Migrants' Remittances and the Transformation of Local Spaces:

The Case of Financial Markets in Mexico*

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I. INTRODUCTION

Remittances – the money sent home by migrants to support their families back home – are situated outside 'traditional' categories of space in several ways. Not only do these small-scale financial transactions span the transnational space beyond the nation-state; they also move largely outside the institutional spaces of the formal banking sector. Exclusion of migrants and their families from the latter occurs on both sides of the border: In the sending countries, many migrants do not hold bank accounts due to language barriers or the fact that they are undocumented residents (Paulson et al. 2006). On the receiving side, many remittances-receivers belong to lower-income groups, often from rural areas, and are usually not serviced by the commercial banking sector (see, for example, Orozco 2006; Jaramillo 2005). Because of this, remittances from Mexican immigrants in the US are in most cases sent and received in cash via money transfer operators (MTOs).

At the same time, linkages between remittances and the financial sector have a high relevance with respect to the impacts of these transfers on receiving countries. First, receivers themselves could benefit from more efficient asset-building strategies through monetary savings options and, eventually, from improved access to other financial services such as credit and insurance products. Access to adequate financial services among poor households plays an important role in reducing poverty and may lead to a more equitable distribution of income (Jalilian and Kirkpatrik 2002; Thomas Beck, Demirgüç-Kunt, and Levine 2007). Beyond these direct benefits to receivers, the linking of remittances with financial services has potentially wider economic effects. Savings from remittances can be channelled to their most productive use and be matched with the demand for credit elsewhere, thereby also benefiting those who

do not directly receive remittances themselves. There is a broad consensus among development economists that financial institutions play a crucial role in the process of economic development (see Levine 1997 for an overview). Cross-country studies have shown that a relative increase in savings and credit is associated with an increase in both growth and per capita income (Goldsmith 1969; King and Levine 1993; Thorsten Beck, Levine, and Loayza 2000a; Thorsten Beck, Levine, and Loayza 2000b).

This article explores, how remittances may lead to a transformation of local spaces, taking the example of financial markets in Mexico. Mexico is one of the main recipient countries of remittances in the world after China and India, with more than 10 per cent of its population of approximately 110 million people living outside their country of birth. Mexicans make up the largest group of immigrants in the US (Pew Hispanic Center 2009). Despite a 16 per cent decrease in the sending of remittances following the 2008 US financial crisis, remittances still play an important role in the Mexican economy. In 2009 they were approximately the same in value as foreign direct investment (FDI) to Mexico, contributing 2.5 per cent to the country's GDP (World Bank 2010). Mexico is also a country with a very unequal access to financial services. According to Honohan (2008), less than a third of the adult population has access to formal financial services (measured by usage of savings accounts), compared to rates above 90 per cent in Western Europe.

The rest of this article is organized as follows: The following section II situates this article within the broader academic debates on migration, remittances and development. The third section links research on remittances with research on propoor financial sector development. Building on recent empirical findings on the impact of migrants' remittances on the financial sector of receiving countries, I

discuss a number of channels through which remittances may reduce information asymmetries and transaction costs that are typical of financial markets in developing countries. The fourth section illustrates hypotheses on remittances and financial sector development with descriptive statistics from the Mexican case. The final section highlights the main implications of the postulated links between remittances and the financial sector and raises open questions.

II. SHIFTING PARADIGMS ON MIGRATION, REMITTANCES, AND DEVELOPMENT

The importance of remittances for many countries has triggered a lot of interest among policy-makers, who have 'discovered' remittances as a potentially important source of capital for development in receiving countries. In recent years, most leading international organizations have dedicated flagship reports to the nexus between migration, remittances, and development (IMF 2005; World Bank 2006; UNDP 2009; OECD 2005), raising the question of whether remittances would become a new mantra in the development discourse – one which responds to the search for a third communitarian way of development between pure market liberalism and state-led development strategies (Kapur 2004; cp. de Haas 2010, 275), and where diasporas play an important role in the economic development of their home countries.

The growing interest in the development potential of remittances has been accompanied by numerous academic publications on the direct and indirect positive or negative effects of remittances on receiving countries. While it is widely accepted that remittances have contributed significantly to the material well-being of receiving households and to poverty reduction (Adams and Page 2005), they also affect receiving countries through several secondary and indirect channels that have to be taken into account when analysing their impact on receiving countries. These indirect

effects of remittances include consumption multipliers from spending remittances (Glytsos 2005; Durand, Parrado, and Massey 1996), or consequences for the labour market through rising wages (Mishra 2007; Airola 2008). Other economy-wide effects have been attributed to the impact of remittances on exchange rates. On the one hand, remittances have contributed to the macro-economic stability of receiving countries: because remittances are less volatile than other private capital flows, they tend to stabilize the exchange rate and may sustain current-account deficits (Buch and Kuckulenz 2010; Singer 2010). On the other hand, large inflows of foreign currency tend to appreciate the nominal or real exchange rates, leading to negative effects on the competitiveness of export-oriented sectors (Amueda-Dorantes and Pozo 2004; Acosta, Lartey, and Mandelman 2009), similarly to the phenomenon known as "Dutch disease" in the literature on natural resource booms.

The wider implications of these direct and indirect effects of remittances on the economic development of receiving countries have been interpreted in different manners. Early research on remittances and development was dominated by structuralist positions, with a mostly critical tone regarding the impact of remittances on migrant-sending communities (cp. de Haas 2010; Durand, Parrado, and Massey 1996, 424f). These critical views, often formulated by sociologists and anthropologists, stemmed from the observation that income from remittances is, to a large degree, spent on receiving households' daily consumption rather than on 'productive' investment or on luxury goods, with few benefits for the local economy (Wiest 1979; Lipton 1980; Mines 1981; Reichert 1981; and Binford 2003; Cortina, de la Garza, and Ochoa-Reza 2005; Canales 2005 for more recent contributions along similar lines). In this tradition, authors with a critical perspective on globalization, such as Delgado Wise and Márquez Covarrúbias (2008), argue that remittances are

the result of strangled economic and social development rather than a tool for growth and well-being. In their view, these flows help sustain the fragile socioeconomic situation of the migrants' countries of origin, expanding the asymmetries between North and South and exacerbating phenomena such as employment insecurity. poverty, and social marginalization. Therefore, instead of altering structural development constraints, remittances, according to these authors, at best constitute a palliative measure against the deteriorating socioeconomic situation of the population, which has been caused by failed macro-economic structural policies (Canales 2008). While critical views on the impacts of migration and remittances have not vanished, the 1980s and 1990s saw a paradigmatic shift towards more positive views on the role of migration and remittances in the development process. Earlier studies that criticized the 'unproductive' ways in which remittances were spent have been contested by more recent contributions that have compared spending behaviour among receiving and non-receiving households, finding that remittances have a positive impact on investment in human and physical capital. According to these studies, remittances enable households to undertake investments in human or physical capital they would not otherwise be capable of making. Remittance-receiving households have therefore been found to spend a higher share of their income on education (Adams and Cuecuecha 2010; Hanson and Woodruff 2003; Cox Edwards and Ureta 2003), health (Amuedo-Dorantes and Pozo 2009; Valero and de Lourdes Treviño 2010), and entrepreneurship (Massey and Parrado 1998; Woodruff and Zenteno 2007). Many of these more recent contributions have been influenced by the insights of the New Economics of Labor Migration (NELM, see Stark and Bloom 1985; Lucas and Stark 1985; Rosenzweig and Stark 1989), a school of thought that led to a re-thinking of the relationship between remittances and development by

putting the transnational household at the centre of analysis. Earlier analyses of migration's impact on home countries usually stopped with the act of migration, which was seen as constituting a loss of human capital for migrant-sending communities. In contrast to these positions, the NELM studied migration as an implicit family arrangement that involves the whole household. According to this view, migration and remittances are informal household mechanisms of assetaccumulation and self-insurance that can be modeled within absent or rudimentary markets for finance and insurance (Stark and Levhari 1982; J. E. Taylor 1986; E. J. Taylor and Wyatt, T.J. 1996), a feature typical of rural areas in developing countries. Families invest in sending one or more members abroad and receive a return in the form of remittances, the monetary expression of a long-term relationship with emigrating family members. Following the work of the NELM, a number of studies have analysed migration decisions as part of the risk-management and asset-building strategies of transnational households: remittances are seen to provide insurance for those family members who stay behind, through the diversification of household incomes, and tend to increase in the case of negative events (e.g. Agarwal and Horowitz 2002; Gubert 2002; Yang 2008; Yang and Choi 2007).

III. REMITTANCES AND FINANCIAL MARKETS IN RECEIVING COUNTRIES

Although migration and remittances can be perceived as 'self-help' strategies enabling households to self-insure and to finance investment in human or physical capital in the context of absent or rudimentary formal institutions for finance and insurance, migration and remittances do not take place in an institutional vacuum. Departing from and extending the ideas of the NELM, this article postulates that migration and remittances, while they take place within a context of incomplete or

rudimentary institutions for credit and insurance, also have an influence on financial markets in the migrants' countries of origin. Recent research based on financial diaries has shown that poor households mix and combine different financial tools and instruments to cope with expected and unexpected financial gaps (Rutherford 2003; Collins et al. 2009). Since migration and financial services are both asset-building and risk-management tools, remittances and financial services may, in some cases, substitute for each other – for example, when family members in the US function as a source of capital from outside the regular household to cover emergency spending, similarly to credit or insurance from financial institutions. In other cases remittances and financial services may complement each other because financial institutions offer a way of saving remittances or because financial institutions may accept remittances as collateral for loans.

In developing countries, many poor people and geographically isolated households have no access to formal financial institutions because of information asymmetries and high transaction costs for individually low sums. Stiglitz & Weiss (1981) have shown that in the presence of information asymmetries – that is, when the same information is not available to all market actors – there is no automatic clearing mechanism between supply and demand in credit markets and systematic exclusion from credit markets occurs for certain groups. Although low-income households would often be ready to pay a higher price for credit, they are considered to be high-risk clients and are not attended by commercial financial institutions. Moreover, low-income households often lack collaterals required by financial institutions and individual sums are low in comparison to transaction costs of collecting information on credit takers and enforcing payments. This makes costs for attending low-income households in many cases prohibitively high for profit-oriented institutions (for a

general discussion see Armendáriz de Aghion & Murdoch (2005) and for a literature review with focus on rural markets see Conning & Udry (2005)).

Recent research has asked whether and to what degree remittances improve access to financial services and therefore function as 'catalyst' for financial development. This issue has been treated, most of all, in policy papers and country studies (see for example Orozco 2004a; Orozco 2004b; Orozco and Fedewa 2006; Terry and Wilson 2005). However, despite a repeated call for "banking" migrants in policy circles and international organizations, the relationship between remittances and financial sector development has so far received relatively little attention in academia. Exceptions include Aggarwal et al. (2010), who find that remittances have contributed to deeper financial sectors measured in domestic savings and, albeit at a minor degree, to domestic credit relative to GDP in a cross-country panel of 99 developing countries. These results are also confirmed by Martínez Pería et al. (2008) for Latin America and by Gupta et al. (2009) for Sub-Saharan Africa. In a case study on Mexico, Demirgüç-Kunt et al. (2011) add further evidence to the overall picture of a positive impact of remittances on deposits (and partly to credits) on the meso level of Mexican municipalities, and, additionally, also find a positive impact on the number of accounts per household. A positive correlation between remittances and the ownership of savings accounts at the household level has also be found by Anzoategui et al. (2011) for the case of El Salvador and by Ambrosius (2012a) for the case of Mexico. The latter study also finds a positive correlation of remittances with borrowing options among remittances-receiving households. This effect is however weaker than for the ownership of savings accounts.

Several arguments can be brought forward as to why remittances may have an impact on financial markets in receiving countries. Remittances could, under certain conditions, make a difference, both for reducing information asymmetries and transaction costs. With respect to information asymmetries on the supply side, financial institutions which pay remittances could build a financial history on remittances for receivers which otherwise lack a formal income - provided the information is registered (cp. Orozco and Fedewa 2006). Remittance could then be included as an additional income into the evaluation of clients that demand a credit. Moreover, remittances are sent out of altruistic motives and tend to increase and stabilize income of households (Buch and Kuckulenz 2010; Bugamelli and Paterno 2009; Sayan 2004) and thereby reduce the default risk of credit takers. Because remittance receivers have an additional "insurance" in the form of remittances, they are less risky debtors from the point of view of the banks.

On the demand side, a positive effect of remittances on access to credits is relevant when remittances-receiving households demand credits. When remittance receivers are mainly savers, the information asymmetry argument becomes less important from the point of view of the supply side, because a savings account bears no risk for financial institutions and does not require monitoring, such as credits. In this case, the information asymmetry lies on the side of the savers. For the same reason that remittances are sent out of altruistic motives and respond to the need of families, remittances could also function as a substitute for credit and insurance from formal financial institutions. Several studies have underlined that a large part of remittances is spent on health and other "emergency" spending (Amuedo-Dorantes and Pozo 2009; Amuedo-Dorantes and Pozo 2006; Yang and Choi 2007). Remittances-receivers which have a demand for finance – for example because of loss of work, sickness or other sudden income shocks – are able to rely on an additional and relatively stable source of income, which is not available to non-receivers. Woodruff

& Zenteno (2007) and Giuliano & Ruiz-Arranz (2009) have explicitly argued that remittances function as a substitute for a lack of access to productive credits and play an important role for financing investment of micro enterprises. Remittances may therefore compete with formal financial services, possibly reducing demand for credits and other financial products like insurances. In this sense, Ambrosius (2012b) finds that households in Mexico with transnational ties were less prone to increased levels of indebtedness when household members faced serious health shocks, compared to households without such ties.

Remittances could reduce information asymmetries on the demand side when remittance-paying banks are able to build trust of savers towards financial institutions. This might be more probable when remittances imply a personal contact between receivers and financial institutions – that is, when not only Money Transfer Operators (MTO) but also financial intermediaries are involved in remittance payments. Also, when the general knowledge about financial institutions and services and their use (so called financial literacy) is low, being exposed to financial institutions through remittances might increase knowledge about other available financial products and their possible benefits (Orozco, Castillo, and Romei 2010).

Finally, remittances could reduce transaction costs of financial service providers, when they are geographically concentrated and increase total financial transactions in remote areas. In this case, they may generate economies of scale (and reduce transaction costs) allowing financial institutions to operate with profits in geographically disperse areas. Remittances might also increase the amount of individual transactions through higher per capita saving or higher per capita credits. This effect would partly be an income effect (because remittances also increase per capita income and thereby might "push" individuals into income segment which are

attended by financial institutions). Besides, there could also be a pure "remittance effect", for example when fees from paying remittances make bank branches (or non-banking financial intermediaries) profitable, an argument which is made by Aggarwal et al (2010, 256) and Demirgüç-Kunt et al (2011, 230), or when remittances change the demand structure for financial products, for example, when remittance-receivers have mostly a demand for saving accounts which implies lower transaction costs for financial institutions compared to credits.

Table 1: Reducing Market Imperfections in the Financial Sector through Remittances?

Reasons for market imperfections impeding access to financial services	Possible reduction of market imperfections through remittances				
Information asymmetries on the supply side					
Lack of financial history	Financial history can be build on remittances				
Lack of collateral for credits	Remittances can be used as a collateral				
Irregular and informal income	Remittances as additional and relatively stable income				
Information asymmetries on the demand side					
Lack of trust towards financial institutions	Exposure to financial institutions and personalized contact may increase trust				
Lack of financial literacy (no knowledge of available financial services)	Positive information externalities through remittance transfers				
High transaction costs					
Low economies of scale for financial institutions/ high fixed costs for branches (geographic dispersion, bank branches are not profitable in remote areas)	Remittances increase total transactions in a given region				
Low economies of scale/ high fixed costs for individual transactions	Remittances (eventually) change demand structure towards products with lower transaction costs (e.g. saving accounts)				

Source: Own elaboration (with contributions from Barbara Fritz, Ursula Stiegler and Christiane Ströh de Martínez)

IV. REMITTANCES AND FINANCIAL ACCESS: THE MEXICAN CASE

In the following section, I take a closer look at descriptive statistics from the Mexican case and compare access to financial services among remittance-receiving and nonreceiving households. Data comes from the Mexican Family Life Survey (MxFLS), a panel data survey carried out jointly by the Centro de Investigación y Docencia Económica (Center for Research and Teaching in Economics, CIDE) and the Universidad Iberoamericana in Mexico City. As a multi-thematic database, it combines information on financial service usage, migration histories, monetary transfers, and a large number of additional socioeconomic characteristics of households and individuals. While households were not directly asked about receiving international remittances, this information can be constructed indirectly by combining questions on whether households received monetary transfers during the last year (and from whom) and whether they have family members that live abroad. Households are classified as remittances-receiving households if at least one household member received monetary transfers from a family member living in the US during the last year. On average between 2002 and 2005, six percent of all households received remittances. In rural communities with less than 2,000 habitants (the definition

¹ In some cases, households could not be clearly classified into remittance-receiving households. Respondents only replied if they received transfers from a sibling, an uncle/aunt, parents, etc. For example, if a respondent has two brothers, one living in the US and another living in a different household in Mexico, it is not possible to know from the survey data whether the respondent received the transfer from the brother living in Mexico, or a different brother living in the US. I classify these households as remittance-receiving households although there is some uncertainty in this classification and some of these transfers might actually be national remittances. Even so, I consider this variable to be a good proxy for international remittances. The estimates for the share of remittance-receiving households based on this procedure are very similar to the estimates on remittances from other sources.

applied by the national statistics office, INEGI, for rural households), 7.8% of all households received remittances, compared to 4.8 percent of households in urban areas.

Access to financial services can be understood and measured in different ways. For example, a household might have access to (often unregulated and semi-formal) credit unions or savings banks, but not to commercial banks; or might have access to credit, but not to savings options. Here, I use two alternative indicators to measure financial access: First, whether at least one household member owns a savings account with a financial institution, a measurement frequently used in literature on financial access (for example Honohan 2008). Alternatively, I use access to borrowing options from financial institutions as an indicator for financial access – where households can ask for credit without owning a savings account. Many institutions in microfinance, such as the most important player in the Mexican Microfinance sector – 'Compartamos' –, focus on lending and do not offer savings accounts. In the case of credit, I ask for the theoretical availability of credit rather than its actual use because I want to measure access – it is more interesting to know whether households are able to receive credit if they wanted to, not if they really did: Households simply may not have demand for credit. In the case of savings, I am not able to measure the availability of savings

According to Esquivel & Huerta-Pineda (2007), estimations based on ENIGH 2002 (Encuesta

Nacional de Ingreso y Gasto de los Hogares, a biannual household survey carried out by the Mexican Statistics Institute INEGI) indicate that 5.7 percent of Mexican households received remittances in 2002. This was 5.9 percent of households in 2008, with 41.1 percent of remittances going to rural households (based on ENIGH 2008, according to Sánchez Ruiz 2010).

2010

options and instead measure the actual use (ownership) of savings accounts.² Using two alternative indicators for financial access allows me to draw a more nuanced picture on the impact of remittances on different dimensions of financial access.

On average, over 2002 and 2005, at least one household member owned a savings account in 17 percent of all Mexican households; in around 30 percent of households, at least one member had borrowing options with a financial institution. These data refer to different types of financial institutions and, next to the traditional banking sector, also include credit unions, savings banks, and other deposit-taking or lending institutions that offer financial services to lower-income segments of the population. Many of these institutions have a local focus only and, in some cases, are not formally regulated. Eight percent of households had a savings account with a non-traditional banking institution from the heterogeneous microfinance sector (compared to 11 percent with commercial banks) and 21 percent of households had borrowing options with a microfinance lending institution (compared to 17 percent that had borrowing options with a commercial bank).³

Table 2 compares the ownership of savings accounts and the availability of borrowing options among remittances-receiving and non-receiving households separately for rural and for urban households and for different types of financial institutions. Although the table provides a static picture on access to financial services among

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² Of course, households with borrowing options can still be denied credit. Even so, I prefer an indicator on the availability of credit to an indicator on the use of credit in order to distinguish financial access from the demand for financial services.

³ A relatively large number of interviewees did not answer the questions on financial service usage and borrowing options, which reduces the number of observations available.

Mexican households only and should not be interpreted causally, several messages can be taken away from this simple data description.

Table 2: Share of Households (%) with Financial Access, for Remittances-Receiving and Non-Receiving Households from Rural and from Urban Communities

		rural		urban	
		non- receivers	receivers	non- receivers	receivers
	no. of households	5,683	483	8,278	418
savings account	any financial institution	8.0	12.0	19.6	23.2
	MFI	2.9	5.2	8.2	11.5
	commercial banks	5.4	6.8	12.4	13.6
borrowing options	any financial institution	20.5	31.1	35.4	38.3
	MFI	14.8	24.6	24.0	29.7
	commercial banks	9.8	13.5	22.5	19.1

Source: Ambrosius (2012a), based on MxFLS 2002, 2005. Data is given as average for the pooled data from 2002 and 2005. Percentage shares for MFI and commercial banks do not sum up to the shares for any financial institution because households can have savings accounts and borrowing options with both types of financial institutions.

First, more than half of all remittances-receiving households in Mexico live in rural communities with less than 2,000 inhabitants, where access to financial services is more restricted, compared to urban households. Only nine percent of rural households owned a savings account compared to 22 percent among urban households; and 22 percent of rural households had borrowing options with a financial institution compared to 36 percent among urban households.

Second, when looking at access to financial services among remittances-receiving households alone, the general judgement in policy reports (e.g. Orozco 2006; Jaramillo 2005) can be confirmed that access to financial services is strongly limited among remittances-receiving households. At the same time, remittances-receiving households have a (slightly) better access to financial services than non-receiving

households, both with respect to the ownership of savings accounts and with respect to the availability of borrowing options. These differences are more striking when the comparison is restricted to rural households only. This could indicate that receiving remittances reduces some of the information asymmetries and transaction costs that prevent poor households from having access to financial services. However, a more careful statistical analysis as in Anzoategui et al. (2011), Demirguc-Kunt et al. (2011) or Ambrosius (2012a), that takes into account systematic differences among remittances-receiving households, would be needed in order to claim a causal effect. Third, a relatively large number of households owns savings accounts with a microfinance institutions (MFI); and more households have borrowing options with microfinance institutions compared to commercial banks. While financial services offered by MFI play an important role both for households from urban and for households from rural communities, their importance relative to commercial banks is stronger among rural households. Access to commercial banks, which rarely open branches in rural communities, is particularly limited among rural households. The fact that differences in terms of financial access between remittances-receiving and non-receiving households are stronger for microfinance institutions (MFI) than for commercial banks could indicate that commercial Banks are not necessarily the most adequate institutions for linking remittances with further financial services.

V. CONCLUSION

Institutions from the microfinance sector are often socially and geographically closer

to remittances-receiving households.

While much of the growing research on migrants' remittances has focused on poverty effects and the spending of remittances, this article contributes to an understanding of

how remittances transform local spaces of receiving countries by focusing on a relatively neglected research topic, the linkages between remittances and the financial sector. This is an important issue, as it draws attention to some of the indirect effects of remittances, whereas concentrating solely on the spending of this source of income misses an important part of the picture. Migration and remittances on the one hand and financial services on the other are both part of the risk-management and assetbuilding strategies of households. The fact that the ownership of savings accounts and the availability of borrowing options is higher among remittances-receiving households in Mexico may point to the fact that financial services can be an important complement of the risk-management and asset-building strategies of transnational households. In this way, remittances partially replace absent or rudimentary institutions for formal credit and insurance and partially complement each other – for example, when financial institutions provide households with savings options or accept remittances as collateral for loans, reducing some of the information asymmetries and high transaction costs that prevail especially in rural financial markets of developing countries.

The linkages between remittances and the financial sector potentially increase the former's development impact by providing receiving households with additional risk-management and asset-building tools, and by channelling savings from remittances to fulfil demands for credit elsewhere. This interpretation contrasts with critiques of the overly 'consumptive' spending of remittances. However, whether and to what degree linkages between remittances and financial services occur depends on the specific institutional setting in each country. Therefore, systematic comparative research is needed on institutional frameworks and specific initiatives that link remittances with additional financial services, and, more generally, the role that governance by the

state and other actors may play in creating favourable conditions for economic and social development. Remittances are the private income of transnational households. Institutional frameworks that open up monetary savings and borrowing options and facilitate the more efficient use of remittances for families are therefore more promising than a paternalistic debate on the 'correct' use of these incomes.

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