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# D Migrants' Remittances and the Transformation of Local Spaces: The Case of Financial Markets in Mexico

**Abstract:** Remittances, the money sent by migrants to 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. Taking the case of financial markets in Mexico and building on recent empirical findings on the impact of migrants' remittances on the financial sector of the receiving countries, this article explores how remittances may lead to a transformation of local spaces by reducing some of the market failures that prevail, especially in rural financial markets. **Keywords:** Economy; Remittances; Financial Access; Mexico; 21st Century.

**Resumen:** Las remesas enviadas por los migrantes en Estados Unidos a sus familiares en América Latina están situadas fuera de las categorías 'tradicionales' de espacio. No sólo atraviesan diferentes espacios geográficos más allá de los Estados nación, sino que también se mueven en gran parte fuera de los espacios formales de las instituciones bancarias. Tomando el ejemplo de los mercados financieros en México y en base a estudios recientes sobre el impacto de las remesas en el sector financiero, este artículo explora en qué forma las remesas tienen el potencial de transformar espacios locales y de reducir algunas de las fallas de mercado que prevalecen ante todo en los mercados financieros rurales.

Palabras clave: Economía; Remesas; Acceso financiero; México; Siglo XXI.

# Introduction

Remittances –the money sent home by migrants to support their families– 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 send-

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ing countries, many migrants do not hold bank accounts because of language barriers or the fact that they are undocumented residents (Paulson et al. 2006). On the receiving side, many remittance-receivers belong to lower-income groups, often from rural areas, and are usually not serviced by the commercial banking sector (Orozco 2006; Jaramillo 2005). For these reasons, 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 are pertinent with respect to the impact 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/Kirkpatrik 2002; Beck et al. 2007). Beyond these direct benefits to receivers, the linking of remittances with financial services potentially has 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.<sup>1</sup> 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.<sup>2</sup>

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 2011). 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, 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 pro-poor 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

<sup>&</sup>lt;sup>1</sup> See Levine (1997) for an overview.

<sup>&</sup>lt;sup>2</sup> Goldsmith (1969); King/Levine (1993); Beck et al. (2000a and 2000a).

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.

### 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,<sup>3</sup> raising the question of whether remittances would become a new mantra in development discourse –one which responds to the search for a third, communitarian path to development positioned between pure market liberalism and state-led development strategies (Kapur 2004; 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/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 et al. 1996), or consequences for the labour market through rising wages (Mishra 2007; Airola 2008). Other economywide 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/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/Pozo 2004; Acosta et al. 2009), similar 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 (De Haas 2010; Durand et al. 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.<sup>4</sup> In this tradition, authors with a critical perspective on globalization, such as Delgado Wise and Márquez Covarrubias (2008), argue that remittances are the result of

<sup>&</sup>lt;sup>3</sup> IMF (2005); World Bank (2006); UNDP (2009) OECD (2005).

<sup>&</sup>lt;sup>4</sup> Wiest (1979); Lipton (1980); Mines (1981); Reichert (1981); Binford (2003) and Cortina et al. (2005). See Canales (2005) for more recent contributions along similar lines.

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 of 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 that 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/Cuecuecha 2010; Hanson/Woodruff 2003; Cox Edwards/Ureta 2003), health (Amuedo-Dorantes/Pozo 2009; Valero/Treviño 2010), and entrepreneurship (Massey/Parrado 1998; Woodruff/Zenteno 2007). Many of these more recent contributions have been influenced by the insights of the New Economics of Labor Migration (NELM),<sup>5</sup> 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 asset-accumulation and self-insurance that can be modeled within absent or rudimentary markets for finance and insurance (Stark/Levhari 1982; Taylor 1986; Taylor/Wyatt 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.<sup>6</sup>

#### 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 capi-

<sup>&</sup>lt;sup>5</sup> See Stark/Bloom (1985); Lucas/Stark (1985); Rosenzweig/Stark (1989).

<sup>&</sup>lt;sup>6</sup> E.g. Agarwal/Horowitz (2002); Gubert (2002); Yang (2008); Yang/Choi (2007).

tal 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 served by commercial financial institutions. Moreover, low-income households often lack the collaterals required by financial institutions, and individual sums are low in comparison to the transaction costs of collecting information on credit takers and enforcing payments. This makes the cost of serving lowincome households in many cases prohibitively high for profit-oriented institutions.<sup>7</sup>

Recent research has asked whether and to what degree remittances improve access to financial services and therefore function as a 'catalyst' for financial development. This issue has been investigated, most of all, in policy papers and country studies.<sup>8</sup> 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 to 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 been found

<sup>&</sup>lt;sup>7</sup> For a general discussion see Armendáriz de Aghion/Murdoch (2005) and for a literature review with a focus on rural markets see Conning/Udry (2005).

<sup>&</sup>lt;sup>8</sup> See, for example, Orozco (2004a and 2004b); Orozco/Fedewa (2006); Terry/Wilson (2005).

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 remittance-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 in reducing information asymmetries and transaction costs. With respect to information asymmetries on the supply side, financial institutions that pay remittances could build a financial history on remittances for receivers who otherwise lack a formal income –provided the information is registered (Orozco/Fedewa 2006). Remittances could then be included as additional income in the evaluation of clients who request credit. Moreover, remittances are sent out of altruistic motives and tend to increase and stabilize the income of households (Buch/Kuckulenz 2010; Bugamelli/ Paterno 2009; Sayan 2004), thereby reducing the default risk of credit takers. Remittance receivers are less risky debtors from the point of view of the banks because they have additional "insurance" in the form of remittances.

On the demand side, the positive effect of remittances becomes apparent when remittance-receiving households request credit. 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 like a loan. 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/Pozo 2006 and 2009; Yang & Choi 2007). Remittancereceivers who request financing -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 in financing the investment of micro-enterprises. Remittances may therefore compete with formal financial services, possibly reducing demand for credits and other financial products like insurance. 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 savers' trust in financial institutions. This might be more probable where remittances imply 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 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 et al. 2010).

Finally, remittances could reduce the 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 at a profit in geographically disperse areas. Remittances might also increase the amount of individual transactions through higher per capita saving or higher per capita credit. This effect would partly be an income effect (because remittances also increase per capita income and therefore might "push" individuals into an income bracket serviced by financial institutions). Additionally, there might 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 there is a demand for saving accounts among remittance-receivers, which implies lower transaction costs for financial institutions compared with loans.

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 built on remittances		
Lack of collateral for loans	Remittances can be used as collateral		
Irregular and informal income	Remittances as additional and relatively stable income		
Information asymmetries on the demand side			
Lack of trust in 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)		

 TABLE 1

 Reducing market imperfections in the financial sector through remittances?

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

# Remittances and financial access: The Mexican case

In the following section, I take a closer look at descriptive statistics from the Mexican case study and compare access to financial services among remittance-receiving and non-receiving 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 (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 remittance-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.<sup>9</sup> In rural communities with less than 2,000 inhabitants (the definition applied by the national statistics office, INEGI, for rural households), 7.8 percent 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 the 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

<sup>&</sup>lt;sup>9</sup> 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 about 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. According to Esquivel/Huerta-Pineda (2007), estimates 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).

did: households simply may not have demand for credit. In the case of savings, I am not able to measure the availability of savings options and instead measure the actual use (ownership) of savings accounts.<sup>10</sup> Using two alternative indicators for financial access allows me to draw a more nuanced picture of the impact of remittances on different dimensions of financial access.

On average, between 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 include 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).<sup>11</sup>

Table 2 compares the ownership of savings accounts and the availability of borrowing options among remittance-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 of access to financial services among Mexican households only and should not be interpreted causally, several conclusions can be drawn from this simple data description.

First, more than half of all remittance-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 remittance-receiving households alone, the findings confirm the general conclusions of policy reports (Orozco 2006; Jaramillo 2005) that access to financial services is strongly limited among remittance-receiving households. At the same time, remittance-receiving households have (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), which takes into

<sup>&</sup>lt;sup>10</sup> Of course, households with borrowing options can still be denied credit. Even so, I prefer an indicator of the availability of credit to an indicator of the use of credit in order to distinguish financial access from the demand for financial services.

<sup>&</sup>lt;sup>11</sup> 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.

		RURAL		URBAN	
		non-receivers	receivers	non-receivers	receivers
savings account	no. of households	5,683	483	8,278	418
	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

#### TABLE 2

# Share of households (%) with financial access, for remittance-receiving and non-receiving households from rural and from urban communities

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 to the shares for any financial institution because households can have savings accounts and borrowing options with both types of financial institutions.

account systematic differences among remittance-receiving households, would be needed in order to claim a causal effect.

Third, a relatively large number of households own savings accounts with a microfinance institution (MFI); and more households have borrowing options with microfinance institutions compared to commercial banks. While financial services offered by MFIs play an important role both for households from urban and for households from rural communities, their importance relative to commercial banks is greater 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 remittance-receiving and non-receiving households are greater for microfinance institutions (MFI) than for commercial banks could indicate that commercial banks are not necessarily the ideal institutions when it comes to linking remittances with further financial services. Institutions from the microfinance sector are often socially and geographically closer to remittance-receiving households.

# Conclusion

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 in 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 asset-building strategies of households. The fact that the ownership of savings accounts and the availability of borrowing options are higher among remittance-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 providing formal credit and insurance and partially complement them; 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 the 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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