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Financial Development and Macroeconomic Stabilisation through Remittances? Potential Benefits and Policies

Author:	Barbara Fritz
Co-Author:	Christian Ambrosius and Ursula Stiegler
Institution:	Freie Universität Berlin
Address:	Rüdesheimer Str. 54-56, 14197 Berlin, Germany
E-mail:	bfritz@zedat.fu-berlin.de, christian.ambrosius@fu-berlin.de, ursula.stiegler@fu-berlin.de
Telephone:	0049 30 838 58544

Abstract

While up to now research on remittances has strongly concentrated on questions linked to poverty reduction and the use of remittances, we emphasize the potential impact of remittances on financial sector development and on macroeconomic stability. We base our research on the assumption that the impact of remittances on the financial system depends on several factors, namely the total amount of remittances sent, the stability and cyclicality of remittance flows, the share of remittances sent through formal channels, the adaptation of financial services to small scale remittances receiving families, and whether remittances are held in local or foreign currency. Based on these assumptions we map different policy options and present examples from the Latin American context which potentially contribute to the goal of financial development and macroeconomic stabilisation.

Keywords: Remittances, Financial Development, Macroeconomic Stabilisation, Policies

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Barbara Fritz, Christian Ambrosius and Ursula Stiegler

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Barbara Fritz
Freie Universität Berlin
Rüdesheimer Str. 54-56
14197 Berlin
Germany
bfritz@zedat.fu-berlin.de

Christian Ambrosius
Freie Universität Berlin
Rüdesheimer Str. 54-56
14197 Berlin
Germany
christian.ambrosius@fu-berlin.de

Ursula Stiegler
Freie Universität Berlin
Rüdesheimer Str. 54-56
14197 Berlin
Germany
ursula.stiegler@fu-berlin.de

***** This paper summarizes the theoretical framework and the main hypotheses of a research project on 'Migrant Remittances, Financial Development and Macroeconomic Stabilisation' at the Special Research Area 'Governance in Areas of Limited Statehood' at the Freie Universität Berlin. We thank the German Research Foundation for financial support.

The Latin Americans do integrate into the globalised world economy in three ways: As cultural producers, as migrants and as debtors.

(Nestor García Canclini 2002: 12)

Introduction

Remittances – the money that migrants send home, usually to their families who have stayed behind – have steadily increased since the mid-1980s. Officially registered remittances reached an estimated volume of US$206 billion in 2006, compared to US$19.6 billion in 1985 (World Development Indicators 2006, Ratha 2007). They have been the second most important source of external finance for developing countries, being twice the amount of official development aid and almost as much as foreign direct investment. In absolute terms, large developing countries such as India, China, Mexico, and the Philippines receive the largest shares of remittances in the world. However, in relative terms, small and poor countries tend to be much more dependent on remittances. A ratio of remittances to GDP of above 15 or 20% is not unusual for many countries with large diasporas.

As a response to the large increase in officially registered remittances, these flows have received much attention recently, as evidenced by an increasing number of publications on the issue. However, remittances are not a new phenomenon – despite their strongly increasing registration in official data. Formal remittances, defined as those that appear in the statistics of the central bank – mostly money sent through banks or money transfer operators (MTO) – are only a fraction of total remittances. Many financial transfers are not included in official numbers, among them in-kind transfers; cash carried by either by the migrant himself or friends or family members; and informal transfer systems of the so-called Hawala type, which is said to have its origin in the early Islamic Empire (Müller 2006). Today, financial liberalisation and reduced costs for sending remittances through official channels have made formal transfers more attractive in comparison to informal channels. As a consequence, remittances are increasingly accounted for in the statistics of the central banks. This means that official numbers about the true increase in remittances are misleading: What is observed is partly a switch in transfers from the informal to the formal sector. Also, improved data collection through central banks has contributed to the inclusion of remittances in official statistics, in spite of accounting differences that still exist between countries (De Luna Martínez 2005). Other authors see the reason for the increased attention given to remittances in terms of changing political and ideological paradigms. According to this view, remittances fit into the development agenda of the leading international organisations because they are a way of engaging migrants as agents for development. As such, they are part of efforts to include the private sector in development strategies (De Haas 2007).

Research on remittances so far has mainly focused on their impact on reducing poverty (Adams/Page 2006), the creation of growth through multiplier effects (Glytsos 2002, Durand et al. 1996), their effects on inequality in remittance-receiving countries (Acosta et al. 2008, Koechlin/León 2006, Jones 1988), a possible loss in international competitiveness through the appreciation of exchange rates (Acosta et al. 2007, Amuedo-Dorantes/Pozo 2004, Loser et al. 2006) as well as moral hazard behaviour among remittance receivers (Chami et al. 2003). A couple of studies also have addressed the impact of remittances on human capital as well as on entrepreneurship among migrant-families (Adams 1991, Cox/Ureta 2003, Goerlich et al. 2007, Woodruff/Zenteno 2001).

Our approach differs from existing studies on remittances by focusing on the indirect development effects of remittances via the financial sector. Our hypothesis is that remittances are conducive to financial sector development and macroeconomic stabilisation, provided that certain conditions are given. Furthermore, we assume that these conditions can be governed through multiple forms of formal or informal regulations, including governmental and non-governmental as well as national and transnational actors.

The paper is organised as follows: As a first step, we summarise the state of research on macroeconomic stabilisation and financial sector development through remittances. We then formulate five hypotheses in which we define the conditions under which remittances are conducive to macroeconomic stabilisation and financial sector development. The second part of the paper presents different remittance policies which are likely to contribute to a positive impact of remittances on macroeconomic stabilisation and financial development. Our five hypotheses regarding the links between remittances and the financial sector are illustrated using empirical examples from three heavily remittance-dependent Latin American countries: Mexico, El Salvador, and the Dominican Republic.

This paper summarises the theoretical framework and the main hypotheses of a research project on migrant remittances, financial development, and macroeconomic stabilisation of the special research area ‘Governance in Areas of Limited Statehood’ at the Free University of Berlin (www.sfb-governance.de/fdr). The paper reflects work in progress during a first field research in February and March 2008.

Macroeconomic Stabilisation and Financial Development through Remittances: A Neglected Research Field

Developing countries typically suffer from weakly developed financial markets and a low degree of monetisation of the economy, measured as a low ratio of credit to GDP and a low ratio of the monetary aggregates M2 or M3 to GDP. A large proportion of the population and typically the small and micro enterprises of the informal sector have no access to bank credit and thus operate outside the financial sector, with low capital intensity and low productivity. Empirical studies confirm that a relative increase in savings and credit is associated with an increase in growth and per capita income (Beck et al. 2000a, 2000b), while weakly developed financial markets limit the process of capital accumulation and hinder economic development.

Because of their weak domestic financial markets, economic actors from developing countries are usually not able to get long-term credit from domestic markets in local currency. Instead, they have to become indebted in foreign currency for long-term investment, a phenomenon which has recently been called ‘original sin’ (Eichengreen et al. 2002). At the aggregate macroeconomic level, ‘original sin’ creates liabilities in foreign currency and a current account deficit, which has to be reversed in later stages of development. Indebted developing countries therefore permanently face the danger that they cannot meet their obligations and have to accept depreciation in order to achieve a current account surplus. At the level of individual economic actors, potentially risky balance sheet effects occur when liabilities and assets are denominated in different currencies. Sudden capital outflows and a depreciation of the domestic currency can then lead to a sudden change in the income and wealth of economic actors and increase their real debts, with cumulative negative effects on other sectors of the economy (Aghion et al. 2000, 2004, Allen et al. 2002, Berganza/Herrero 2004, Calvo et al. 2004, Céspedes et al. 2000, Chue/Cook 2004, Demirgüç-Kunt/Detragiache 1998, Glick/Hutchison 2001, IMF 2003, Tornell/ Westermann 2005). Developing countries with weak domestic financial markets are therefore more vulnerable to volatility in international financial markets than developed countries. In addition, exchange rate depreciation as a policy tool is more restricted in economies with a high degree of liabilities in foreign currency.

Remittances can play a positive role in macroeconomic stabilisation and financial development in several ways. First of all, remittances can provide developing countries with foreign currency and ease the foreign exchange constraint that is often associated with development. Unlike private lending, remittances are like a 'present' from abroad and provide foreign currency without creating liabilities in the future. The danger of indebtedness and painful current account adjustments that is always associated with private lending is therefore not given in the case of remittances. In this way, these money transfers can reduce dependence on foreign capital and permanently finance a current account deficit.

Recently, a number of studies have addressed the impact of remittances on the capital accounts of remittance-receiving countries (Apaa-Okello/Aguyo 2006, Buch et al. 2002, Bugamelli/Paternò 2005; Munzele Maimbo/Ratha 2005, Rapoport/Docquier 2005; Sayan 2004, 2006; Straubhaar 1986; World Bank 2006). Because capital usually flows into a country in good times and out of a country in bad times, private capital has been pro-cyclical and has intensified boom-bust cycles in emerging markets. The series of financial crises since the 1990s has shown that the perceptions of investors can change suddenly and lead to massive outflows of capital. Remittances behave differently: They have both a lower volatility and a lower cyclicality than other flows of foreign capital. Remittances are less sensitive to changes in interest rates and other financial market variables, because the main objective of remittances is to support relatives and not to search for the highest possible return on an investment. They act as a buffer in difficult economic surroundings and provide the population with an income that is not dependent on the national economic situation. This feature of remittances, which has its microeconomic grounding in the new economics of labour migration (Stark/Bloom 1985), is important in the absence of functioning credit or insurance markets in developing countries. While remittances function as an insurance against adverse economic conditions at the microeconomic level, they also help to stabilise the balance of payments at the macroeconomic level. As such, remittances can play a strategic role in the prevention of financial crises.

Few studies have so far explicitly addressed the relationship between remittances and the development of the domestic financial sector, with the notable exceptions of Aggarwal et al. (2006), Fajnzylber/López (2007), Giuliano et al. (2006) and Mundaca (2005). Mundaca and Giuliano et al. differ in their approach to measuring the link between remittances, financial development, and growth. Mundaca finds that in Central America, Mexico, and the Dominican Republic the impact of remittances on growth is stronger when the indirect effect on growth via an extension of domestic credit is also taken into account. In other words, remittances have a stronger effect on growth in those countries where a functioning banking system exists. Giuliano et al. arrive at opposite empirical results in a cross-country comparison, saying that the impact of remittances on growth is, on average, higher in those countries where the financial sector is weak. Their argument for this surprising result is that in countries with weakly developed financial markets, remittances can compensate for a lack of access to credit. This leads to higher spending on investment and, consequently, higher growth. However, the findings of Giuliano et al. may be misleading, as they do not take into account the existence of informal remittances. The proportion of remittances sent through informal channels tends to be much higher in countries with weakly developed financial markets (Freund/Spatafora 2005, De Luna Martínez 2005). A series of African countries are among those with the highest proportion of informal remittances, while East Asia and the more developed Latin American countries such as Mexico have a relatively high ratio of formally transferred remittances to total remittances (Freund/Spatafora 2005). Consequently, Giuliano et al. may overestimate the growth effect of remittances in countries with weak financial markets. This is a good example of the difficulties associated with econometric studies based on high and shifting proportions of informal remittances that are not accounted for in the statistics of central banks. Improving remittance data is therefore a challenge for future research.

Aggarwal et al. (2006) show in a cross-country regression that an increase in remittances is positively correlated with an increase in banking deposits and, albeit to a lesser degree, with the volume of credit. The latter is also confirmed by Fajnzylber and López (2007), who stress the importance of differences between countries in the degree of correlation between remittances and credit. Aggarwal et al. conclude that their findings provide strong support for the notion that remittances promote financial development in developing countries, though they recognise that they are not able to give a definite answer to the question of causality: It is also possible that financial development leads to more – and more formalised – remittances and not vice versa. Also, they do not claim general validity for their findings, because individual countries may have experiences that differ from the aggregate results they present (Aggarwal et al. 2006: 20). Nevertheless, the study from Aggarwal et al. provides a good starting point for a closer examination of the link between remittances and financial sector development at the country level.

The Main Hypotheses regarding Financial Sector Development and Macroeconomic Stabilisation through Remittances

In this section our objective is to specify the main channels and conditions under which remittances can promote financial sector development and macroeconomic stabilisation. Based on key financial variables, we formulate five hypotheses regarding the link between remittances on the one hand and financial sector development and macroeconomic stabilisation on the other hand. In this sense, we treat remittances as determinants, that is, independent variables, of financial development and macroeconomic stabilisation.

At the same time, we assume that the transfer of formal and informal remittances can be influenced by policies that are realised by differing constellations of transnational actors, as regulation of these flows goes beyond the capacity of the nation state for a series of reasons. These reasons lie in the transnational character of migration itself, its at least partially informal character, and the structural weakness of the state in a developing economy. In our framework, the financial sector variables themselves also constitute policy goals. We turn to a policy perspective in the next section and ask which remittance policies may have a positive influence on these financial sector variables, thereby conditioning the impact of remittances on financial sector development and macroeconomic stabilisation. Thus, the same variables that are initially analysed as independent variables in the following section, where we develop hypotheses regarding the links between remittances and financial sector development, turn into dependent variables in the last section, where remittance policies are analysed as independent variables for their effects on financial development.

<u>H1: A high proportion of remittances relative to the size of the receiving economy increases the potential for financial sector development and macroeconomic stability</u>

We assume that remittances imply a demand for financial services which has a potentially positive impact on the expansion of financial services and financial sector development. The higher the proportion of remittances relative to the size of the remittance-receiving economy, the stronger is the potential effect of remittances on financial sector development. Financial institutions – be they MTO, Microfinance institutions (MFI), or banking institutions – benefit from economies of scale. They require a ‘critical mass’ defined by a minimum demand for financial services in order to realise profits. When demand is large enough, different service providers will compete for market shares. We expect competition to be higher in markets with a higher remittance volume. Higher competition leads to lower fees and better service, which in turn favour the formalisation of remittances. However, the translation of formalised remittance transfers into the supply of adequate financial services for remittance-receiving families depends on a series of specific regulations that are not necessarily brought forward as pure market-based solutions (see H4).

<u>H2: Low volatility and cyclicality of remittances relative to other forms of capital flows stabilises the balance of payments</u>

As has been mentioned above, empirical analysis shows that remittances are less volatile and less cyclical than other private capital flows. When remittances are high relative to other capital inflows, they can therefore stabilise the balance of payments of the remittance-receiving country. However, the way in which remittances respond to business cycles or recessions in the home country may differ from country to country (Apaa-Okello/Aguyo 2006). Apart from the economic need of the family, a couple of other variables play a role in the sending of remittances. For example, cyclicality may be higher when migrants have stronger investment motives. Further important factors in the cyclicality of remittances are the degree to which business cycles in the home country converge with business cycles in the sending country and whether senders and receivers of remittances are exposed to the same risks. We could assume that when a recession or any kind of shock hits only the receiving country and there is little change in the economic situation of the remittance-sending country, remittances can be expected to increase. For example, El Salvador and the USA might even be exposed to similar business cycles, due to the high trade-led integration of El Salvador into the US economy, but an economic crisis due to political upheaval or natural disaster in El Salvador has little effect on the economic situation of migrants in the USA.

<u>H3: The formalisation of remittances improves the access of developing countries to international capital markets</u>

Formalising[1] remittances has become one of the primary objectives of international organisations and governments. One of the reasons for this is the fear that informal money transfer systems escape governmental control and can easily be abused for laundering money. This is why they have been associated with the financing of terrorism and other illegal activities (Müller 2006, Munzele Maimbo 2003, Qorchi et al. 2003).

Apart from security concerns, the formalisation of remittances has important economic implications. Macroeconomic policies are easier to implement when central banks have a better knowledge of the financial flows entering or leaving the country. The formalisation of remittances also facilitates the access of developing countries to international capital markets through future flow securitisation. The creditworthiness of developing countries and through this the interest rate they have to pay for loans is partly defined according to export-to-debt ratios. When remittances are included in

[1] Formal systems are defined by their participation in the regulated financial sector. This means that the institutions involved in the remittance business are supervised by public authorities and regulated by financial sector-specific laws (Hernández-Coss 2005: 3).

official statistics, the securitisation of remittance flows can lead to a better rating of these countries compared to that in a situation where remittances are not properly registered (Ratha 2007, Ketkar/Ratha 2004). Also, commercial borrowers (for example, banks) can use future flow securitisation of remittances to obtain better access to international capital. In recent years, banks in several developing countries have been able to raise cheaper and longer-term financing from international capital markets via the securitisation of future remittance flows (Ratha 2007: 10). However, increased access to international capital markets via remittances has to be balanced against the above-mentioned destabilising effects of foreign currency lending for the debtor economy.

An indirect and positive effect of incremented formal registration is its signalling function: Within the context of boom-bust cycles of international capital flows, the increased booking of remittances in the balance of payments increases visible net foreign exchange income in times of crisis and may thus help prevent sudden stops in capital flows.

<u>H4: Linking remittances with banking services has positive effects on saving and investment</u>

For many migrant families, sending remittances through formal channels is an important first contact with the formal financial sector. However, financial development requires a step further than just the formalisation of remittances. Remittances entering the country through MTO or post offices are paid in cash and neither the sender nor the receiver of remittances must necessarily hold a bank account. In contrast, access to banking services opens up the option of monetary savings instead of real savings or immediate consumption, from the remittance receiver's perspective. Furthermore, running a bank account with regular payment receipts may increase access to credit and other financial services. At the macroeconomic level, this may have positive effects on monetary saving and investment. Savings that are kept in bank accounts are available for investment elsewhere and can be channelled to where they earn the highest return, for example, where they have the highest productivity. Where migrants have no access to banking services, saving often takes the form of acquisition of real assets such as land or housing which may not be used productively. This can lead to a speculative increase in prices, resulting in limited investment opportunities at the microeconomic and the macroeconomic level.

Stiglitz and Weiss (1981) have shown how transaction costs and information asymmetries lead to credit rationing, and thus prevent parts of the population from accessing banking services. When individual sums are low, transaction costs are high, meaning that banks do not offer services to low-income groups, especially when they work in the informal sector and do not own assets that banks would accept as collateral for credit. According to data of the Inter-American Development Bank, only one out of ten people in Latin America owns a bank account, while in the USA nine out of ten people own a bank account (Bate et al. 2004). The access of remittance receivers to bank accounts is only slightly higher than the average, with important differences between countries (Fajnzylber/López 2007; Orozco 2006). Additionally, the fact that remittances are only moderately correlated with an increase in credit (Aggarwal et al. 2006, Fajnzylber/López 2007) could point to the fact that remittance receivers are subject to the typical problems of information asymmetries and transaction costs or to the possibility that remittances substitute credits. The unsatisfied demand for financial services has been confirmed by surveys among migrants and their families in El Salvador and Bolivia (Jaramillo 2005).

In order to improve the access of migrants and their families to financial services, the existence of MFI with their specific know-how seems to be a prerequisite (Orozco/ Hamilton 2005). In this context, remittances could possibly serve as collateral. An assumed problem in linking remittances with financial services is that MFI are not always authorised to realise foreign exchange transactions – even if this problem may be overcome by cooperation with financial institutions authorised and actively engaged in international financial transfers. Moreover, the scope and quality of MFI differ significantly among countries (Conger 2001).

H5: When remittances are held in foreign currency, the substitution of local currency can lead to financial destabilisation

The relationship between currency substitution or ‘dollarisation’ and remittances has received little attention so far. Dollarisation often occurs in developing and transition countries, when confidence in the local currency erodes due to monetary instability in the face of high inflation and/or exchange rate volatility. Rational economic actors then tend to substitute domestic currency for a more stable and reliable foreign currency. Once a parallel currency is being used for monetary transactions, the further destabilisation of the local financial system easily leads to a self-enforcing dollarisation trend, which is difficult to reverse (the so-called hysteresis argument, see Feige et al. 2002) In spite of its microeconomic rationality, (unofficial) dollarisation induces macroeconomic instability. When the dollar replaces the local currency as a means of exchange, it becomes difficult for central banks to control the amount of money in circulation. As a consequence, central banks lose control over monetary policy, which may result in high inflation rates and/or in the inability of monetary policy to gain macroeconomic influence.

We assume that when confidence into the local currency is low, there is a danger that remittances are kept in dollars and not in the local currency, thereby further contributing to unofficial dollarisation. Foreign exchange regulations differ between countries: While in some countries (for example, the Dominican Republic) it is possible to receive dollars formally through MTO, other countries strictly regulate the possibility of receiving dollars via formal channels. In countries where this is not allowed, migrants might prefer carrying dollars in cash or transferring dollars through other informal channels in order to circumvent regulations.

When dollars are not only used as a means of exchange, but also kept as remittance dollar deposits at local banks, then a high proportion of remittances transmitted through the formal financial sector may further increase the level of financial dollarisation. When domestic banks transform dollar deposits into dollar credits, these dollar credits create currency mismatch and balance sheet effects for the debtors. Provided that the debtors are not export-oriented, economic actors earn revenues in local money but must pay back a dollar credit. In the case of a depreciation of the local currency, the increase in real debts poses a threat to financial stability. As a result, exchange rate depreciation as a policy tool is much more restricted in economies with a high degree of financial dollarisation (cp. Priewe/Herr 2005: 171ff). Therefore, the potential of remittances for macroeconomic stabilisation and financial sector development is higher when remittances are held in local currency.

Currency mismatch only exists when different currencies are used simultaneously. Fully or officially dollarised countries such as El Salvador, Panama, or Ecuador, where the dollar has entirely substituted the local currency, are not exposed to the danger of informal or unofficial dollarisation through remittances. Fully dollarised countries are confronted with the problem that the domestic central bank loses its function as a lender of last resort in the face of a liquidity crisis in the banking system, as it is not able to create liquidity by issuing money. When a run on bank accounts held in dollars occurs, the central bank has no mechanism to provide banks with liquidity exceeding its foreign reserves (cp. Berg/Borensztein 2000). In a completely dollarised monetary regime faced with this constraint, remittances could probably provide additional liquidity to the banking system and partly compensate for a key weakness of such financial systems.

Capitalising on the Development Potential of Remittances – Examples of Regulations and Policies

In the previous section we formulated five hypotheses regarding the link between remittances and both macroeconomic stability and financial sector development. In this section, based on the assumptions formulated in the hypotheses above, we present policy measures which could potentially contribute to macroeconomic stabilisation and financial development through remittances. Following our five hypotheses, we identify five variables that we assume to be positively influenced through different types of regulations and policies: a) the total sum of remittances, b) their degree of cyclicality, c) the degree of remittances sent through formal channels, d) the degree of remittances linked to financial services, and e) the proportion of remittances held or received in domestic currency.

Before going into more detail about specific aspects of remittance policies and regulations, we first introduce some relevant migration and remittance related facts of the three empirical cases on which we base our investigation – Mexico, El Salvador, and the Dominican Republic – and make a few general remarks on the problem of remittance-related policies and the respective research on the topic to date.

We have chosen the three Latin American countries for the following reasons. First of all, a particular set of characteristics is common to all of them: They have all experienced significant labour migration to the United States for long periods of time, through which strong transnational ties have been established between the labour-sending and labour-receiving countries (Terry 2005: 7f). The United States is the main migration destiny for all of them and also the main remittance-sending country. To a considerable extent, the migrants move without the required documentation, which means that the flows take place through informal channels where the capacities of states to tackle the phenomenon are rather restricted. Moreover, the three countries suffer from high rates of indebtedness in relation to GDP combined with weakly developed financial sectors and a subsequent vulnerability to financial crisis. And finally, all are highly remittance dependent.[2] There are also considerable variations between the three countries: The absolute sums and the relative weight of the remittance-flows differ greatly between the three economies: Whereas in El Salvador remittances account for almost a fifth of the GDP, in the Dominican Republic this share lies around ten percent, in Mexico only around three. We chose Mexico because it is the country with the highest absolute flow of remittances in the region (and with one of the largest worldwide) and El Salvador and the Dominican Republic because of their high relative proportion of remittances in relation to GDP. Mexico is also an interesting case because of its regional importance and its often pioneering role in terms of remittance-related policies. Further differences between the selected countries consist in their degree of dollarisation and the diffusion rate of MFI. Table 1 provides an overview of these migration- and remittance-related characteristics as well as the key aspects of financial development in the three countries.

[2] The International Monetary Fund defines an economy as remittance dependent when the critical percentage of remittances related to the GDP is greater than one percent (IMF 2005: 76).

Table 1: Migration, Remittances, and Financial Development: Key Aspects in Mexico, El Salvador, and the Dominican Republic[3]

Country	Stock of emigrants in the United States (Million)[4]	Remittances in million US$ (2006)	Remittances as a share of GDP (%, 2005)	Rate of dollarisation	Diffusion rate of Microfinance-Institutions
Mexico	11,0	24.7	2.9	Partial dollarisation (ca. 25% of M2)	Low
El Salvador	0,9	3.3	18.2	Full dollarisation	relatively high
Dominican Republic	0,7	3.0	10.0	Partial dollarisation (ca. 30% of M2)	very low

Sources: Data on migration from PEW 2006; data on remittance flows from World Bank 2008; data on dollarisation: Fitzgerald 2001; Sánchez-Fung 2004; data on diffusion rate of MFI: CGAP 2003.

Since policymakers and researchers have realised the relevance of remittances for the receiving countries, they have been developing policy options to leverage the development potential of those financial flows. However, due to the fact that remittances are private capital flows at first glance it seems rather difficult to define government policies that could enhance their positive impacts. Despite of this, while scholars now agree that states should desist from implementing *direct* policy intervention – for example, the imposition of a tax in order to divert funds to public budgets – they also emphasise that quite a lot can be done to increase the development impact of remittance transfers through *indirect* policy interventions (Fajnzylber/López 2007: 47; GCIM 2005: 26f; Terry 2005: 12). However, those options are limited by the fact that data on remittances are still often not comprehensive enough to draw general conclusions for policy recommendations (Orozco/ Wilson 2005: 385).

Although there is more and more literature dealing with policies to increase the developmental impact of remittances at a general level (Carling 2004; CPSS/WB 2007; De Luna Martínez 2005; GCIM 2005; IAD 2007; Orozco 2004; Orozco/Fedewa 2006; Orozco/Wilson 2005; Page/Plaza 2005; Terry 2005), there are few detailed country

[3] The data presented here are from official statistics. Nevertheless, it is important to keep in mind that neither the numbers of migrants nor the amounts of remittances are absolutely reliable due to the fact that those flows are – to a lesser or higher degree – informal (Page/Plaza 2005: 6).

[4] The numbers refer only to the first generation. The total population descended from one of the three countries, that is, with the second and third generations included, is, respectively (rounded numbers in millions): Mexico: 26.8; El Salvador: 1.2; Dominican Republic: 1.1 (Pew Hispanic Center 2006). However data presented by the national governments sometimes are much higher. In the Salvadorian case, the ministry of foreign affairs estimates its diaspora at 2.5 Million persons.

and/or case studies on existing remittance policies. Also, policy options for remittances have, to date, rarely been studied in a systematic way. Remittance-related policies hitherto treated in publications can be roughly divided into three groups: a) transfer cost reduction and improvement of paying systems, b) formalisation of flows and improvement of access to financial services for the 'unbanked' (often referred to as 'financial democracy' or 'financial inclusion'), and c) the channelling of remittances towards 'productive' or 'non-consumptive' use[5].

In recent years there have also been several initiatives to tackle the growing importance of remittances at the international level: The G8 states concluded at their summit at Sea Island in 2004 that international cooperation was necessary to reduce the cost of sending remittances.[6] Moreover, a series of initiatives from international financial institutions, such as the World Bank and the Inter-American Development Bank, and international cooperation agencies have been dealing with the challenge of designing policies to improve the positive economic impacts of remittances (Orozco 2005: 28ff.). The growing international political interest in controlling remittance flows also increased in the wake of September 11: a range of new regulations emerged because of the fear of terrorist financing and money-laundering activities (Orozco 2007: 138; Hernández-Coss 2005: 1ff.). Policies, incentive schemes, and regulations in the field of remittances have often emerged at different policy levels and have not always been designed with a special focus on remittances. Some of them are the result of transnational cooperation of governmental, market, and civil society actors.

In the following paragraphs we present some empirical examples of remittance policies and relate them to the five variables identified above – the total sum of remittances, their degree of cyclicality, their degree of formalisation, the proportion of remittances linked to financial services, and the amount held or received in domestic currency. Often, one and the same policy can have an impact on more than one vari-

5 It has to be noted, however, that the distinction between 'productive use' or 'investment' of remittances and 'consumptive use' is far from clear. In the following, we don't treat policies aiming at 'productive use' because they are not related directly related to financial development and macroeconomic stabilization.

6 One of the following actions was the creation of a task force consisting of members from international financial institutions such as the World Bank as well as central bankers from both sending and receiving countries. The recommendations of the task force were published in 2007 in the document 'General principles for international remittance services' (CPSS/WB 2007; Terry 2005: 10f.).

able. They may, for instance, have an influence on the formalisation of remittance flows as well as on the amount of remittances linked to financial services. In order to capture a wide range of initiatives, we also include policies that have not explicitly been designed with the aim of influencing our identified variables, assuming that unintended causalities exist.

a) Stabilising and b) Increasing Remittance Flows

According to our first two hypotheses, a high proportion of remittances relative to the size of the receiving economy increases the potential for financial sector development and macroeconomic stability, while low volatility and cyclicality of remittances relative to other forms of capital flows contributes to the stability of the balance of payments.

Policies which tend to increase the total sum of remittances are difficult to disentangle from policies which tend to stabilise flows. This is why we present both policies together. One strand of polices which tends to indirectly increase and stabilise remittances could be summarised as ‘diaspora engagement policies’ (Gamlen 2006: 3). Although such goals are not stated explicitly, it can be assumed that these policies are supposed to contribute to high remittances-flows and to increase transfers in bad times in order to balance income losses at the family level. One of the measures to maintain close links between migrants and their home country with the indirect effect of keeping remittance flows high is the right of dual nationality (Gamlen 2006: 10), that is guaranteed by Mexico and the Dominican Republic and partly by El Salvador (Vono de Vilhena 2006).

Many strongly remittance-dependent countries also have created special governmental institutions for its diaspora engagement policies. The Salvadorian government has institutionalized its diaspora policy creating the General Directorate for the Communities Abroad (*Dirección General de Atención a la Comunidad en el Exterior*, DGACE) as part of the Ministry of Foreign Affairs in 2000. With the aim of upgrading the institutional status of the diaspora policy, in 2004 additionally a special Vice-Ministry for Salvadorians Abroad (*Viceministerio de Relaciones Exteriores para los Salvadoreños en el Exterior*) was created. The DGACE organizes its activities along three main lines: cultural, economic and social programs. Whereas it doesn’t realize special policies regarding remittances, so does the Mexican Institute for the Mexicans Abroad (*Instituto de los Mexicanos en el Exterior,* IME), which is also part of the Ministry of Foreign Affairs. The IME offers a wider range of services than the DGACE, among others in the education and health sector, and recently it has also started to realize a range of activities related to remittances. In this field it mainly coordinates and informs about programs and policies of other governmental institutions and seeks to promote the development of further services for the migrant population.[7] In the Dominican Republic there is also a special division for the Dominicans abroad at the Ministry of Foreign Affairs (*División de Protección de Intereses de Dominicanos en el Exterior*) and the so called Consultative Councils of the Presidency of the Dominicans Abroad (*Consejos Consultivos de la Presidencia de los Dominicanos en el Exterior*), whose creation has been justified with the importance of the economic contributions of the emigrated population.[8]

Furthermore, it is plausible to assume that reducing transfer costs has a positive effect on the amount of money reaching the beneficiaries. If a migrant's budget allows him to send a fixed amount per month, say US$200, then a lower transfer fee results in more money reaching his family. Countries have undertaken various efforts to reduce the costs of sending money home. Cost reduction can be realised through various approaches, for example, enhancing competition in the remittance market, improving payment systems, increasing transparency (Fajnzylber/López 2007: 52ff.), and through desisting from taxation and overregulation of remittances (López-Córdova/Olmeda 2007: 12).

An example of the improvement of payment systems in the US-Mexican case is the bilateral agreement between the Federal Reserve Bank of Atlanta and the Mexican central bank which implied the coordination of their respective payment systems. Through this program, called '*Directo a México*', the automated clearing house (ACH) infrastructure of both countries is connected, thus lowering the costs of transfers for payments from US bank accounts to Mexican banks accounts (Hernández-Coss 2005: 23f). Originally created for the transfer of pension payments to Mexico, this mechanism is now promoted especially for remittances transfers at one of the lowest

7 http://www.ime.gob.mx/.
8 http://www.ccpde.gov.do/default.asp.

fees in this bilateral corridor. One reason for the low cost is the usage of the FIX - the inter bank exchange rate – minus a small spread (0,21%) as reference exchange rate for the transaction. MTO in contrast usually apply less favourable exchange rates, thereby often elevating transfer costs considerably. In the Salvadorian and Dominican cases, similar cooperation agreements with the United States do not exist. El Salvador has not yet established a unique paying system for the whole banking sector itself, which is a condition for connecting payment systems internationally.

Another measure concerning transfer costs in the Mexican case was the creation of an internet platform called *Calculadora de Remesas* (remittances calculator). This information service was launched by the national commission for the protection of consumer rights in the area of financial services (CONDUSEF). It allows the remittance senders to compare the transfer fees of a wide range of transfer companies operating in the market, who themselves are responsible for the actualisation of the data base. The internet platform provides information on fees according to the amount, the origin and the destination of the money transfer. Furthermore, it informs on the proximity of the respective bank or MTO branches to the location of both the sender and the receiver.[9]

c) Formalising Remittances

We assume that the formalisation of remittances has a positive impact on economic development because it signals net foreign exchange income in the balance of payments, thereby helping to prevent sudden stops of capital inflows, and improving developing countries' access to international capital markets.

From the supply side, the key to formalising remittances is making formal sending channels more attractive than informal sending channels. One way of achieving this is cost reduction (see above). From the demand side, giving undocumented migrants access to the formal financial sector is a precondition for formalising remittances. A large number of Latin American immigrants in the United States live there without documentation. In this context, governmental initiatives for the quasi-formalisation of migrants are ways of improving the access of migrants to the formal financial sector.

9 http://portalif.condusef.gob.mx:8000/Remesamex/home.jsp.

The Mexican consulates, for instance, issue an identification document, the so-called '*Matrícula Consular de Alta Seguridad*' (MCAS). While the consulates have been issuing an identification document for Mexicans abroad already for more than 130 years, the MCAS has been launched in 2003 with a range of security features to prevent forgery. Despite of immigration critics that see in this document a subversion of the US immigration system and call it an "ID for illegals" (Dinerstein 2003), this alternative form of documentation is now accepted by a wide range of banks and other institutions in the United States, thus granting access to financial services, including the sending of remittances, to undocumented migrants (Hernández-Coss 2005: 11).[10]

The various efforts undertaken with the aim of formalising the remittance flows have contributed to the fact that the US-Mexican remittance-flow corridor is now at quite an advanced stage in the process of shifting from informal to formal transfer systems (ibidem).

d) Influencing the Degree of Remittances Linked to Financial Services

A considerable challenge for better capitalising on remittances is the fact that many migrant families, that is, remittance senders and receivers, lack access to financial services. According to our fourth hypothesis, we assume that remittances improve financial sector development when they are linked to financial services because of their positive effects on savings and investment. Remittances can be a point of entry to the formal financial system for the 'unbanked', giving them access to bank accounts and other financial products such as consumer loans, mortgages, life and non-life insurance products and pension plans (Terry 2005: 11f; De Luna Martínez 2005: 20).[11]

Policy options to enhance the amount of remittances linked to such financial services comprise the providing of incentives for the development of special financial products for migrants, the promotion of transfers through microfinance institutions, financial

[10] The MCAS is recognised in 32 states, more than 1,000 police agencies and 280 banking institutions, among others (Hernández-Coss 2005: 11).

[11] In fact, remittance recipients usually demonstrate higher levels of account holding than the average population. In Mexico, which shows one of the lowest levels of banking penetration in the Latin American Region, 29% of remittance receivers hold bank accounts compared to 28% of non-receivers. While in this case the difference is not that marked, in El Salvador the respective shares are 31% and 19% and in the Dominican Republic they are 66% and 58% (Orozco 2006: 5).

literacy programs, and the increase of domestic banks' presence in remittance markets among others (Page/Plaza 2005: 61; De Luna Martínez 2005: 27f.). Especially the possibility of transfers through MFI seems promising for the development of the financial sector in terms of both depth and breadth. That is because MFI are often located in areas where traditional banks aren't present and because they have considerable experience serving low-income clients that are often also the ones that receive remittances (Jaramillo 2005: 133f.).

In the Mexican case, a prominent example of granting migrants' families a better access to financial services is the so-called '*Red de la Gente*' (Network of the People). This network was founded by the Mexican national development bank BANSEFI (*Banco de Ahorro Nacional y Servicios Financieros*) and includes over 100 credit unions and other MFI with almost 1400 branches.[12] Cooperating with various US-based MTO, *L@Red de la Gente* offers remittance-based services in Mexican rural and urban areas with low incomes and high migration density which are often not covered by the official banking system (Orozco/Fedewa 2006: 17; Orozco 2005: 21). A new initiative of the *Red* to foster the bancarisation of its clients is the so called "Beneficiary Account Registration" (BAR) mechanism through which a remittance-sender in the US can open a bank account in the name of a recipient family member in a credit union branch in Mexico. The receiver then has to formalize the account personally when receiving the remittances.[13]

In El Salvador there is no governmental initiative of that type. However, in the absence of a state led program, there are market or civil society driven experiences with similar motivations and presumably similar results. The Federation of Associations of Savings and Credit Cooperatives (Federación de Asociaciones Cooperativas de Ahorro y Crédito de El Salvador, FEDECACES) for example offers remittance services to its clients since 1998. It cooperates with a group of US based MTO and channels money transfers directly to its branches. Receivers have the option to join one of the cooperatives opening an account and/or get access to other financial products like loans or insurances.[14]

[12] http://www.lared-delagente.com.mx/pdf/quienes_la_forman/directorio/2007/DIR_CORP_0407.pdf.
[13] http://www.directoamexico.com/en/lared.html.
[14] Interview with Héctor Córdova, Executive Director of FEDECACES, 29th.of February 2008, San Salvador.

In the Dominican Republic, MFI have not been very active in the remittance market up to now due to capacity and regulatory constraints (Suki 2004: 47).

e) Reducing the Proportion of Remittances Held in Foreign Currency

Following our last hypothesis, the substitution of local currency with foreign currency can lead to financial destabilisation in economies which are only partially dollarised. Many countries allow migrants to hold accounts in US dollars or other major international currencies, or they allow migrants to receive dollars through MTO in foreign currency – among them México and the Dominican Republic (De Luna Martínez 2005: 19; Page/Plaza 2005: 62, Suki 2004). In this case, the aim of attracting more remittances to formal channels may conflict with the aim of macroeconomic stability, due to our hypothesis presented above. When remittance receivers do not have the option of keeping their savings in a stable currency, the result may be that they choose non-monetary means of saving. This means that there exists a trade-off between different policy goals: Offering dollar accounts may increase the amount of remittances held at banks, but it may also lead to macroeconomic instability. This example provides evidence that policies aimed at leveraging the impact of remittances can also cause unintended side effects. This doesn’t represent a problem in El Salvador due to its dollarised economy. In Mexico, the dollar is not a common means of payment in daily transactions and is therefore not demanded by remittance-receivers. However, in the Dominican Republic, the share of remittances received in Dollars has increased significantly during and after the banking crisis in 2003 (Suki 2004: 13). In this case, a lack of trust in the domestic currency implies a lower demand for local currency which may lead to a further destabilisation of the financial system. These effects have to be studied in much more detail and kept in mind by policy makers.

Conclusion

Within the growing research on workers remittances, the impact of remittances on financial development and macroeconomic stability, as well as the effectiveness of remittance-oriented policies in meeting these goals, has only recently gained attention. Besides a small number of cross-country studies, there is a lack of analytical and empirical work that is based on country studies and a systematic comparison of policies. In this article, we have presented an overview of the most recent and useful research, a series of hypotheses on the potential links between remittances and financial development, and some examples of policies oriented – both intentionally and unintentionally – towards financial development and macroeconomic stabilisation through remittances.

In spite of the recent 'remittance euphoria', the positive development impact of remittances should not be taken for granted. Here, we have only focused on the impact of remittances on the financial sector, highlighting potential positive and negative effects. Although remittances certainly do hold important potential for development, it is important to keep in mind that their impact depends on the specific context. Whether remittances finally translate into productive investment depends on a number of factors that determine opportunities to invest and which have not been part of this paper, for example, the quality of governance and the macroeconomic policies pursued by remittance-receiving states.

References

Acosta, Pablo / Calderon, Cesar A. / Fajnzylber, Pablo R. / Lopez, Humberto (2006): Remittances and Development in Latin America, in: The World Economy, Vol. 29, No. 7 (July), pp. 957-987.

Acosta, Pablo A. / Lartey, Emmanuel K.K. / Mandelman, Federico S. (2007): Remittances and the Dutch Disease, Federal Reserve Bank of Atlanta, Working Paper 8/2007.

Acosta, Pablo / Calderon, Cesar / Fajnzylber, Pablo / Lopez, Humberto (2008): What is the Impact of International Remittances on Poverty and Inequality in Latin America? in: World Development, Vol.36, No.1, pp. 89–114.

Adams, Richard (1991): The Economic Use and Impact of International Remittances in Rural Egypt, in: Economic Development and Cultural Change, Vol. 39, No. 4, pp. 695-722.

Adams, Richard / Page, John (2003): International Migration, Remittances and Poverty in Developing Countries, The World Bank, Poverty Reduction Group, Working paper 3179.

Aggarwal, Reena / Demirgüc-Kunt, Asli / Martinez Peria, Maria Soledad (2006): Do Workers' Remittances Promote Financial Development? World Bank Policy Research Working Paper 3957.

Aghion, Philippe / Bacchetta, Philippe/ Banerjee, Abhijit (2000): A Simple Model of Monetarz Police in an Economy with Credit Constraints, in European Economic Review, No. 44, pp. 728- 738.

Aghion, Philippe / Bacchetta, Philippe / Banerjee, Abhijit (2004): A Corporate Balance-Sheet Approach to Currency Crises, in: Journal of Economic Theory, No. 119, pp. 6-30.

Allen, Mark / Rosenberg, Christoph B. / Keller, Christian / Setser, Brad / Roubini, Nouriel (2002): A Balance Sheet Approach to Financial Crisis, IMF Working Paper 02/210.

Amueda-Dorantes, Catalina / Pozo, Susan (2004): Remittances and Insurance. Evidence from Mexican Migrants, in: Journal of Population Economics, Vol. 19, No.2, pp.227-254.

Apaa-Okello, Jimmy / Aguyo, Francis (2006): The Cyclical Implications of Immigrant Workers' Remittances to Uganda, Bank of Uganda, Kampala.

Bate, Peter / Quesada, Charo / Urdaneta, Dianela (2004): Remittances With a Future – Latin American Migrants and Their Families Get More Out of the Money Sent Home, in: Microenterprise Americas, 2004, pp. 37-39.

Beck, Thorsten / Levine, Ross / Loayza, Norman / (2000a): Financial Intermediation and Growth –Causality and Causes, in: Journal of Monetary Economics, No.46, pp.31-77.

Beck, Thorsten / Levine, Ross / Loayza, Norman / (2000b) Finance and the Sources of Growth, in: Journal of Financial Economics, No.58. pp.31-77.

Beck, Thorsten/ Demirgüc-Kunt, Ash/ Levine, Ross (2000): A New Database on the Structure and Development of the Financial Sector. In: World Bank Economic Review 14(3), pp. 597-605.

Berg, Andrew / Borensztein, Eduardo (2000): The Pros and Cons of Full Dollarization. IMF Working Paper 00/50.

Berganza, Juan C. / Herrero, Alicia G. (2004): What Makes Balance Sheet Effects Detrimental for the Country Risk Premium? International Finance 0408002, EconWPA.

Buch, Claudia M. / Kuckulenz, Anja / Le Manchec, Marie-Helene (2002): Worker Remittances and Capital Flows, Kiel Institute for World Economics, Working Paper No. 1130.

Bugamelli, Matteo / Paternò, Francesco (2005): Do Workers' Remittances Reduce the Probability of Current Account Reversals? World Bank Policy Research Working Paper 3766.

Calvo, Guillermo / Izquierdo, Alejandro / Mejia, Luis-Fernando (2004): On the Empirics of Sudden Stops: The Relevance of Balance-Sheet Effects, NBER Working Paper 10520.

Carling, Jørgen (2004): Policy options for increasing the benefits of remittances. Paper presented at Workshop B9: Remittances and Development: beyond increasing incomes at the Ninth International Metropolis Conference, Geneva, 27/09—01/10. | International Peace Research Institute, Oslo (PRIO). URL: http://www.gdrc.org/icm/remittance/carling_benefits-remittances.pdf.

Casanova, Ann M. (2007): Remittances and Mobile Banking, in: Migrant Remittances, Vol. 4, No.3 (July) pp.6-7.

Céspedes, Luis / Chang, Roberto / Velasco, Andres (2000): Balance Sheets and Exchange Rate Policy, NBER Working Paper No. 7840, Washington, D.C.

CGAP [Consultative Group to Assist the Poor] (2003): IT Innovations for Microfinance. Presentation by Xavier Reille and Gautam Ivatury at October 16.

CPSS/WB (2007): General Principles for International Remittance Services - Comments on CPSS/WB Consultative Report, Washington D.C.

Chami, Ralph/ Fullenkamp, Connell/ Jahjah, Samir (2003): Are Immigrant Remittances a Source of Capital for Development? IMF Working Paper 03/189, Washington D.C.

Chue, Timothy / Cook, David (2004): Emerging Market Exchange-Rate Exposure; URL:http://home.ust.hk/~daccook/exposurep28trytry.pdf.

Conger, Lucy (2001): The Big-Country Enigma, in: Microenterprise Americas, 2001, pp. 28-31.

Cox Edwards, Alexandra / Ureta, Manuelita (2003): International Migration, Remittances, and Schooling: Evidence from El Salvador, in: Journal of Development Economics, Vol. 72, No.2, pp. 429-461.

De Haas, Hein (2007): The Impact of International Migration on Social and Economic Development in Moroccan Sending Regions: A Review of the Empirical Literature, University of Oxford, International Migration Institute, Working Paper 3.

De Luna Martínez, Jose (2005): Workers Remittances to Developing Countries: A Survey with Central Banks on Selected Public Policy Issues, The World Bank.

Demirgüç-Kunt, Asli / Detragiache, Enrica (1998): The Determinants of Banking Crises in Developing and Developed Countries, IMF Staff Papers, 45, No.1, pp. 81-109

Dinerstein, Marti (2003) IDs for Illegals. The 'Matricula Consular' Advances Mexico's Immigration Agenda. Center for Immigration Studies.

Durand, Jorge / Parrado A. Parrado / Massey S. (1996): Migradollars and Development: A Reconsideration of the Mexican Case, International Migration Review Vol.30, No.2, pp. 423-444.

Eichengreen, Barry / Hausmann, Ricardo / Panizza, Ugo (2005): The Pain of Original Sin, in: Eichengreen, Barry /Hausmann, Ricardo (eds.): Other Peoples´ Money: Debt

Denomination and Financial Instability in Emerging-Market Economies. Chicago: University of Chicago Press.

Fainzylber, Pablo / López, J. Humbert (2007): Close to Home – The Development Impact of Remittances in Latin America, Washington D.C.: The World Bank.

Feige, Edgar L./ Vedran Šošić/ Michael Faulend/ Velimir Šonje (2002): Unofficial Dollarization in Latin America: Currency Substitution, Network Externalities and Irreversibility, in: Dean, J.W./Salvatore D. /Willett T. (eds.): Dollarizing the Americas, New York, Oxford University Press.

Fitzgerald, Valpy (2001): The Winner's Course: Premature Monetary Integration in the NAFTA, in: Bulmer-Thomas, Victor (ed.): Regional Integration in Latin America and the Caribbean – The Political Economy of Open Regionalism, London: Elgar, pp. 119-114.

Freund, Caroline/ Spatafora, Nikola (2005): Remittances: Transaction Costs, Determinants, and Informal Flows, World Bank Policy Research Working Paper 3704, September.

Gamlen, Alan (2006): Diaspora Engagement Policies: What Are They, and What Kinds of States Use Them? Oxford University, COMPAS Working Paper06/32.

Garcia Canclini, Néstor (2002): Latinoamericanos buscando lugar en este siglo, Buenos Aires, Paidós.

Giuliano, Paola / Ruiz-Arranz, Marta (2006): Remittances, Financial Development, and Growth, IZA Discussion Paper No. 2160 / IMF Working Paper No. 05/234.

Glick, Reuven / Hutchison, Michael M. (2001): Banking and Currency Crises: How Common Are Twins?, in: R. Glick / R. Moreno / M. Spiegel (eds.): Financial Crises in Emerging Markets, Cambridge, Cambridge University Press.

Görlich, Dennis / Mahmoud, Toman Omar / Trebesch, Christoph (2007): Explaining Labour Market Inactivity in Migrant-Sending Families: Housework, Hammock, or Higher Education? Kiel Working Paper No. 1391, December 2007.

Glytsos, Nicholas (2002): Dynamic Effects of Migrant Remittances on Growth. An Econometric Model with an Application to Mediterranean Countries, Centre of Planning and Economic Research Discussion Paper, No. 74.

Hernández-Coss, Raúl (2005): The U.S.-Mexico Remittance Corridor- Lessons on Shifting from Informal to Formal Transfer Systems, The International Bank for Reconstruction and Development, The World Bank Working Paper No.47.

IMF (2003): The Balance Sheet Approach and its Applications at the Fund, Prepared by the Policy Development and Review Department. URL: http://www.imf.org./external/np/pdr/bal/2003/eng/06003.htm.

IMF (2005): Worker's Remittances and Economic Development, in: World Economic Outlook, pp. 69-100, April.

Jaramillo, María (2005): Leveraging the Impact of Remittances through Microfinance Products: Perspectives from Market Research, in: Terry, Donald / Wilson, Steven (eds.): Beyond Small Change – Making Migrant Remittances Count. Washington D.C.: Inter-American Development Bank, pp. 133-159.

Jones, Richard C. (1998): Remittances and Inequality: A Question of Migration Stage and Geographic Scale, Economic Geography, Vol.74, No.1, pp. 8-25.

Ketkar, Suhas / Ratha, Dilip (2004-2005): Recent Advances in Future-Flow Securitization, in: The Financier, Vol. 11/12, 2004-2005. http://www.the-financier.com.

Koechlin, Valerie / León Gianmarco (2006): International Remittances and Income Inequality: An Empirical Investigation, in: Journal of Economy Policy Reform, Vol. 10, No. 3, pp. 123-141

López - Córdova, Ernesto J. / Olmeda, Alexandra (2006): La Migración Internacional, las Remesas y el Desarrollo: una Visión General, Banco Interamericano de Desarrollo (BID), No. 27, Washington D.C.

Loser, Claudio, et al. (2006): The Macro-Economic Impact of Remittances in Latin America Dutch Disease or Latin Cure? Inter-American Dialogue, Washington D.C.

Mundaca, Gabriela (o.J.): Can Remittances Enhance Economic Growth? The Role of Financial Market Development. Mimeo, University of Oslo.

Munzele Maimbo, Samuel / Ratha, Dilip (eds., 2005): Remittances: Development Impacts and Future Research, World Bank, Washington D.C.

Müller, Sebastian R. (2006): Hawala. An Informal Payment System and Its Use to Finance Terrorism, Saarbrücken.

Orozco, Manuel (2004): The Remittance Marketplace: Prices, Policy and Financial Institutions, Pew Hispanic Center Report.

Orozco, Manuel (2005): International Financial Flows and Worker Remittances: Best Practices, Washington D.C.: Inter-American Dialogue

Orozco, Manuel (2006): International Flows of Remittances: Cost, Competition and Financial Access in Latin America and the Caribbean – Toward an Industry Scorecard, Washington D.C., Inter-American Dialogue.

Orozco, Manuel / Fedewa, Rachel (2006): Leveraging Efforts on Remittances, Washington D.C. Inter-American Development Bank, Working Paper 24.

Orozco, Manuel (2007): Toward the Mainstream: Remittances and Development in Latin America and the Caribbean, Conference Paper, October.

Orozco, Manuel / Hamilton, Eva (o.J.): Remesas e intermediación de IMF – temas y lecciones, FLACSO, Secretaria General.

Page, John / Plaza, Sonia (2005): Migration, Remittances and Development, Review of Global Evidence, Washington D.C, The World Bank.

Pew Hispanic Center (2006): A Statistical Portrait of Hispanics at Mid-Decade, Reports and Factsheets, URL: http://pewhispanic.org/files/other/middecade/complete.pdf

Priewe, Jan / Herr, Hansjörg (2005): The Microeconomics of Development and Debt Reduction – Strategies Beyond the Washington Censensus, Baden-Baden.

Qorchi, Mohammed El / Munzele Maimbo, Samuel/ Wilson, John F. (2003): Informal Funds Transfer System. An Analysis of the Informal Hawala System, A Joint IMF-World Bank Paper, Occasional Paper 222.

Rapoport, Hillel / Docquier, Frédéric (2005): The Economics of Migrants' Remittances, Institute for the Study of Labour (IZA), IZA Discussion Papers 1531.

Ratha, Dilip (2005): Remittances: A Lifeline for Development, in: Finance & Development, Vol. 42, No.4, pp.42-43.

Ratha, Dilip / Shaw, William (2007): South-South Migration and Remittances, Development Prospects Group, The World Bank.

Sánchez-Fung, José R. (2004): Modelling Money Demand in the Dominican Republic, Department of Economics, University of Kent, Studies in Economics 0015.

Sayan, Serdar (2004): Guest Workers' Remittances and Output Fluctuations in Host and Home Countries, in: Emerging Markets Finance and Trade, Vol. 40, No. 6, pp.68-81.

Sayan, Serdar (2006): Business Cycles and Workers' Remittances: How Do Migrant Workers Respond to Cyclical Movements of GDP at Home? IMF Working Paper No. 06/52.

Stark, Oded / Bloom, David (1985): The New Economics of Labour Migration, in: AEA Papers and Proceedings, May, pp. 173-178.

Stiglitz, Joseph E. / Weiss, Andrew (1981): Credit Rationing in Markets with Imperfect Information, in: American Economic Review, American Economic Association, Vol. 71, No.3, pp. 393-410.

Straubhaar, Thomas (1986): The Determinants of Worker's Remittances – the Case of Turkey, in: Weltwirtschaftliches Archiv, Vol. 122, No.4, pp. 728-740.

Suki Lenora (2004): Financial Institutions and the Remittances Market in the Dominican Republic, Center on Globalization and Sustainable Development, The Earth Institute at Columbia University, New York.

Terry, Donald F. / Wilson, Steven R. (2005): Beyond Small Changes-Making Migrant Remittances Count, Washington D.C., Inter-American Development Bank.

Tornell, Aaron / Westermann, Frank (2005): Boom-Bust-Cycles and Financial Liberalization, MIT Press, Cambridge, Massachusetts / London.

Vono de Vilhena, Daniela (2006): Vinculación de los emigrados latinoamericanos y caribeños con su país de origen: transnacionalismo y políticas públicas. CEPAL/CELADE, Series de población y desarrollo Nr. 71.

Woodruff, Christopher/ Zenteno, Rene (2001): Remittances and Microenterprises in Mexico, UCSD, Graduate School of International Relations and Pacific Studies Working Paper.

World Bank (2006): Global Economic Prospects: Economic Implications of Remittances and Migration, Washington, D.C.

World Bank (2008): Migration and Remittances Factbook, Washington, D.C. URL: http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,contentMDK:21352016~menuPK:3145470~pagePK:64165401~piPK:64165026~theSite PK:476883,00.html.

World Bank (2006): World Development Indicators 2006, The World Bank, Washington, D.C.