | 47.9  | 52.6  | 62.7  | 59.5  | 64.7  | 64.6  | 72.3  |
| Share of remittances in all countries | 56.3  | 59.6  | 60.7  | 59.2  | 61.7  | 61.7  | 64.8  |
| Industrial countries                  | 37.2  | 35.7  | 40.5  | 41.0  | 40.2  | 40.1  | 39.3  |
| Share of remittances in all countries | 43.7  | 40.4  | 39.3  | 40.8  | 38.3  | 38.3  | 35.2  |
| All countries                         | 85.1  | 88.3  | 103.2 | 100.5 | 104.9 | 104.7 | 111.6 |
| Share of remittances in all countries | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Table 2 Remittances <sup>(a</sup> received by country groupings, 1995-2001 (in billions of US\$)

Note: (a Remittances are calculated as the sum of workers' remittances and compensation of employees.

Source: IMF (2003).

| Table 3  |
|--|
| Remittances (a received by developing countries, 1996-2002 |

| Countries                 | 1996    | 1997  | 1998  | 1999  | 2000  | 2001  | 2002<br>Estimate |
|---------------------------|---------|-------|-------|-------|-------|-------|------------------|
| East Asia and Pacific     |         |       |       |       |       |       |                  |
| as % of GDP               | 1.0     | 1.3   | 0.7   | 0.8   | 0.7   | 0.7   | 0.7              |
| as % of FDI inflows       | 16.2    | 22.8  | 14.4  | 21.7  | 23.4  | 21.3  | 19.3             |
| as % of aid flows         | 125.0   | 215.2 | 103.8 | 112.8 | 128.8 | 152.9 | na               |
| Europe and Central Asia   |         |       |       |       |       |       |                  |
| as % of GDP               | 1.4     | 1.3   | 1.4   | 1.1   | 1.0   | 0.9   | 1.0              |
| as % of FDI inflows       | 38.0    | 32.6  | 35.4  | 28.6  | 29.8  | 29.6  | 34.5             |
| as % of aid flows         | 89.9    | 126.8 | 131.4 | 84.4  | 90.6  | 97.8  | na               |
| Latin America and the Car | ribbean |       |       |       |       |       |                  |
| as % of GDP               | 1.3     | 1.2   | 1.1   | 1.1   | 1.2   | 1.3   | 1.4              |
| as % of FDI inflows       | 28.8    | 20.6  | 20.2  | 19.2  | 25.3  | 32.6  | 59.5             |
| as % of aid flows         | 232.7   | 302.2 | 328.9 | 359.6 | 505.3 | 434.6 | na               |
| Middle East and North Afr | ica     |       |       |       |       |       |                  |
| as % of GDP               | 3.4     | 3.0   | 3.1   | 2.9   | 2.8   | 3.0   | 3.0              |
| as % of FDI inflows       | 1,300.0 | 151.6 | 137.3 | 328.1 | 436.0 | 238.2 | 466.7            |
| as % of aid flows         | 171.7   | 195.8 | 219.1 | 244.2 | 294.6 | 335.9 | na               |
| South Asia                |         |       |       |       |       |       |                  |
| as % of GDP               | 3.7     | 3.8   | 3.1   | 3.2   | 2.6   | 2.6   | 2.6              |
| as % of FDI inflows       | 351.4   | 298.0 | 380.0 | 487.1 | 435.5 | 363.4 | 320.0            |
| as % of aid flows         | 236.5   | 339.5 | 271.4 | 351.2 | 321.4 | 252.5 | na               |
| Sub-Saharan Africa        |         |       |       |       |       |       |                  |
| as % of GDP               | 1.4     | 1.7   | 1.4   | 1.3   | 0.7   | 0.7   | 1.1              |
| as % of FDI inflows       | 62.8    | 46.9  | 55.4  | 43.2  | 32.8  | 17.4  | 57.1             |
| as % of aid flows         | 18.0    | 28.6  | 27.1  | 28.7  | 16.4  | 18.9  | na               |
| Developing countries      |         |       |       |       |       |       |                  |
| as % of GDP               | 1.6     | 1.7   | 1.4   | 1.4   | 1.3   | 1.3   | 1.3              |
| as % of FDI inflows       | 41.2    | 37.0  | 34.1  | 36.1  | 40.2  | 42.1  | 55.9             |
| as % of aid flows         | 101.3   | 134.5 | 118.3 | 123.5 | 127.9 | 139.0 | na               |

Notes: (a Remittances are calculated as the sum of workers' remittances and compensation of employees; FDI is foreign direct investment; Aid flows are official development assistance; na means not available.

|             | Remittar | nces <sup>(a</sup> | Aid flo | ows <sup>(b</sup> | Other<br>flow | official<br>/s <sup>(c</sup> | FD     | FDI |        | FDI |        | FDI |  | rivate<br>s <sup>(d</sup> |  | otal |
|-------------|----------|--------------------|---------|-------------------|---------------|------------------------------|--------|-----|--------|-----|--------|-----|--|---------------------------|--|------|
|             | US\$     | %                  | US\$    | %                 | US\$          | %                            | US\$   | %   | US\$   | %   | US\$   | %   |  |                           |  |      |
| 1991        | 33.1     | 21                 | 49.5    | 32                | 11.4          | 7                            | 35.7   | 23  | 26.3   | 17  | 156    | 100 |  |                           |  |      |
| 1992        | 37.2     | 19                 | 46.4    | 24                | 10.1          | 5                            | 47.1   | 24  | 52.2   | 27  | 193    | 100 |  |                           |  |      |
| 1993        | 38.9     | 15                 | 41.7    | 16                | 11.9          | 5                            | 66.6   | 26  | 100.2  | 39  | 259.3  | 100 |  |                           |  |      |
| 1994        | 44.1     | 16                 | 48.1    | 18                | -0.1          | 0                            | 90.0   | 34  | 85.6   | 32  | 267.7  | 100 |  |                           |  |      |
| 1995        | 47.9     | 15                 | 61.0    | 19                | 8.9           | 3                            | 105.0  | 33  | 99.1   | 31  | 322.3  | 100 |  |                           |  |      |
| 1996        | 52.6     | 14                 | 51.9    | 14                | -7.8          | -2                           | 128.0  | 34  | 148.44 | 40  | 372.9  | 100 |  |                           |  |      |
| 1997        | 62.7     | 15                 | 46.6    | 11                | 7.2           | 2                            | 169.0  | 41  | 131.37 | 31  | 417.2  | 100 |  |                           |  |      |
| 1998        | 59.5     | 15                 | 50.3    | 12                | 16.2          | 4                            | 175.0  | 43  | 108.75 | 27  | 409.3  | 100 |  |                           |  |      |
| 1999        | 64.7     | 19                 | 52.4    | 15                | 5.0           | 1                            | 179.0  | 52  | 45.09  | 13  | 346.6  | 100 |  |                           |  |      |
| 2000        | 64.6     | 19                 | 50.5    | 15                | -3.0          | -1                           | 161.0  | 48  | 65.15  | 19  | 338.0  | 100 |  |                           |  |      |
| 2001        | 72.3     | 25                 | 52.0    | 18                | na            | na                           | 172.0  | 60  | -11.73 | -4  | 284.3  | 100 |  |                           |  |      |
| 2002 (est.) | 80.0     | 36                 | na      | na                | na            | na                           | 143.0  | 64  | na     | na  | 223.0  | 100 |  |                           |  |      |
| Average:    |          |                    |         |                   |               |                              |        |     |        |     |        |     |  |                           |  |      |
| 1991-2001   | 52.51    | 18                 | 50.04   | 18                | 5.98          | 2                            | 120.75 | 38  | 77.32  | 25  | 306.04 | 100 |  |                           |  |      |

Table 4Resource flows to developing countries, 1991-2002<br/>(current US\$ billions and %)

Notes: (a Remittances are calculated as the sum of workers' remittances and compensation of employees;

(b Aid flows are official development assistance and official aid;

(c Other official flows are total official flows (official development finance), net of aid flows;

(d Other private flows are portfolio flows, and bank and trade;

na not available.

Source: IMF (2003) for remittances; World Bank (2003) for all other flows.

|                   |                        | Number of companies reviewed |                    |       |                |  |  |  |  |  |  |
|-------------------|------------------------|------------------------------|--------------------|-------|----------------|--|--|--|--|--|--|
| Receiving country | Remittances sent from: | Banks                        | MTOs <sup>(a</sup> | Other | All businesses |  |  |  |  |  |  |
| Philippines       | United States          | 5                            | 14                 | 5     | 24             |  |  |  |  |  |  |
| Egypt             | United States          |                              | 2                  |       | 2              |  |  |  |  |  |  |
| Greece            | Germany and USA        | 4                            | 2                  |       | 6              |  |  |  |  |  |  |
| India             | Saudi Arabia, USA, UK  | 7                            | 11                 |       | 18             |  |  |  |  |  |  |
| Pakistan          | Saudi Arabia, USA, UK  | 7                            | 1                  |       | 8              |  |  |  |  |  |  |
| Portugal          | France, USA            | 3                            | 2                  |       | 5              |  |  |  |  |  |  |
| Turkey            | Germany, USA           | 3                            | 2                  |       | 5              |  |  |  |  |  |  |
| Mozambique        | South Africa, USA      | 1                            |                    |       | 1              |  |  |  |  |  |  |
| Zimbabwe          | South Africa, USA      |                              | 7                  |       | 7              |  |  |  |  |  |  |
| Bangladesh        | UK                     | 1                            | 3                  |       | 4              |  |  |  |  |  |  |
| Ghana             | UK                     |                              | 7                  |       | 7              |  |  |  |  |  |  |

Table 5 Countries and companies studied

Note: (a money transfer operators

Source: Orozco (2003).

|           | F    | or a remittance of US\$ 200 | )       |
|-----------|------|-----------------------------|---------|
| Туре      | FX % | Fee %                       | Total % |
| Bank      | 1.0  | 6.5                         | 7.0     |
| Major MTO | 1.7  | 10.9                        | 12.0    |

 Table 6

 Average costs of sending money to select non-Latin American countries

Source: Orozco (2003).

|             |      | Type of business            |           |  |  |  |  |  |  |
|-------------|------|-----------------------------|-----------|--|--|--|--|--|--|
| Country     | Bank | Ethnic store/exchange house | Major MTO |  |  |  |  |  |  |
| Egypt       |      |                             | 13.8%     |  |  |  |  |  |  |
| Philippines | 8.0% | 10.1%                       | 10.3%     |  |  |  |  |  |  |
| India       | 6.0% | 2.5%                        | 13.8%     |  |  |  |  |  |  |
| Greece      | 6.8% |                             | 9.5%      |  |  |  |  |  |  |
| Pakistan    | 0.4% | 3.0%                        | 13.0%     |  |  |  |  |  |  |
| Portugal    | 3.4% |                             | 12.3%     |  |  |  |  |  |  |
| Turkey      | 3.1% |                             | 9.5%      |  |  |  |  |  |  |
| Mozambique  | 1.0% |                             |           |  |  |  |  |  |  |
| Mean        | 7.0% | 6.0%                        | 12.0%     |  |  |  |  |  |  |

 Table 7

 Charges by type of business for sending US\$200 to selected countries

Source: Orozco (2003).

|              | Novemb | er 2001 | Novembe | er 2002 |
|--------------|--------|---------|---------|---------|
| Charges      | US\$   | %       | US\$    | %       |
| Total charge | 17.46  | 8.77    | 16.02   | 8.01    |
| FX charges   | 4.73   | 2.44    | 2.97    | 1.48    |
| Fee charge   | 15.33  | 7.66    | 14.05   | 7.02    |

Table 8Average charges for sending US\$200 from the United States to Latin America(in US\$ dollars, and as %)

Source: Orozco (2003).

|         |           |          | Fxch  | ange  | Fee o | charge | Total | charge |
|---------|-----------|----------|-------|-------|-------|--------|-------|--------|
| Amount  | Country   | Currency | Level | %     | Level | %      | Level | %      |
| US\$200 | Colombia  | Local    | 9.30  | 4.65  | 10.67 | 5.33   | 19.96 | 9.98   |
|         |           | Dollar   | 0.00  | 0.00  | 12.33 | 6.17   | 12.33 | 6.17   |
|         | Ecuador   | Dollar   | 0.00  | 0.00  | 11.23 | 5.62   | 11.23 | 5.62   |
|         | Bolivia   | Local    | 6.50  | 3.25  | 21.00 | 10.50  | 27.50 | 13.75  |
|         |           | Dollar   | 0.00  | 0.00  | 16.80 | 8.40   | 16.80 | 8.40   |
|         | Peru      | Local    | -3.54 | -1.77 | 18.50 | 9.25   | 14.96 | 7.48   |
|         |           | Dollar   | 0.00  | 0.00  | 13.00 | 6.50   | 13.00 | 6.50   |
|         | Venezuela | Local    | 12.04 | 6.02  | 15.00 | 7.50   | 27.04 | 13.52  |
|         |           | Dollar   | 0.00  | 0.00  | 21.00 | 10.50  | 21.00 | 10.50  |
| US\$250 | Colombia  | Local    | 11.62 | 4.65  | 13.25 | 5.30   | 24.87 | 9.95   |
|         |           | Dollar   | 0.00  | 0.00  | 15.39 | 6.16   | 15.39 | 6.16   |
|         | Ecuador   | Dollar   | 0.00  | 0.00  | 13.96 | 5.58   | 13.96 | 5.58   |
|         | Bolivia   | Local    | 8.12  | 3.25  | 27.00 | 10.80  | 35.12 | 14.05  |
|         |           | Dollar   | 0.00  | 0.00  | 20.80 | 8.32   | 20.80 | 8.32   |
|         | Peru      | Local    | -4.42 | -1.77 | 22.50 | 9.00   | 18.08 | 7.23   |
|         |           | Dollar   | 0.00  | 0.00  | 16.25 | 6.50   | 16.25 | 6.50   |
|         | Venezuela | Local    | 15.05 | 6.02  | 18.75 | 7.50   | 33.80 | 13.52  |
|         |           | Dollar   | 0.00  | 0.00  | 25.00 | 10.00  | 25.00 | 10.00  |
| US\$300 | Colombia  | Local    | 13.95 | 4.65  | 14.88 | 4.96   | 28.82 | 9.61   |
|         |           | Dollar   | 0.00  | 0.00  | 17.22 | 5.74   | 17.22 | 5.74   |
|         | Ecuador   | Dollar   | 0.00  | 0.00  | 15.38 | 5.13   | 15.38 | 5.13   |
|         | Bolivia   | Local    | 9.75  | 3.25  | 27.00 | 9.00   | 36.75 | 12.25  |
|         |           | Dollar   | 0.00  | 0.00  | 22.40 | 7.47   | 22.40 | 7.47   |
|         | Peru      | Local    | -5.31 | -1.77 | 24.00 | 8.00   | 18.69 | 6.23   |
|         |           | Dollar   | 0.00  | 0.00  | 17.83 | 5.94   | 17.83 | 5.94   |
|         | Venezuela | Local    | 18.05 | 6.02  | 20.00 | 6.67   | 38.05 | 12.68  |
|         |           | Dollar   | 0.00  | 0.00  | 29.00 | 9.67   | 29.00 | 9.67   |

| Table 9   |
|---|
| Cost of remittances from the US to the Andean countries |
| (in local currency versus US\$, averages per country)   |

Source: Solimano (2003).