# *Remittances. Overview of the existing literature*[*]

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## ABSTRACT

Remittances occupy an important place at the intersection of migration with finance and development. This proves why the literature, belonging not only to scholars but also to international institutions, regional banks and national governments, has been so prolific on this issue over the last twenty years. The aim of this essay is to present in a complete way the kernel of such a production.

People migrate and this decision is sometimes permanent, but there are links with the country of origin that stand up to time and distances. With respect to this, the so called "economic diaspora" well depicts the broad transnationalism that has established as a consequence of the increasing amount of money migrants have been sending back home. The data collected and the estimates fully agree on this positive trend but the outlines of these peculiar private capital flows are still controversial. This is due to three aspects each section of this work tries to address.

The first part analyses those remittances' features on which the results of the econometric studies are still causing discussion: stability, cyclicality and sustainability. The second one deals with the reasons why people do remit, concluding that "the world is more balanced" than a clear-cut division between behavioural and economic motives. Finally, the third one tries to go through the relationship between remittances and development, topic on which lots of studies have been conducted but that is still far from a comprehensive and convincing conclusion.

## INTRODUCTION

Migrants' remittances commonly refer to certain transactions that are initiated by individuals living or working outside their countries of birth or origin and related to their migration. However, if we want to provide a more formal definition[1], three items under

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[1] The definition of remittances is currently under discussion by means of a Technical Subgroup on the Movement of Natural Persons (TSG) chaired by the United Nations Statistics Division. The TSG has been jointly created by the Development Data Group of the World Bank and the Statistics Department of the IMF.

which remittances are encountered[2] into the IMF Balance of Payments Statistics Yearbook (BOPSY)[3] need to be considered. These are compensations of employees, workers' remittances and migrants' transfers. The first category belongs to the subsection "income" and comprises wages, salaries, and other benefits earned by individuals in economies other than those in which they are residents, for work performed for and paid for by residents of those economies. The second one, belonging to the sub-category "current transfers", covers current transfers by migrant[4] who are employed in new economies and are considered residents there. Finally, the third one, that is accounted into the "capital transfers", arises in correspondence to the migration of individuals from one economy to another. It is made up of three components: the flow of goods (personal effects) accompanying the migrant, his flow of financial assets and the change in the stock positions due to the change in his residence status. All these data[5], like all the other components contained into the balance of payments framework, are compiled by relevant statistical authorities in member countries such as the central bank or the national statistical office who then report them to the Statistics Department of the IMF, where global tables are compiled and published in the annual report.

Nevertheless, the data contained in the BOPSY are far from being perfectly estimated so that any data comparison and aggregation have to be approached with caution[6]. First of

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See both WORLD BANK, "*Global Economic Prospects. Economic Implications of Remittances and Migration*", No. 34320, World Bank Publication, 2006, p. 87, and TSG (prepared by), "*Definition of personal remittances in the Balance of Payments Context*", in occasion of the Eighteenth Meeting of the IMF Committee on Balance of Payments Statistics, Washington, June 27-July 1, 2005, p. 3.

[2] Data users usually compute remittances as the sum of these three components: compensation of employees, workers' remittances and migrants' transfers. But some scholars just consider the first two components or the latter plus an additional category in the BOP that is named "other current transfers from other sectors". In OECD, "*Migration, Remittances and Development*", OECD Publication, Paris, 2005, p. 14

[3] What follows is the reason why a definition of migration is contained into the IMF, "*Balance of Payments Statistics Yearbook*", Washington, 2004, p. xxiii. "Because an economy is defined in terms of the economic entities associated with its territory, the scope of an economy is likely to be affected by changes in entities associated with the economy". Moreover, "Migration occurs when the residence of an individual changes from an economy to another because the person moves his or her abode. Certain movable, tangible assets owned by the migrant are, in effect, imported into the new economy. The migrant's immovable assets and certain movable, tangible assets located in the old economy become claims of the new economy on the old economy. The migrant's claims on, or liabilities to, residents of an economy other than the new economy become foreign claims or liabilities of the new economy. The migrant's claims on, or liabilities to, residents of the new economy cease to be claims on, or liabilities to, the rest or the world for any economy. The net sum of all these shifts is equal to the net worth of the migrant, and his or her net worth must also be recorded as an offset if the other shifts are recorded. These entries are made in the balance of payments where the offset is conventionally included with transfers".

[4] "A migrant is a person who comes to an economy and stays there, or is expected to stay, for a year or more". So individuals leaving their country with the intention of living in a new economy for a year or longer will be considered residents of the new economy (with a few exceptions, notably students, medical patients, diplomats and military personnel). In REINKE, J. and PATTERSON, N. (prepared by) , "*Remittances in the Balance of Payments Framework*", International Technical Meeting on Measuring Remittances, January 24-25, 2005, World Bank, Washington, p. 3

[5] All the data corresponding to the items contained into the BOP are not disaggregated by sending countries. So, for example, the exact amount of compensation of employees, workers' remittances and migrants' transfers, are respectively available for the recipient country, but the country from where those flows have been sent cannot be consulted.

[6] In the appendix of a recent study by GIULIANO, P. and RUIZ-ARRANZ, M. , "*Remittances, Financial Development, and Growth*", IZA Discussion Paper No. 2160, June 2006, p. 35, the authors describe how they managed the definition of the remittance variable and the data provided by the BOPSY 2004 in order to overcome such misrepresentations of the reality. They proceeded in four steps. They first followed the definition of remittances made up of the three components contained into the BOPSY. They then excluded the item "compensation of employees" from total remittances for nineteen countries out of 70 developing ones of the sample. Thirdly, they considered the additional item "other current transfers" for computing the

all, aggregate data are subject to variations of compilation[7] on a national basis as a consequence of a variety of concepts and methodologies that are not uniformly applied across all countries. With regard to this, the definition of residence is one of the most critical since some countries still consider their nationals working abroad for a year or longer as national residents (and therefore their earnings as compensations of employees), simply because they maintain strong linkages with their home country. Secondly, data sourcing and compilation is better in some countries than others, leading up to the fact that some of them do not report all the items to the Fund or, at worst, they do not send any data at all.

Apart from terminological issues, in most of the cases, data weaknesses and omissions depend on the difficulties in obtaining all necessary data[8]. The system through which remittances can be transferred is, indeed, multidimensional. The broadest distinction is between formal and informal channels, whose regularity depends on the possibility that the flows can be systematically and formally collected. The former include hand deliveries by the migrant himself or by a courier, ordinary mail, informal geographical systems such as "hawala" (in Pakistan and Bangladesh), "hundi" (in India and Nepal) or "mulas" (in Cuba)[9], and ethnic stores. According to the IMF there is a positive correlation between the limits of a country's financial capacity and the degree of informality of its transfer system[10].

However, comparative costs of transfers[11] have also to be mentioned as contributors to a fertile environment where informal channels can develop. As far as the trade off between them and formal channels is concerned, migrants often prefer to risk more instead of sending their money through regular ways. The latter encompass postal services, banks, credit unions and money transfer companies. Migrants behave very differently with respect to them. The Mexican migrants in the United States, for example, are sceptical as regards the banking system and so prefer sending their money home through international wire transfer services[12], such as Western Union[13] or Money Gram, even if it is much

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migrants' transfers for three countries and, finally, they made additional adjustments or additions to the series on the basis of information received from the IMF country desks and national authorities.

[7] The IMF, *ibidem*, (Part 3), contains the so called "metadata". They are a tool for understanding the differences in methodology, data sources and compilation practices applied by national compiling agencies.

[8] The World Bank states that if the remittances sent through informal channels could be estimated, their size would doubled in the official statistics. In WORLD BANK, *ibidem*, 2006, p. 85

[9] Even if the way of naming the system of transferring money differs from one country to another (and among the systems mentioned, "feich'ien" (in China), "chits/chops" (in China) have to be added too) the mechanism is almost the same everywhere: the trust. It involves two intermediaries. The first intermediary (called the "hawaladar" or the "mula") in the sending country (country A henceforth) receives funds in one currency from a person from country A to be transferred to another person in the recipient country (country B henceforth). The person in country A receives a code for authentication proposes. The hawaladar then instructs his correspondent in country B to pay an equivalent amount in local currency to the designated beneficiary, who needs to disclose the code to receive the funds.

[10] This is one of the result of the research project jointly done by the IMF and the World Bank after the First Convention on Hawala organized by the Central Bank of United Arab Emirates in May 2002. In IMF, "*Regulatory Frameworks For Hawala and Other Remittance Systems*", 2005, Monetary and Financial Systems Dept. , Washington, pp. 1-7

[11] They concern many variables such as the cost of the transfers, the risk encompassed by the delivery of the money, the distance of the agency, the speed of delivery of the money. The World Bank in particular has paid attention to the reduction of remittance fees as a tool for improving transfers' conditions and increasing the amounts of capital flows developing countries receive. In WORLD BANK, *ibidem*, 2006, Chapter 6

[12] In SURO, R. , "*Remittance Senders and Receivers: Tracking the Transnational Channels*", Pew Hispanic Center Report, November 24, 2003, Washington, p. 6

more expensive. The costs related to the fees or the minimum balance the intermediaries fix to transfer remittances, plus the nature of "passive consumers[14]" of the Latin migrants with respect to technology, and the legal status that prevents them from using this kind of service[15], contribute to this. On the other hand, Turkish banks, such as the Turkiye Is Baankasi or the TC Ziirat Bankasi, are the most important channels for the transmission of remittances from Germany to Turkey[16]. They are estimated to account for more than a half of all remittance transactions. This is especially due to quite low fees. Finally, the migrants from the MENA (Middle East and North Africa) countries and East Europe in both Italy and Spain usually use postal services to send their money back home. From the Nineties the "Eurogiro", which is a collaboration network of postal banks, has operated in direct cooperation with the Universal Postal Union to promote new solutions for postal financial organizations worldwide. Its strength has been its new, close, and friendly approach to migrant customers and the fact to have become quite widespread all over Europe. It indeed operates in more than 30 countries (including the European Union).

After having said what remittances are and how they can be transferred by migrants, we portray their geographical distribution. In most cases remittances, relative to other macroeconomic indicators, are significantly higher in low and lower middle income countries than in the other developing countries. They follow two main directions. The first one is that from developed to developing countries, in other words they move from the North to the South. While the second one is between developing countries, hence from South to South. The top receiving continent is Asia with its 40-46% of the annual total flows, the second one is the Latin America and Caribbean Area with their 17-22% of total flows and finally Central and Eastern Europe (15-18%). For countries instead, the first three recipients are India, China and Mexico in total terms and Bosnia and Herzegovina, Haiti and Lesotho in relative terms (as a share of national GDP). Finally, as far as sending countries are concerned, the World Bank has estimated that the United States and Saudi Arabia are the main pools of origin.

## STABILITY, CYCLICALITY AND SUSTAINABILITY

The scholars have spent much of their work discussing and testing three features related to remittances: stability, cyclicality and sustainability. They all describe remittances' behaviour through time and space but from different points of view.

### STABILITY

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[13] To see in details what the Western Union's business model consists of and how its service works or what its costs are, a precise description is available in FELLAHI, K. and DE LIMA, S. , "*Western Union and the World Market for Remittances*", in OECD, *ibidem*, Chapter 7

[14] There are many reasons behind this statement concerning the role of convenience, the influence of inertia, the strength of the force of habit and the lack of information. They are able to condition migrants' behaviour above every other rational optimal choice.

[15] The legal status impeded illegal migrants from opening a current account. The situation has been changing rapidly in the last four years with the growing acceptance by banks of the so called "matricula", an ID card issued by Mexican consulates for Mexican migrants who illegally reside in the US. For the procedure to obtain a "matricula" see SURO, R. , BENDIXEN, S. , LOWELL, B.L. and BENAVIDES, D.C. , "*Billions in Motion: Latino Immigrants, Remittances and Banking*", Pew Hispanic Center and Multilateral Investment Fund Report, Washington, 2002, p. 14.

[16] In OECD, *ibidem*, Chapter 6

Stability, in the sense of low volatility[17], consists of being less affected by the impact of favourable and unfavourable shocks than other capital flows. In other words, they would suffer less from any sharp withdrawal or euphoric surge that characterize foreign direct investments and development aid towards emerging markets. The rationale is behind the trend of the finance for development as a whole in the last twenty years. So if we compare their components, remittances have not only had a positive (or much more positive than ODA' s) trend but it has also been much more stable[18] than the others'. According to the OECD, while FDI and capital market flows fell sharply from 2000 due to the recession in the high income countries, migrants' remittances continued to grow, reaching USD 149.4 billion in 2002. And for the World Bank they would have amounted to $ 167 billion in 2005, up from $ 160 in 2004. In several recipient countries, remittances in 2004 largely exceeded the volume of ODA, and in certain case even that of the FDI or of income from the export of good and services. But what is striking is not only their positive trend but also their steady way of reacting to unexpected economic events. This would be due to two peculiar characteristics that distinguish them from FDI (Foreign Direct Investments) and ODA (Official Development Assistance). They are private and characterized by altruism and solidarity motives that are supposed to remain stable. So if we look at the figures provided by the International Organization for Migration[19], we can see that from 1995 to 2004 remittances have grown from 58 to 160 US $ billion, FDI from 107 to 166 US $ billion, while ODA to 59 to 79 US $. And, even from 1998 to 2001, when private capital flows declined in the wake of the Asian financial crisis, remittances to developing countries have continued to rise. Furthermore, if we consider the allocation of remittances, those intended for consumption would be less volatile than those intended for investment. Migrants may indeed increase remittances in times of economic hardship, especially in low income countries where their families may depend significantly on remittances as a source of income and may live at close subsistence levels. And even when the purpose behind is investment, remittances are less likely to suffer from those up and downs that characterize portfolio flows to emerging markets. This depends on migrants' stronger propensity (similar to the home bias in investment) to invest in their home country despite economic adversity than foreign investors'.

In addition, even when exceptions could be made to remittances' response to dramatic changes in economic activity in recipient countries, the decline of remittances and volatility have been smaller than those of other capital flows, meaning they are affected by the investment climate in recipient countries in the same manner as capital flows, though to a much lesser degree. In the Philippines, for example, remittances rose steadily as the investment climate improved in the early Nineties, becoming more volatile following the financial crisis in the late 1990s. Similarly, Turkey's remittance receipts increased for most of the 1990s but suffered a decline as the economy slipped into the crisis in 1999 and 2000. Estimates from the World Bank confirm such a trend after cross-countries comparisons of workers' remittances receipts relative to some key indicators as corruption (index of the International Corruption Research Group), inequality (Gini coefficient), financial development (M2/GDP), openness (trade/GDP), domestic debt (debt/GDP) and country risk (institutional investor rating). So remittance receipts averaged 0.5% of GDP in countries with a higher than median level of corruption, compared to 1.9% in countries with lower than median corruption. Countries that were

[17] This is how Ratha, D. defines stability in the WORLD BANK, "*Global Development Finance 2003-Striving for Stability in Development Finance*", World Bank Publication, 2004, p. 161

[18] See the figure in WORLD BANK, *ibidem*, p.158

[19] In GHOSH, B. (ed.) , "*Migrants' Remittances and Development: Myths, Rhetoric and Realities*", International Organization for Migration Publication, Geneva, 2006, p. 13

more open or more financially developed[20] also received larger remittances. On the other hand, stability is sometimes tested through the evidence of altruistic motives behind the decision to remit[21], seeming reasonable that these motives remains firmly fixed. This can be captured in the following way: a negative long run correlation of remittances with wage in the home country, or a negative correlation between transfers and real GDP in the home country (countercyclicality), or a positive correlation between remittance and income in the country of residence (the so called implied “willingness to share”). It is important to remark that stability can be also intended in the sense of resistance to the sending country’s economic activity. As regards to this, the nexus between US business cycle and workers’ remittances have also been studied, leading again to a steady reaction as far as the latter are concerned[22].

Since much more work needs to be done to compare remittances, FDI and ODA, but everybody seem to agree on the reliability of the results, it is worth mentioning what the IOM is worrying about stability. First of all, they claim that gross inflows of remittances (or credits) should be adjusted against the recorded debts (or outflows) in the balance of payments framework, especially for those countries that are at the same time recipient and sending ones. Otherwise, overestimation can be a possible biased result. Secondly, they suggest migrants remittances are not considered a substitute for ODA, that are transactions between governments, hence bound to projects to be implemented in the recipient country.

## CYCLICALITY

The starting point for defining cyclicality is a recent work[23] in which this property is described as the correlation between the cyclical components of net capital flows into a country and its output. The migration literature has then borrowed this definition for depicting the relationship between the cyclical components of remittances and recipient countries’ level of GDP growth. So, remittances are said to be countercyclical (procyclical) when the correlation between their cyclical components and output is negative (positive), in other words, the economy would borrow from (lend) abroad in bad times (remittances in/out) and would lend (borrow) in good times (remittances out/in). On the other hand, they are acyclical when the above correlation is not statistically significant, meaning that the pattern of international borrowing and lending is not systematically related to the recipient country’ s business cycle. The reason why the debate among scholars is so heated on this issue depends on the possibility for countries of using or intending to use future potential remittances as collateral for international loans in periods of economic downturn in order to overcome liquidity constraints.

As for stability, the critical starting point for dealing with cyclicality are the assumptions behind the decision to remit. As a matter of fact, the literature is divided into two streams of thought depending on the prevalence of consumption smoothing or portfolio motives.

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[20] In WORLD BANK, *ibidem*, 2004, p. 62, Ratha, D. states that during 1996-2000 countries that were more financially developed received more remittances. We will see that, assuming procyclicality, opposite conclusions are reached by GIULIANO, P. and RUIZ-ARRANZ, M. , *ibidem*, p. 10-14

[21] In BOUHGA-HAGBE, J. , “*A Theory of Workers’ Remittances With an Application to Morocco*”, IMF Working Paper No. 04/194, October 2004, IMF Middle East and Central Asia Dept. , pp. 1-35. We will see later in the essay that assuming altruistic motives behind the decision to remit is still an open issue.

[22] In SURO, R. , BENDIXEN, S. , LOWELL, B.L. and BENAVIDES, D.C. , *ibidem*, 1999, p. 2

[23] See KAMINSKY, G. , REINHART, C.M. and VEGH, C.A. , “*When It Rains, It Pours: Procyclical Capital Flows and Macroeconomic Policies*”, 19th Conference on Macroeconomics (organized by M. Gertler and K.S. Rogoff), August 13, 2004, pp. 1-37

If the former is assumed, countercyclicality is straightforward. Remittances would be compensatory in the sense that they would compensate for poor economic performance in the home country. On the other hand, procyclicality would be linked to a search of investment opportunities, because migrants would tend to send their remittances when the economic situation in the country of origin is favourable.

Moreover, three other variables need to be considered. First of all, the passage of time, since it may change the cyclical properties of remittances. Then the economic situation in the country of destination needs also to be encountered. Regarding to this, even if remittances move countercyclically with the output in the home countries of migrant workers, the cycle in home and host country economies may move together in synchrony, thereby making it difficult for migrant workers employed in a crisis-struck economy to help out family members facing similar conditions back home[24]. Finally, the average level of remittances on which the recipient country can count matters a lot.

The formal way cyclicality can be tested consists of evaluating the country correlations between the cyclical components of remittances and GDP. First of all, the trend within each series need to be removed to identify stylized facts of business cycles and analyze cyclical nature of remittance receipts. Detrending each series by removing the estimated trend makes it possible to separate fluctuations (cyclical components) around the trend of each data series, making examination of the statistical properties of the co-movements of deviations of output and real remittances from their respective trend. When respective trends are properly filtered out from real remittances and output series for each country, the remaining cyclical components would be stationary with zero mean for each variable. Then, contemporaneous and asynchronous cross correlations between the cyclical components of respective series can be calculated to identify cyclical characteristics of remittances. Procyclicality (countercyclicality) of remittances in this context refers to the tendency of real remittances to move above its trend, whenever the corresponding real output variable is above (below) its respective trend. In the absence of such a tendency, remittances and output are said to be acyclical.

A step beyond cyclicality has been recently made in order to assess if financial development smoothes or amplifies the cyclicality of remittances[25]. Assuming portfolio motives (hence procyclicality) behind the decision to remit, the authors try to address if more developed financial systems are associated with more or less procyclicality. The a priori paradoxical result suggests that remittances are more procyclical in countries with shallower financial systems, namely that migrants tend to seek more investment opportunities in countries with less developed financial sectors, while, on the other hand, remittances are more countercyclical in countries with deeper financial systems. If these results were going to be confirmed the macroeconomic consequences would be of great value.

## SUSTAINABILITY

Sustainability implies the relationship between migrants' duration of stay in the destination countries and the level of remittances sent back home. One of the oldest and influential article on remittances already used to deal with this third and last remittances' feature, highlighting an inverse relationship between the two variables[26]. The rationale for

[24] In SAYAN, S. , "*Business Cycles and Workers' Remittances: How Do Migrant Workers Respond to Cyclical Movements of GDP at Home?*", IMF Working Paper No. 06/52, February 2006, IMF Institute, p.3

[25] In GIULIANO, P. and RUIZ-ARRANZ, M. , *ibidem*, pp. 14-16

[26] In LUCAS, R.E.B. and STARK, O. , "Motivations to remit: Evidence from Botswana", *Journal of Political Economy*, Vol. 93, No. 5, 1985, pp. 908-913

the negative sign is related to the diminution and at worst the cease of the remittances transferred to the home country as time goes by. In particular, it is argued that this is a feature that would manifest after five year (during which the amount of remittances would continue to rise) of permanence abroad.

The subsequent literature, except for the initial piecewise increasing behaviour, has been firmly confirming the same conclusions. And what is more important is that any assumption related to the motives of remitting (either altruistic or self interested) is not conditional. So, for example, if pure portfolio motives are present, the migrant would remit since he expects to come back home sooner or later. But if at the end he does not, pure self-interested motivations would have no sense[27] and remittances would start to decrease or cease. On the other hand, if altruistic reasons are present, the ties with the home country can become less stringent in time. Finally, even in presence of what are called "enlightened self-interested" motives the negative relationship holds. What is assumed behind this last case is the presence of an "informal contract" between the migrant and the family left in the country of origin. So the intention of the former, for example, would be that of repaying the latter for the costs due to his human capital formation incurred before the departure, but once they have expired the level of the transfers would tend to weaken.

The IOM has recently argued that a crucial moment towards the negative relationship between the time spent abroad and the intention to remit, is the change in the legal status of the migrant or the acquisition of an open-ended labour contract, since they would accelerate the weakening of the bonds with the sending countries. As regards to this, we could perform the nexus between the number of permanent visa issued by a country of destination and the change in the amount of remittances in the respective countries of origin of the migrants (just residents). We should expect a negative coefficient if the lack of sustainability holds.

Concerning the definition of sustainability but taking in consideration just the propensity to remit of the highly skilled migrants, a remarkable step forward as far as both the brain drain and the remittance literature are concerned has been taken in the last few years[28]. Given that skilled migrants tend to stay longer in the host country and are more likely to family reunifications, the inverse relationship between the time spent abroad and the intention to remit holds whenever the so called "reunification effect", meaning the intention of the migrant of living with his family in the host country, is stronger than the so called "wage effect", the potential increase of the amount remitted due to the higher skills embedded by the migrant. In addition to this, we have also to say that the fact that the brains usually come from relatively wealthier families can matter and so needs to be controlled.

We could question whether a negative (in the sense of lack of) sustainability associated to a steady increase of the total amount of remittances can be considered a contradictory result. In our opinion, this is not. If we, indeed, consider the figures of the total migration flows in the last two decades, we can see that despite the restrictive policies adopted by

[27] This is why an interesting analysis could be conducted exploring the relationship between the circulation of the highly skilled people and the intention to remit. The result, meaning a positive relationship, could lead to another conclusion in favour of the so called "brain circulation".

[28] See FAINI, R. , "*Remittances and the Brain Drain*", IZA Discussion Paper No. 2155, June 2006, pp. 1-19. The conclusions reached by the author are innovative because one of the argument that is often recurrent in favor of a beneficial brain drain (brain gain) is the importance of the amount of money the brains would send home in exchange for the loss of human capital. With regard to this he states that the brains would not repay their sending countries in any way.

recipient countries, numbers have continued to rise[29], strongly conditioning remittances' trend more than a still vague remitting behaviour.

## A MICRO APPROACH: WHY PEOPLE REMIT

When considering a micro approach to remittances, the question why migrants decide to give up fractions of their disposable income to send them back to their country of origin needs to be answered. We first deal with the most general framework that can be assumed considering jointly what the New Economics of Labour Migration (NELM), the life course's argument and the articles on social networks have separately dealt with, and then we shift from it to a more specific and rigorous classification of the remitting decisions. The rationale is that, behind the most common motives encountered by the literature on remittances[30], different kinds of human beings (and so preferences) are present, and beyond them an unevenly influential background made up of many components[31]. These can be classified in the following way:

- *Demographic component*
  It includes the age of the migrant, his gender, marital status, family size and the location of key family members.
- *Cultural component*
  The level of education of the migrant, his language skills, his level of integration in the host country and the role of the social networks are crucial variables. Regarding the last one, three approaches have been proposed[32]: social networks of migrant in the destination country, social networks spanning destination and origin communities created by circulation of migrants, household's social networks at origin. In particular, as far as the third one is concerned, measures from sibling and rice harvest help networks can be used (including both network measures within villages and measures of network ties outside the village).
- *Economic component*
  Employment of the migrant (fixed or open-ended contract), level of income in the host country, level of income of the household in the home country, needs-tested transfers

[29] "Migration has gained momentum in all the MED-MENA countries. Not only are the numbers of migrants sizeable, but their rate of growth largely exceeds that of total population". In FARGUE, P. (ed.), "*Mediterranean Migration 2005 Report*", Robert Schuman Centre for Advanced Studies, European University Institute, Florence, 2006, p. 5

[30] One of the most comprehensive classification is that provided throughout RAPOPORT, H. and DOCQUIER, F. , "*The Economics of Migrants' Remittances*", Working Paper No. 236, December 2004, Stanford Center for International Development, Stanford University, pp. 11-36. The following motives why migrants remit are listed: altruism, exchange, strategic reasons, insurance, investment motives, inheritance and finally mixed motives. Our list will be limited to four items since we think it is explanatory enough for describing all the remitting behaviour's features.

[31] The reason why this general framework (and their components) cannot be left out of consideration is due to the growing interest of the scholars for a micro approach as far as the literature on remittances is concerned. This can be a starting point for conducting country specific household surveys.

[32] In PIOTROWSKI, M. , "The Effect of Social Networks at Origin Communities on Migrant Remittances: Evidence from Nang Rong District", *European Journal of Population*, Vol. 22, 2006, p. 69. However, one of the first and most important approach to the "network component" is that of CARRINGTON, W. J. , DETRAGIACHE, E. and VISHWANATH, T. , "Migration with Endogenous Moving Costs", *American Economic Review*, Vol. 86, No. 4, September 1996, pp. 909-30. Remittances are not mentioned in that context but if we endogenize the decision to remit (in other words, if we assume that one of the reasons why the migrant leaves his country is for remitting) that can be explanatory as well (even if just from a destination country's network perspective).

received by the migrant in the country of destination[33], and income risk belong to this economic component. In particular, the last variable can be studied either from a migrant's (host economy's risk variables) or from his household perspective (origin country's income risk).

- *Migration component*
  The time spent abroad by the migrant, the nature of the migration decision (endogenous or exogenous), which kind of laws concerning family reunion are present in the destination country, how is the procedure for obtaining the legal status there, and the state of the naturalization status of the migrant matter a lot[34].
- *Macro component*
  It is reasonable to expect that there are some macroeconomic factors, both in the host and in the home country, which may significantly affect the migrant's portfolio management choice, hence the flows of remittances. They can be the following ones: interest rate differential, the level of inflation, the financial spread, the black market premium, exchange rates, national policies implemented as incentive schemes, political stability[35].

Which of these components is then significant or how some of them can combine together determine the peculiarity of each single micro-framework. The literature distinguishes among pure altruism, self-interested motives, loan repayment and insurance motives.

Under the first case, the migrant derives utility from the utility of those left at home since he concerns about them. This is the most intuitive, tested and widespread presumption. It implies that remittances increase with migrant's income and degree of altruism, and decrease with the recipient's income and, more interestingly, degree of altruism. But, since the parameters concerning the degree of altruism cannot be observed, the main testable implications are those related to the economic and demographic components described above. First, the amount of remittances should increase with the migrant's income. Secondly, transfers cannot increase with the recipient's income. Thirdly, the sustainability of remittances should be inversely related to the presence of key members of the family in the country of destination. Fourth, countercyclicality should hold.

On the other hand, behind self-interested motives, there is a migrant that considers just the advantage to himself when making decisions, and acts for his own benefit. On this regard, many situations can be thought of. He can remit money as to "buy" various types of services such as taking care of his assets (e.g. land, cattle) or relatives (children,

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[33] See LOWELL, B.L. and de la GARZA, R.O. , "*The Development Role of Remittances in U.S. Latino Communities and in Latin American Countries*", A Final Project Report, Inter- American Dialogue, 2000, pp. 19-20

[34] The Canadian case is peculiar in this sense since the vast majority of the foreign-born residents are admitted on a permanent basis and often accompanied by their immediate families. Finally, Canada's family reunification policy permits sponsorship of parents and grandparents with no explicit waiting period thus potentially blunting the motivation to remit. In DEVORETS, D.J. and VADEAN, F.P. , "*A Model of Foreign Born Transfers: Evidence from Canadian Micro Data*", August 2005, Conference Draft, discussed for the "XVIII Villa Mondragone International Economic Seminar on Europe: A New Economic Agenda?", 26/06/2006-27/06/2006, Villa Mondragone, Frascati, Roma, pp. 1-41

[35] In regard to this, the literature is not so prolific. Nevertheless, two studies have been conducted for Turkey concluding how political stability and periods of military regimes have affected remittance transfers from 1963 to 1993. Compare what the OECD states about the analysis of Straubhaar, T. in OECD, *ibidem*, 2006, p. 32 and TUNKAY AYDAS, O. , METIN-OZCAN, K. and NEYAPTI, B. , "Determinants of Workers' Remittances. The case of Turkey", *Emerging Markets Finance and Trade*, Vol. 41, No. 3, May-June 2005, pp. 53-69.

elderly parents) at home. Then remittances can be driven by a "biased altruism[36]", under which the aspiration to inherit is powerful[37], or by the intention of acquiring or enhancing prestige in his country of origin's local community. Finally, remittances can also be instrumental in reaching a predetermined saving target or in investing in real estates. From all these frameworks, it is evident how one of the presumption behind pure self interest is the migrant's intention to return to his country of origin, hence his strong "home attachment". In this case, testable implications could be again those related to the demographic and the income components but also to the macro framework. First, sustainability should hold as long as the migrant stays abroad but then, after his departure, should drop at once. Secondly, the amount transferred should increase with the level and the quality of the service to be offered, increase with the level of migrant's income too, but should react ambiguously to an exogenous increase in the recipient's income.

We can reasonably argue that remittances in both the inheritance and the so called "exchange[38]" perspectives, take place when there is a welfare gain for all the parties concerned. So, except in the case of perfect mutual altruism, some arrangements need to be reached between the senders and the receivers. Two variables generally matter a lot. The first one is the role of the bargaining power, especially in the former framework, while punishment devices and social norms affect the latter one. So, in the first case a testable implication could be the inverse correlation between the unemployment at home and the level of transfers sent home. Since it is assumed that the level of education and the employment condition give more bargaining power to the related party. While, on the other hand, in the second case, the amount of remittances should increase with the remaining household's assets and income, the probability of inheriting, the migrant's wealth and income, and should decrease with the his own degree of risk aversion.

Since both pure altruism and pure self interest alone may be inadequate or partially explanatory in describing the extent and the variability of remittances, an alternative theory is therefore provided, viewing remittances as part of an intertemporal, mutually beneficial contractual arrangement between migrant and home. It is important to stress that this theory (called as "tempered altruism" or "enlightened interest") is not merely the intersection of pure altruism and pure self interest but rather offers a quite separate set of hypotheses. The first hypothesis consists of the endogenous nature of the remitting decision. This means that it is one of the consequence, if not the most important one, of the decision to remit. This originates from the household's evaluation which considers a Pareto-superior strategy to allocate certain members of the family as migrants, and manages remittances as the mechanism for redistributing the gains. The second hypothesis is that arrangement between the migrant and the family are voluntary and thus must be self-enforcing. The third set of hypotheses is related to the prevalence of one of the following components: investment or risk. If the former exists, remittances can be seen as a loan repayment, while in the latter case they become part of an insurance contract.

In the first case, that of a loan agreement model, remittances serve as repayment (once the investment starts to pay off) for both the pre-migration investments in the migrant's human capital and the migration costs, under the assumption that the "parent company[39]"

[36] Actually, one cannot probe whether the true motive is one of caring or more selfishly wishing to enhance prestige by being perceived as caring. In LUCAS, R.E.B. and STARK, O. , *ibidem*, p. 904

[37] The level of remittances can be influenced by parents' ability to reward good behaviour through the promise of bequests. As in HODDINOTT, J. , "A Model of Migration and Remittances Applied to Western Kenya", *Oxford Economic Papers*, Vol. 46, No. 3, 1994, pp. 459-476, where the bequest is represented by family's land.

[38] In RAPOPORT, H. and DOCQUIER, F. , *ibidem*, p. 13

[39] "The family acts as a transnational corporation of kin with subsidiaries abroad". This is what the author says underlining how the role of the traditional culture implements a loan agreement model. People from

has before lent to the future migrant to finance his education in the home country and his establishment in a foreign country, where returns on investment seem higher than in the country of origin[40]. Since both education and migration are costly we can imagine that just richer families can take advantage from such an investment opportunity, where the richer the family the higher its bargaining power. Testable implications of this framework can be the positive relation between remittances' sensitivity and migrant's income, migrant's education and the distance from the family (the higher the distance the higher the migration costs). At the same time, the adverse short run shocks in recipient economy should positively affect remittance transfers too, but the effect of recipient's long run income is controversial. Finally, higher unemployment at home, increasing the value of education, should increase the level of remittances from abroad.
In the implicit co-insurance model, two kinds of hypotheses are assumed. They imply either being insured from the migrant's point of view from the income risk in the country of destination and being insured from the household's point of view from income risk in the home country. So, in the first step the migrant is the insuree and his household the insurer: the family pays for the migration costs and for possible initial expenses in the destination country. While, in the second one, the inverse holds: migrant remittances insure for unanticipated household's income shortfall[41]. This kind of model is widespread especially in rural areas of low income countries where income volatility, fragmentation of the financial markets and poor insurance markets give rise to a variety of such informal contracts. Foreign markets shocks are generally uncorrelated to those in the home country, so families think that migration could be a source of income in case of future agricultural drops. As far as the testable implications are concerned, the insurance and the altruistic motives share similar predictions with respect to the sign of the effects of income levels on the amount remitted. However, they differ with respect to the predicted timing of remittances, since remittances for insurance motives are more likely when income at origin is more volatile, meaning they should be sent on a more irregular basis (so lesser stability should hold).

Obviously, one should not expect remittances to be driven by a single motive. In reality, a combination of different motives applies, with the exact mixture varying over time and places. This is due not only to the fact that different individuals may be heterogeneous in their motivations to remit, but also that different motivations to remit may coexist within the same individual. However what the evidence seems to confirm is the constant presence of altruistic components behind the migrant's decision to send money back home.

## REMITTANCES AND DEVELOPMENT

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Tonga and Western Samoa behave without being conscious of such a self enforcing pact. They think they are "giving money" but they are actually "repaying for something". In POIRINE, B. , "A Theory of Remittances as an Implicit Family Loan Arrangement", *World Development*, Vol. 25, No. 4, 1997, pp. 589-590

[40] There exist even more complicate loan agreement models in which remittances continue to be sent by the migrant even after the total repayment of both the education and migration costs incurred by his family. It is assumed a second stage in which migrant remittances are loans made by migrants to young relatives to finance their education, until they are themselves ready to migrate. Finally, in a third stage remittances would be either a sort of retirement subsidy paid by this new generation migrant to the old one once having come back in the country of origin, or self interested transfers made by the old migrant with the intention of ensuring his own assets at home on his return.

[41] The two hypotheses can also be considered separately. As in AMUEDO-DORANTES, C. and POZO, S. , "Remittances as insurance: evidence from Mexican immigrants", *Journal of Population Economics*, Vol. 19, May 2006, pp. 227-254, where remittances can insure the migrant himself from future shocks in the host economy even after the job search. In this case the migrant, who behaves as an insurer of himself, wants to ensure a decent return in his home country.

Following the definition of economic development as a multidimensional approach that takes into consideration not only economic levels but also the distribution of income, welfare and opportunities, the relationship between remittances and development is going to be analysed in this section where households' and the whole country's perspective are treated separately.

## HOUSEHOLD'S PERSPECTIVE

From the household point of view, a first important effect is the poverty alleviation. Actually, the level of domestic disposable income increases since remittances go directly from the migrant to his family or friends (third party remittances). Evidence has showed that either the poverty headcount ratio, and the level of poverty depth (poverty gap ratio) or that of poverty severity (square of the poverty gap ratio) can be affected[42]. Of course, the level of remittances matters a lot in enhancing such an effect. For example, it has been confirmed that the higher it is the steeper the headcount ratio's increase (from 5 to 12.2 percentage points). At the same time, the initial level of the headcount ratio matters a lot. The higher to start with it is, the stronger the effect of remittances on poverty. These results have been obtained thanks to poverty simulations, even if one of their weaknesses is the risk of incurring in reverse causality problems[43]. Cross-country regressions have been more efficient in dealing with that, showing a decrease of the poverty gap ratio equal to 3.5%[44]. The same holds for household surveys, although the lack of proper data on remittances does not allow us to rely on their conclusions.

Strictly linked to the issue of poverty reduction is that of inequality, because income growth is valuable for recipient households but even more important is the distribution of its benefits among different groups in society. Inequality is usually empirically measured by the Gini coefficient[45]. Household studies have showed opposing results in terms of correlation, either positive or negative, and dynamics, either in favour or not of a U-shape relationship between migration (where remittances are included) and inequality. The variety of these conclusions depends on three important factors. The first one is the initial level of inequality, since the higher it is, the stronger is the evidence in favour of a negative relationship (it is indeed assumed that just the richest can migrate). The second one consists of the nature and the level of the migration costs, where they can depend on the network component and/or the distance between the sending and the receiving country. It has been demonstrated that the higher they are the lower the probability that the poorest migrate and, consequently, remit. As far as this last issue is concerned, the literature[46]has recently dealt with the so called "trickle down" effect, that is the effect of

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[42] For the definition of poverty and its measures see RAY, D. , *ibidem*, Chapter 8. By headcount ratio we mean the number of people below the poverty line divided by total population. By poverty gap ratio, the ratio of the average of income needed to get all poor people to the poverty line, over the mean income of the society.

[43] Because the question that the simulation is answering is whether and how much poverty would decrease if remittances disappeared. Under this framework the direction of the causality between remittances and poverty cannot be controlled. Is it poverty that affects migration rates, hence remittances, or do remittances foster poverty alleviation?

[44] In ADAMS, R.H. and PAGE, J. , "*International Migration, Remittances and Poverty in Developing Countries*", World Bank Policy Research Working Paper No. 3179, December 2003, p. 30

[45] For the definition of the Gini coefficient and other measures of inequality see RAY, D. , *ibidem*, Chapter 6. The Gini coefficient takes the difference between all pairs of incomes and simply totals the absolute differences. It is then normalized by dividing by population squared as well as mean income. According to the World Bank one of the weakness of the Gini coefficient is the inability to capture income mobility, in WORLD BANK, *ibidem*, 2006, p. 122

[46] In DOCQUIER, F. and RAPOPORT, H. , *ibidem*, p. 64

the increasing migration flows on the reduction of migration costs, hence a widespread possibility to migrate, for the poorest people too. If evidence confirmed the validity and the sustainability of such an effect for recipient countries, the results concerning inequality and remittances would be much more homogenous (even because in the last few years the trends concerning migration have been increasing almost everywhere).

The third effect on household income depends on how remittances are spent. They can be indeed consumed, saved or invested. Remittances are an important source of income for many low and middle income households but how this money is used affects in a different, and sometimes opposite way, people's welfare. As far as consumption is concerned, remittances can be good in terms of consumption smoothing, but we will see that on the other side, at aggregate level, an increase of the magnitude of consumption can foster inflation. And even the first effect does not always hold. Positive evidence exists for remittances that are countercyclical[47] or pushed by insurance motives[48], but this could be the case of middle income families, since first of all poor families would not be able to send their individuals abroad, and secondly even if this were the case, their consumption pattern would remain the same, or would change in a much slower way[49].
On the other hand, households can decide to save or invest remittance transfers. According to the World Bank, five factors would condition the prevalence of that. First of all, the household's degree of dependence on remittances. The more households are dependent, the less they save. Secondly, the nature of the recipient, since women are more likely to prefer a smoother consumption path. Third, the existence of a conditional targeted destination upon the transfers (education expenditures, for example). Fourth, the income level of the recipient family or the presence of credit constraints. However, whatever is the reason why households decide to invest, and taking in mind the welfare perspective, according to which an extra dollar of investment is only better than an extra dollar of present consumption if the marginal social value of investment is greater than its marginal private value, investments can be either destined to physical capital or human capital. Under the former case, investments can be fostered by the migrant himself or by his household. In regard to this, remittances can enhance entrepreneurship in the recipient country, being allocated in construction, housing, agricultural production and technology. On the other hand, the latter framework is fundamental especially from an endogenous growth perspective: relaxing liquidity constrains would impinge on human capital formation (education and health). Remittances may be conditional upon a loan agreement, or they can be inserted in a household's forward looking framework. In the former case, the migrant, after having repaid for the educational expenditures incurred by his family, continues to send remittances (loan's second stage) in order to provide education to the new young generation. While, in the latter case, the recipient household decides to allocate its new entries in children' education. From this perspective, remittances can be a good instrument in decreasing child labor, too. But, although remittances are fungible and education has a relatively high income elasticity, so one would expect remittances to have a significant positive effect on the educational attainment of children from households with migrant members, a recent sociological

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[47] Insurance motives are usually linked to the probability of natural disasters and households' shocks. As a matter of fact families usually send their migrants to other countries where the covariance between income shocks with the home region is smaller. In OZDEN, C. and SCHIFF, M. (eds.), "*International Migration, Remittances & the Brain Drain*", No. 33988, World Bank and Palgrave Macmillan, Washington, 2006, Chapter 3.

[48] In LUCAS, R.E.B. and STARK, O. , *ibidem*, pp. 904-906

[49] In LOWELL, B.L. and de la GARZA, R.O. , "*The Development Role of Remittances in U.S. Latino Communities and in Latin American Countries*", A Final Project Report, Inter- American Dialogue, 2000, pp. 21-23

argument[50] indicates that the absence of one of the parents can be detrimental on children' schooling achievements when credit constraints are the most binding. So, at the end, even from an endogenous growth perspective, the conclusions are unclear.

A last but not least effect of remittances on households concerns labor supply. A high dependency degree on remittances, accompanied by economic uncertainty and asymmetric information, would lead households to incur in the so called moral hazard[51] problem. Instead of exploiting the possible positive externalities related to remittances, the recipients would prefer to bribe the migrant substituting effort with leisure. This would have negative effects in terms of growth. However, a recent work[52] has argued that the probability of the moral hazard would depend on the level of financial development, too. The higher it is, the stronger the former would be, as a consequence of the fact that less stringent liquidity constraints would discourage more labor supply.

## COUNTRY'S PERSPECTIVE

Linked to the previous arguments is the so called multiplier effect. Either remittances are consumed or invested, they can have an important multiplier effect. One remittance dollar spent even for basic needs will stimulate retail sales, which then stimulates output and employment. Some studies have found that one dollar sent from migrants abroad would boost the recipient country's GNP by an increase that ranges from 1.8 to 2.5[53]. However such multiplier effects would occur where output is constrained by insufficient demand. But in many developing countries where unemployment (or underemployment) is widespread, hiring costs are high, and the demand side has increased as a consequence of the new transfers, inflationary shocks are likely to occur, so stifling the growth effects.

Another consequence of the low speed of reaction of the supply side in the recipient country may be a trade balance deficit. It consists of a disproportionate increase of imports in order to neutralize the increased internal demand. Except for the demand for imports towards cheap capital goods that can be used as substitutes for other imports and/or to produce exportable goods, this effect is detrimental for the recipient country's growth..

Similar to the "boomerang effect" (often called "German transfer problem", too) just mentioned, though differently motivated, is the so called "Dutch disease". This refers to a steep currency appreciation that the recipient country sustains as a consequence of a surplus in the balance of payments due to the large inflows of remittances. As a result, once again, the country would suffer of an emerging lower export competitiveness, due to the deterioration of its terms of trade. However, neither empirical results have confirmed the previous effects[54], nor theoretically it has been shown[55] that the conditions required for impoverishing transfers to materialize are so weak (on the contrary, they are very restrictive).

Still on the balance of payments issue, another argument in favour of beneficial remittances consists of their effect on the recipient country's shortages of foreign

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50 See HANSON, G.H. and WOODRUFF, C. , "*Emigration and educational attainment in Mexico*", Mimeo, 2002, University of California at San Diego, p. 17

51 In CHAMI, R. , FULLENKAMP, C. and JASHJAH, S. , *ibidem*, p. 15

52 See GIULIANO, P. and RUIZ-ARRANZ, M. , *ibidem*, pp. 17

53 Various estimations from OECD, *ibidem*, p. 26, and WORLD BANK, *ibidem*, p. 124-125

54 See OECD, *ibidem*, p. 27

55 In DOCQUIER, F. and RAPOPORT, H. , *ibidem*, p. 51

exchange[56]. It is, indeed, plausible assuming that a developing country' liquidity statement is overdrawn so that remittances can relax its deficit. Their impact would be immediate since their use is not tied to a particular project with high import content, they bear no interest and they do not have to be repaid.

From a financial perspective, the following effects are of great value, too. First of all, credit worthiness can be improved by country's remittances, thereby enhancing the country's access to international capital markets. The World Bank points out that a key indebtness indicator, such as the ratio of debt to exports of goods and services, would increase significantly if remittances were excluded from the denominator. Two studies concerning Lebanon and Haiti have confirmed that if remittance transfers were included, their credit ratings would increase by two notches. Secondly, another way for the recipient country of collecting international capitals is also through the securitization of future remittances. Using this structured financial technique, several banks in developing countries have been able to raise relatively cheap and long term financing from international capital markets. This has happened in Brazil for example and in Turkey, too. Other two important arguments have also been recently proposed. The first one argues that stable and acyclical remittances, reducing macroeconomic instability, decrease the probability of financial crises in emerging markets[57]. By financial crises, current account reversals are taken into consideration, defined as dramatic adjustments of current account deficit that may be triggered by sudden stops of foreign capital. They, in turn, can be due to foreign investors' loss in the face of worsening fundamentals, such as lower reserves (decreasing stock of international reserves over GDP) or higher external debt (increasing stock of external debt over GDP). The authors have found that a high level of remittances, as a ratio of GDP, makes the effects of these shocks less stringent, meaning a lower probability that foreign investors suddenly flee out of emerging markets. Moreover, a threshold effect of remittances has been provided, since the mechanisms just described would be much stronger when remittances are above 4% of GDP. If we consider the figures provided by the OECD in its last report, the last country among the top 30 with the highest level of remittances received as a share of GDP is Bangladesh with its 6.6 % of GDP. We can reasonably define these two points per cent (at least) as an encouraging perspective as far as macro stability is concerned.
On the other hand, the second one is related to the role of procyclical remittances as financial substitutes in countries with a lower financial depth[58]. The authors back up that, in less developed financial systems, remittances can be used to overcome liquidity constraints, providing the enough collateral to borrow and/or finance their investments. If these results are going to be confirmed by future works, this would be very important from a theoretically perspective since it is as if we stated that from a financial development's point of view, remittances can enhance dynamic convergence[59]. And from an empirically perspective, too since we would be able to understand why remittances effects are so controversial, hence proceed towards different assumptions.

Still from an indirect endogenous perspective, the relationship between remittances and brain drain has been considered. Unfortunately, until now, not so much work has been

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[56] See GLYTSOS, N.P. , "The Role of Migrant Remittances in Development: Evidence from Mediterranean Countries", *International Migration*, Vol. 40, No. 1, 2002, pp. 5-26

[57] In BUGAMELLI, M. and PATERNO', F. , "*Do migrants' remittances reduce the probability of financial crises in emerging markets?*", Bank of Italy, Research Dept. , May 2005, pp. 1-20

[58] In GIULIANO, P. and RUIZ-ARRANZ, M. , *ibidem*, pp. 16-17

[59] From an endogenous point of view, if we consider countries with a similar level of initial human capital but different income levels, countries with a lower income per head should grow faster, since the further they are from the equilibrium the faster they should run to catch up. This is what we mean by dynamic convergence.

done and a few articles have shown that remittances, that could in principle compensate the recipient country for the loss of human capital, do not contribute to this in any way.

Finally, a last detrimental macroeconomic implication of remittance transfers is the possibility that terroristic groups[60] could divert these resources from potentially positive uses to suspicious purposes. This is why more and more attention has to be paid especially to informal transfer channels and why the IMF, during the Second Convention on Hawala in 2004, has pressed for more efficient national supervisory systems.

## CONCLUSIONS

On the occasion of the High Level Dialogue on International Migration and Development[61], the Secretary General of the United Nations Kofi Annan declared "*We are only beginning to learn how to make migration work more consistently for development. Each of us holds a piece of the migration puzzle, but none has the whole picture. It is time to start putting it together*".

We reasonably think that an important piece of this puzzle are migrants' remittances[62]. Because their flows to developing countries have steadily increased in the last twenty years, leaving behind both the Official Development Assistance and the FDI. Because they can play a potential key role for recipient countries' economies both from a micro and macro perspective. And, finally, because empirical evidence has showed so far that their benefits seem to prevail over negative effects.

In this article we have presented the kernel of the migration literature on remittances. We started from their three most debated features: stability, cyclicality and sustainability. We then moved to the motives driving remittances and, finally, their relationship with development.
Both sustainability and cyclicality are the most controversial issues, as they are probably the most critical in terms of economic development. The former is fundamental from an endogenous point of view. In terms of dynamic convergence, if sustainability holds, less financial developed countries could redeem themselves fostering riskier and more productive investments, "substituting" their liquidity constraints with procyclical remittances. On the other hand, from a "brain gain" perspective, if the inverse relation between the time spent abroad and intention to remit (so the lack of sustainability) is going to be confirmed in future works, the "brain circulation" could be beneficial both from a human capital and a remittances point of view. This would imply that, from a policy perspective, the countries of origin should become much more and more interested in attracting back home their brains from abroad, meaning implementing sound programs towards this object, such as temporary visa permits, research allowances, benefits bound by the return, bilateral agreements between the two countries or the universities.

Cyclicality is much more complicated to deal with, since it is often strongly related to the motives why people remit. But once reverse causality has been addressed, countercyclicality, acyclicality or procyclicality, may have distinct but equally important results in terms of development. Procyclicality can boost investments overcoming

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[60] The Conference held in Monterrey in 2001 already denounced this claim. See UNITED NATIONS, "*Report on the International Conference on Financing for Development*", Monterrey, Mexico 18-22 March 2002, p. 5

[61] United Nations General Assembly, United Nations Headquarters, New York, 14-15 September 2006

[62] This can also be confirmed by the fact that a special section of the *High Level Dialogue on International Migration and Development* has been dedicated to them. The Third Round Table, named "*Multidimensional aspects of international migration and development, including remittances*", took place on Thursday, 14 September 2006, from 3:00 to 6:00 p.m.

liquidity constraints. Acyclicality can prevent the country from current account crises and countercyclicality can provide macro stability. As future work, country analyses need to be conducted, especially because the change in the cyclical components of national GDP, the amount of remittances a country receives and other macro variables (financial depth, level of corruption, openness) are country specific. Furthermore, cyclical properties may change through time and migrants' remitting behaviour can be influenced by national migration policies, too. The literature is unevenly distributed with regard to country analyses. A lot of work has been, indeed, done on the Latin migrants living in US but, on the other side, the interest for the MED-MENA migrants who live in the European Union has just began. This suggests future works are oriented towards this geographical perspective.

However, either future work and country policies need reliable data to deal with, and this is not a migration literature's prerogative. If the figures are not able to describe what really happens, or if just one side of the coin is provided, the "*whole picture of the migration puzzle*" will be hardly depicted. In particular, as far remittances are concerned, efforts have to be made towards three goals: improving a much more formal and binding definition of migrants' remittances, so that national central banks and statistical offices cannot have any doubts about that; providing banking systems and wire services (fees, minimum balances, exchange rate spreads) on a migrant scale, so to stem informal transfers; and, finally, addressing estimations of the irregular flows in the meanwhile.

## References


ADAMS, R.H. , "*Remittances and Poverty in Ghana*", World Bank Policy Research Working Paper No. 3838, February 2006, pp. 1-43

ADAMS, R.H. , "*International Migration, Remittances and the Brain Drain: A Study of 24 Labor-Exporting Countries*", World Bank Policy Research Working Paper No. 3069, June 2003, pp. 1-29

ADAMS, R.H. and PAGE, J. , "*International Migration, Remittances and Poverty in Developing Countries*", World Bank Policy Research Working Paper No. 3179, December 2003, pp. 1-37

AGARWAL, R. and HOROWITS, A. , "Are International Remittances Altruism or Insurance? Evidence from Guyana Using Multiple Migrant Households", *World Development*, Vol. 30, No. 11, 2002, pp. 2033-2044

AMUEDO-DORANTES, C. and POZO, S. , "Remittances as insurance: evidence from Mexican immigrants", *Journal of Population Economics*, Vol. 19, May 2006, pp. 227-254

BEINE, M. , DOCQUIER, F. and RAPOPORT, H. , "Brain drain and economic growth: theory and evidence", *Journal of Development Economics*, Vol. 64, 2001, pp. 275-289

BOUHGA-HAGBE, J. , "*Altruism and Workers' Remittances: Evidence from Selected Countries in the Middle East and Central Asia*", IMF Working Paper No. 06/130, May 2006, IMF Middle East and Central Asia Dept. , pp. 1-29

BOUHGA-HAGBE, J. , "*A Theory of Workers' Remittances With an Application to Morocco*", IMF Working Paper No. 04/194, October 2004, IMF Middle East and Central Asia Dept. , pp. 1-35

BROWN, R. , "Estimating Remittance Functions for Pacific Island Migrants", *World Development*, Vol. 25, No. 4, 1997, pp. 613-626

BUGAMELLI, M. and PATERNO', F. , "*Do migrants' remittances reduce the probability of financial crises in emerging markets?*", Bank of Italy, Research Dept. , May 2005, pp. 1-20

BURGESS, R. and HAKSAR, V. , "*Migration and Foreign Remittances in the Philippines*", IMF Working Paper No. 05/111, June 2005, IMF Asia and Pacific Dept. , pp. 1-18

CARRINGTON, W. J. , DETRAGIACHE, E. and VISHWANATH, T. , "Migration with Endogenous Moving Costs", American Economic Review, Vol. 86, No. 4, September 1996, pp. 909-30

CHAMI, R. , COSIMANO, T.F. and GAPEN, M.T. , "*Beware of Emigrants Bearing Gifts: Optimal Fiscal and Monetary Policy in the Presence of Remittances*", IMF Working Paper No. 06/61, March 2006, IMF Institute, pp. 1-51

CHAMI, R. , FULLENKAMP, C. and JASHJAH, S. , "*Are Immigrant Remittance Flows a Source of Capital for Development?*", IMF Working Paper No. 03/189, September 2003, IMF Institute, pp. 1-47

COMMANDER, S. , KANGASNIEMI, M. and WINTERS, L.A. , "*The Brain Drain: Curse or Boon*?", IZA Discussion Paper No. 809, June 2003, pp. 1-34

COX EDWARDS, A. and URETA, M. , "International Migration, Remittances, and Schooling: Evidence from El Salvador", *Journal of Development Economics*", Vol. 72, No. 2, 2003, pp. 429-461

CUC, M. , LUNDBACK, E. and RUGGIERO, R. , "*Migration and Remittances in Moldova*", International Monetary Fund Publication, Washington, 2005

DESAI, M.A. , KAPUR, D. and MCHALE, J. , "*The Fiscal Impact of the Brain Drain: Indian Emigration to the U.S.*", Conference Draft, prepared for the Third Annual NBER-NCAER Conference on December 17-18, 2001, December 2001, pp. 1-57

DEVORETS, D.J. and VADEAN, F.P. , "*A Model of Foreign Born Transfers: Evidence from Canadian Micro Data*", August 2005, Conference Draft, discussed for the "XVIII Villa Mondragone International Economic Seminar on Europe: A New Economic Agenda?", 26/06/2006-27/06/2006, Villa Mondragone, Frascati, Roma, pp. 1-41

DJAJIC, S. (ed.), "*International Migration: Trends, Policies and Economic Impact*", Routledge Contemporary Economic Policy Issues, London Routledge, 2001

DJAJIC, S. , "Emigration and Welfare in an Economy with Foreign Capital", *Journal of Development Economics*, Vol. 56, No. 2, 1998, pp. 433-445

DOCQUIER, F. and MARFOUK, A. , "*Measuring the international mobility of skilled workers (1990-2000)*", World Bank Policy Research Working Paper No. 3381, 2004, pp. 1-37

DOCQUIER, F. and RAPOPORT, H. , "*Remittances and inequality: a dynamic migration model*", Bar-Ilan Department of Economics Working Paper, June 2003, pp. 1-30

EL-SAKKA, M. and McNABB, R. , "The Macroeconomic Determinants of Emigrant Remittances", *World Development*, Vol. 27, No. 8, 1999, pp. 1493-1502

FAINI, R. , "*Remittances and the Brain Drain*", IZA Discussion Paper No. 2155, June 2006, pp. 1-19

FAINI, R. , "*Does the brain drain boost growth*?", preliminary version, February 2005, pp. 1-22

FAINI, R. , "*Trade Liberalization in a Globalizing World*", IZA Discussion Paper No. 1406, November 2004, pp. 1-39

FAINI, R. , "*Migration, Remittances and Growth*", preliminary version, September 2002, pp. 1-21

FARGUE, P. (ed.), "*Mediterranean Migration 2005 Report*", Robert Schuman Centre for Advanced Studies, European University Institute, Florence, 2006

FREUND, C. and SPATAFORA, N. , "*Remittances: Transaction Costs, Determinants, and Informal Flows*", World Bank Policy Research Working Paper No. 3704, September 2005, pp. 1-42

GALOR, O. and STARK, O. , "Migrants' savings, the probability of return migration and migrants' performance", *International Economic Review*, Vol. 31, No. 2, May 1990, pp. 463-467

GERARD-VARET, L.A. , KOLM, S.C. and MERCIER-YTHIER, J. (eds.), "*The Economics of Reciprocity, Giving and Altruism*", Basingstoke Macmillan in association with the International Economic Association, 2000

GHOSH, B. (ed.), "*Migrants' Remittances and Development: Myths, Rhetoric and Realities*", International Organization for Migration Publication, Geneva, 2006

GIULIANO, P. and RUIZ-ARRANZ, M. , "*Remittances, Financial Development, and Growth*", IZA Discussion Paper No. 2160, June 2006, pp. 1-37

GLYTSOS, N.P. , "The Role of Migrant Remittances in Development: Evidence from Mediterranean Countries", *International Migration*, Vol. 40, No. 1, 2002, pp. 5-26

GUPTA, P. , "*Macroeconomic Determinants of Remittances: Evidence from India*", IMF Working Paper No. 05/224, December 2005, IMF European Dept. , pp. 1-21

HANSON, G.H. and WOODRUFF, C. , "*Emigration and educational attainment in Mexico*", Mimeo, 2002, University of California at San Diego, pp. 1-38

HODDINOTT, J. , "A Model of Migration and Remittances Applied to Western Kenya", *Oxford Economic Papers*, Vol. 46, No. 3, 1994, pp. 459-476

IADB, "*Remittances 2005. Promoting Financial Democracy*", Multilateral Investment Fund Report, March 2006, Washington, pp. 1-55

IMF, "*World Economic Outlook*", Washington, April 2005

IMF, "*Balance of Payments Statistics Yearbook*", Washington, 2004

IMF, "*Balance of Payments Compilation Textbook*", Washington, 1996

IMF, "*Balance of Payments Compilation Guide*", Washington, 1995

KAMINSKY, G. , REINHART, C.M. and VEGH, C.A. , "*When It Rains, It Pours: Procyclical Capital Flows and Macroeconomic Policies*", 19th Conference on Macroeconomics (organized by M. Gertler and K.S. Rogoff), August 13, 2004, pp. 1-37

KIREYEV, A. , "*The Macroeconomics of Remittances: The Case of Tajikistan*", IMF Working Paper No. 06/2, January 2006, IMF Policy Development and Review Dept. , pp. 1-26

LEON-LEDESMA, M. and PIRACHA, M. , "International Migration and the Role of Remittances in Western Europe", *International Migration*, Vol. 42, No. 4, October 2004, pp. 65-83

LOWELL, B.L. and de la GARZA, R.O. , "*The Development Role of Remittances in U.S. Latino Communities and in Latin American Countries*", A Final Project Report, Inter-American Dialogue, 2000, pp. 1-32

LUCAS, R.E.B. , "*International Migration to the High Income Countries: Some Consequences for Economic Development in the Sending Countries*", Boston University (mimeo), 2004, pp. 1-43

LUCAS, R.E.B. and STARK, O. , “Motivations to remit: Evidence from Botswana”, *Journal of Political Economy*, Vol. 93, No. 5, 1985, pp. 901-918

MASSEY, D.S. and BASEM, L. , “Determinants of savings, remittances, and spending patterns among U.S. migrants in four Mexican communities”, *Sociological Inquiry*, Vol. 62, No. 2, 1992, pp. 185-207

MCCORMICK, B. and WAHBA, J. , “*The Brain Drain, Remittances and Economic Development*”, Discussion Paper in Economics and Econometrics, February 1996, Univ. Southampton, Dept. of Economics and Econometrics, pp. 1-30

MCKINNON, R. I. , “*Money and Capital in Economic Development*, The Brookings Institution, 1973

MERKLE, L. and ZIMMERMANN, K.F. , “Savings, remittances and return migration”, *Economic Letters*, Vol. 38, No.1, 1992, pp. 77-81

MISHRA, P. , “*Emigration and Brain Drain: Evidence From the Caribbean*”, IMF Working Paper No. 06/25, January 2006, IMF Western Hemisphere Dept. , pp. 1-39

MUNSHI, K. , “Networks in the Modern Economy: Mexican Migrants in the U.S. Labor Market”, *Quarterly Journal of Economics*, Vol. 118, No. 2, May 2003, pp. 549-599

OECD, “*Migration, Remittances and Development*”, OECD Publication, Paris, 2005

OMARINI, A. “*Il Migrant Banking. Esigenze della clientela immigrata e modelli di servizio per l’offerta*”, Bancaria Editrice, Roma, 2006

OROZCO, M. , “*The Remittance Marketplace: Prices, Policy and Financial Institutions*”, Pew Hispanic Center Report, June 7, 2004, Washington, pp. 1-45

OZDEN, C. and SCHIFF, M. (eds.), “*International Migration, Remittances & the Brain Drain*”, No. 33988, World Bank and Palgrave Macmillan Publication, Washington, 2006

PIOTROWSKI, M. , “The Effect of Social Networks at Origin Communities on Migrant Remittances: Evidence from Nang Rong District”, *European Journal of Population*, Vol. 22, No. 1, 2006, pp. 67-94

POIRINE, B. , “A Theory of Remittances as an Implicit Family Loan Arrangement”, *World Development*, Vol. 25, No. 4, 1997, pp. 589-611

PURI, S. and RITZEMA T. , “*Migrant Worker Remittances, Micro-Finance and the Informal Economy: Prospects and Issues*”, ILO Working Paper No. 21, 1999, ILO Social Finance Unit, pp. 1-41

QUIBRIA, M.G. , “ International Migration, Remittances and Income Distribution in Source Country: a Synthesis”, *Bulletin of Economic Research*, Vol. 49, No.1, 1997, pp. 29-46

RAPOPORT, H. and DOCQUIER, F. , “*The Economics of Migrants’ Remittances*”, Working Paper No. 236, December 2004, Stanford Center for International Development, Stanford University, pp. 1-81

RAY, D. , “*Development Economics*”, Princeton University Press, Princeton, New Jersey, 1998

ROBERTS, K. and MORRIS, M. , “Fortune, risk, and remittances: An application of option theory to participation in village-based migration networks”, *International Migration Review*, Vol. 37, No. 4, 2003, pp. 1252-1282

SAYAN, S. , “*Business Cycles and Workers’ Remittances: How Do Migrant Workers Respond to Cyclical Movements of GDP at Home*?”, IMF Working Paper No. 06/52, February 2006, IMF Institute, pp. 1-21

SIDDIQUI, T. and ABRAR, C.R. , “*Migrant Worker Remittances and Micro-Finance in Bangladesh*”, ILO Working Paper No. 38, September 2003, ILO Social Finance Programme, pp. 1-111

STARK, O. , “The New Economics of the Brain Drain”, *World Economics*, Vol. 6, No. 2, April June 2005, pp. 1-5

STRAUBHAAR, T. , “Determinants of Workers’ Remittances. The Case of Turkey”, *Emerging Markets Finance and Trade*, Vol. 41, No. 3, May-June 2005, pp. 53-69

SURO, R. , “*Remittance Senders and Receivers: Tracking the Transnational Channels*”, Pew Hispanic Center Report, November 24, 2003, Washington, pp. 1-19

SURO, R. , BENDIXEN, S. , LOWELL, B.L. and BENAVIDES, D.C. , “*Billions in Motion: Latino Immigrants, Remittances and Banking*”, Pew Hispanic Center and Multilateral Investment Fund Report, Washington, 2002, pp. 1-28

TAYLOR, J.E. , “The New Economics of Labor Migration and the Role of Remittances in the Migration Process”, *International Migration*, Vol. 37, No. 1, 1999, pp. 63-86

TERRY, D.F. , JIMINEZ-ONTIVEROS, F. and WILSON, S.R. (eds.) , “*Beyond Small Change: Migrants, Remittances and Economic Development*”, Inter-American Development Bank Publication, John Hopkins University Press, Washington, 2004

THIEME, S. , “*Savings and Credit Associations and Remittances: The case of Far West Nepalese Labour Migrants in Delhi, India*”, ILO Working Paper No. 39, July 2003, ILO Employment Dept., Social Finance Programme, pp. 1-54

THIEME, S. and WYSS, S. , “Migration Patterns and Remittance Transfer in Nepal: A Case Study of Sainik Basti in Western Nepal”, *International Migration*, Vol. 43, No.5, December 2005, pp. 59-98

TUNKAY AYDAS, O. , METIN-OZCAN, K. and NEYAPTI, B. , “Determinants of Workers’ Remittances. The case of Turkey”, *Emerging Markets Finance and Trade*, Vol. 41, No. 3, May-June 2005, pp. 53-69

WORLD BANK, “*Global Economic Prospects. Economic Implications of Remittances and Migration*”, No. 34320, World Bank Publication, 2006

WORLD BANK, “*Global Development Finance 2003- Striving for Stability in Development Finance*”, World Bank Publication, 2004