New Options for Financing Development – The Case for Securitized Remittances

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Abstract

Financing for development has always been a particularly complex puzzle. With the establishment of the Millennium Development Goals, there has been increasing attention paid to new sources of development finance, from foreign direct investment, to a proposed global tax for development, to loans from the World Bank. Remittances have long been studied in terms of their effects on development, but less has been said about their ability to provide an alternative source of capital. The huge flows of money that are remitted annually not only promote a higher standard of living to millions of families, but also strengthen financial institutions and can be securitized by banks and governments to increase access to development capital. This paper presents and analyzes some of the new financial mechanisms available as a result of large remittance flows, with a particular focus on securitizing future-flow receivables of remittances.

Introduction

Development financing presents challenges to economist and policy officials alike, and has long been a source of serious scholarship. In the wake of financial collapses such as the Asian financial crisis and the more recent global crisis of 2008, of special interest are stable, reliable sources of funding to counter the boom and bust cycle of global capital markets. Increased pressure and attention has also been paid to development financing recently with the establishment of the Millennium Development Goals in 2000 as a target to be achieved by 2015. This paper reviews some of the options for governments to access funds to increase economic and social development. Two main groups of financing options are available. The first is external development financing such as foreign direct investment and global taxes. The second strain of options are domestic, including loans and remittances. Both types have positive and negative aspects, as we will see from a following brief review.

It is to remittances, however, that we will turn our attention to in more detail. Remittances as a source of stable development financing is an area that has been largely unexplored, yet many new and promising options exist. Encouraging hometown associations, fostering local credit unions, sponsoring diaspora bonds, and securitizing remittances are all ways that governments can capitalize on the large and dependable cash flows entering their countries in the form of remittances.

By examining securitized remittances....this paper shows...Securitizing remittances emerges as a particularly useful tool in securing low cost funding for development purposes. Through securitization, governments can access capital markets in times of crisis. In this way such mechanisms can lower market volatility and increase liquidity, both of which are important to sustainable economic growth and development. In addition to providing new sources of financing, leveraging and formalizing remittances can also lead to strengthened domestic financial institutions, which helps to further spur economic growth.

The paper is organized as follows. First we look at traditional sources of financing development including foreign direct investment and loans, as well as non-traditional options such as the possibility of global taxes. Next we turn to the subject of remittances and review the current literature on the financing opportunities presented by these capital flows as well as the added benefits that remittances bring to a country's financial institutional strength. Following this review we examine securitized remittances in more detail as a stable source of funding and discuss examples of where and how this financial tool has been implemented. We conclude with recommendations.

In general, this paper limits itself by focusing on the funding side of development, not the spending side. The two cannot be fully separated, as the use of resources may affect their availability. While the more effective use of funds may influence future supply, here only sources of funding are examined and not their administration.

Options for Development Financing

Official Development Assistance

Official development assistance (ODA) is an important source for financing. While forming the Millenium Development Goals it was recognized by all parties that more funding and vast increases in economic growth would be needed in order for them to be achieved. At a Panel on Financing and Development at the U.N. in 2001, former Mexican President Zedillo made several recommendations for meeting the Millennium Development Goals. The Panel estimated that an additional $50 billion in development funds and global cooperation were needed to achieve such public goods as limiting carbon emissions and the reduction of contagious diseases (UN 2001, 5). It was the Panel's recommendation (and has been the U.N. recommendation for some time now) that each country designate .7 of its gross national product towards ODA.

Increased ODA is not an easy political option, however. To put the additional $50 billion target in context, total world ODA contributions in 2009 totaled $119.6 billion, with the United States contributing about 24 percent of that amount at 28 billion (OECD 2010). The funding gap could be closed if the OECD countries contributed the recommended .7 percent of their GNP, in which case there would be no need to look for alternative financing options. Knowing that this is unrealistic, however, we must examine other ways for countries to raise funds for development.

Foreign Direct Investment

Besides unattached aid donations, increasing foreign direct investment (FDI) is one of the most well known ways of increasing development. FDI involves both foreign companies investing in tangible goods such as ownership of factories and office buildings, as well as foreign investment in a company's total stock. Money can be traded relatively freely, but direct investments cannot be freely moved from one state to another when conditions change.

When compared to ODA, foreign investments surpass official aid flows by almost five times, standing at $510 billion in 2010 (World Bank 2011). The current figure masks the whole truth, however, as in 2009 FDI only stood at $343 billion. Foreign investments rise and fall dramatically based on current financial conditions. In times of the most need, FDI often drops off precipitously.

Mexico's financial crisis of 1995 highlighted the risks of a recovery based largely on foreign investment. The economy had been booming since the late 1980's, but when foreign investors began to doubt the Mexican government's ability to sustain the economic situation, especially in light of rising political violence and instability, they retreated en masse, pulling the carpet out from under the peso and threatening the economy with collapse. The government responded with a strict austerity program, but survived the crisis only because foreign creditors, mostly the United States, offered the government billions of dollars in credit to shore up the peso and restore investor confidence (Rapley 2007, 88).

Because FDI does have the power to stimulate economies, and is such a powerful tool for growth, countries will often adjust their regulatory policies to attract foreign investments (Goldstein and Pevehouse 2009). More foreign investments usually mean increased trust and credibility in the economy, which are crucial for a successful economic growth pattern. Knowing this, multinational corporations can "shop" for the best business conditions for their investment, and this can promote weaker government institutional enforcement and lower wage and environmental standards. Governments will change their own policies for foreign business interests (Goldstein and Pevehouse 2009, 476).

Loans

Borrowing money is an alternative to foreign investment as a way of obtaining funds to facilitate economic development. If enough accumulation occurs, it produces enough surplus to repay the loan and still make a profit. Borrowing has several advantages. It keeps control in the hands of the state (or other local borrower) and does not impose sacrifices on local citizens.

Debt has disadvantages, too. The borrower must service the debt – making regular payments of interest and repaying the principal according to the terms of the loan. Debt service is a constant drain on whatever surplus is generated by investment of the money. With FDI, a money-losing venture is the problem of the foreign company. With debt, it is the problem of the borrowing state. Often a debtor state will borrow new funds to service old loans, perpetuating the cycle. Such behavior has led to a debt crisis in many countries, where economic growth was nearly impossible due to the huge amount of money owed to outside financial institutions.

Failure to make scheduled payments, called a default, is a serious problem and destroys a lenders' confidence in the country, results in cutoff of future loans, and is usually accompanied by a downgrading of a country's sovereign investment rating (Tomz 2007). A sovereign investment rating determines on what terms a government can borrow money. The United States, for example, has an AAA investment rating according to Standard & Poor's.[1] Jamaica has a D. Thus, the countries in the most need of financing for development have the hardest time getting it through loans.

World Bank and IMF Loans

To solve the credit problem in many countries, and recognizing that low sovereign investment ratings prevent countries from getting funds, the World Bank and International Monetary Fund give loans to less developed countries at very low, or interest-free rates. The IMF lent out $21 billion in 2010 in total loans and disbursements, and the World Bank $20.1 billion in 2004 (IMF 2011; World Bank 2004).[2] The IMF lends primarily to stabilize currency, which is crucial for sustainable and stable growth, where the World Bank lends mostly for specific development projects.

The cheaper, lower cost loans from these two institutions do not come without conditions, however. The IMF states that "a loan is usually provided under an 'arrangement,' which may, when appropriate, stipulate specific policies and measures a country has agreed to implement to resolve its balance of payments problem" (IMF 2011). The IMF will not loan money without a guarantee that the country will change or fix what the IMF perceives to be the problem with the country's financial policies. The World Bank loans are given with slightly less harsh conditionality clauses, stipulating that receiving countries must have"the capacity to use [World

1 Pointing to the importance of investment ratings, S&P's recent revision of the U.S. credit rating from AAA to AAA with a "negative" warning on April 18th, 2011 has caused concern among financial speculators. http://online.wsj.com/article/BT-CO-20110418-710899.html.

2 The "World Bank" in this case refers to two agencies within the larger organization: The International Development Association (IDA) and the International Bank of Reconstruction and Development (IBRD). The former deals with grants and low cost loans to the lowest-income developing countries. The latter issues higher interest rate loans (though usually still under market value) to higher-income developing countries. More recent aggregate data than 2004 from these two institutions was not available.

Bank] resources effectively" and if not, the World Bank will assist in designing programs and new policies to help make good use of the funds

Often there are serious repercussions to conditionality agreements from the IMF or World Bank. On quite a few occasions a conditionality agreement has brought rioters into the streets demanding the restoration of subsidies for food, gasoline, and other essential goods. In Egypt, for example, bread is vital to political stability in the government's view. An annual subsidy of $4.5 billion provides a supply of bread at one-third its real cost for Egypt's large population. These costs distort the free market. When the government tried to raise the price of bread in 1977, street riots forced a reversal (Gutner 2003).

Global Taxes

Probably the most radical departure from traditional sources of funding is a global tax for the environment or a currency transaction tax. To compensate for the negative externalities from market based forces, governments could charge a universal carbon tax to put towards resuscitating or protecting key environmental features. A currency transaction tax (commonly called a Tobin tax after the man who first proposed it), would compensate countries for the loss of fiscal autonomy and sometimes tax revenue that comes with financial globalization (Nissanke 2005). Neither of these proposals have ever been implemented.

Environmental degradation has real detrimental economic implications for many developing countries, and is not just an abstract public good. For those relying on subsistence agriculture, there is incentive to cut down trees for fuel and use high amounts of fertilizer in their farming. This can start soil erosion and deplete nutrients from it that make the conditions of farming worse than before (Sandmo 2005). Environmental destruction poses a real threat to economic development in many cases.

The argument in favor of environmental taxes is that they have the potential to change the behavior of those whose actions are the causes of the degradation. Many arguments against the feasibility of this action arise, however. The main obstacle would be collecting the tax. How would governments pass it along to its people? How would the funds be redistributed? What are the incentives for developed countries to participate?

A Tobin tax was first proposed to counter exchange rate fluctuations and decrease short-term currency exchange. By providing "sand in the wheels" a tax could create a dis-incentive for speculative currency trading that is often harmful to developing economies (Tobin 1996). The proposal has received much criticism and faces similar critiques as does the carbon tax. Opponents say a Tobin tax decreases market efficiency and hurts market liquidity (Nissanke 2005, 61). There are also huge implementation problems in terms of how it would be administered, distribution, and a lack of political will.

Remittances

Remittances have emerged as a new source of development financing on both the individual and national level. For decades, millions of migrant workers have been sending billions of dollars back to their home countries to support their families, yet the impact and implications of these huge international flows of money are only beginning to be understood. We examine how remittances are used for access to capital for development on the local level as well as on the macro scale.

The literature reviewed finds that the development impact of remittances on the micro scale is ambiguous. Some find that remittances greatly further economic and human development while others contend that they perpetuate inequality and are wasted on luxury consumption. On the macro level, however, remittances strengthen financial institutions and can be used by banks and governments to increase access to capital for large-scale development through financing tools such as securitization.

Three main narratives emerge from the literature on how best to use remittances to increase funds for development :

- Further formalize remittance flows by decreasing cost and making them more transparent;
- Put them to more productive use in home countries; and
- Use large scale financial tools like issuing bonds or securitization to gain increased benefits from remittances.

How are they used?

The World Bank estimates that some $414 billion in remittances were sent home by migrants in 2009. These figures probably underestimate the actual totals as well because of problems in counting and tracking these remittance flows. These totals are also cash amounts. They do not include periodic transfers of goods such as computers and household appliances. In many cases, the total amount of remittances exceeds a country's total foreign direct investment and outside development aid combined, such as in Mexico (World Bank 2009).

A central element in almost all remittance studies has been their use. How are they used by recipients? Are they simply used for consumption, of either necessities or for consumer goods? Are they used for productive investments and, if so, what type?

Analysis has focused on the debate over whether they are used for productive investments. Early on, Henry Rempel and Richard A. Lobdel argued that “it seems certain that very little is used directly as investment for rural development” (Rempel 1978, 336), whereas Oded Stark argues that there is “sufficient evidence to suggest that...remittances can and have actually been used to transform agricultural modes of production” (Stark 1980). In a series of studies sponsored by the Inter-American Development Bank, evidence shows that remittances are used first and foremost for daily household expenses like food, utilities and rent, ranging from 46 percent (Brazil) to 84 percent (El Salvador). Education expenses take between 2 percent (Ecuador) and 17 percent (Dominican Republic). Use for business investment ranges from 1 percent (Mexico) to 10 percent (Guatemala, Brazil), and remittances put towards savings can reach as high as 11 percent (Guatemala) (Bendixen and St. Onge 2005, Table 3.2).

Investments and business capital are not primary reasons for remitting funds or the primary uses for the funds in receiving countries. This does not, however, mean that they do not have a positive impact on development and financialization. Spending on education and health are important for expanding human capital and potential. Remittances decrease poverty, raise education achievements, and lower poverty rates.[3]

Besides important benefits to households in terms of consumption, education, and healthcare, remittances also have important implications for investments and access to capital on the individual and national level. This paper is particularly interested in access to capital at the

3 For a comprehensive review on the positive impact of remittances for human development see Ernesto Lopez-Cordova and Alexander Olmedo. “International Remittances for Development: Existing Evidence, Policies, and Recommendations.” Inter-American Development Bank, 2006.

national level, but the benefits of remittances for credit on a smaller scale should not be ignored.

Where profitable, emigrants invest in productive enterprises in home communities, and also invest more in economically vibrant areas (Durand, Kandel, Parrado and Massey 1996). Remittances provide a solution to a credit problem for starting or investing in a business, which is a common obstacle in developing countries. Migration can help the entrepreneurial advances of a region by providing start-up capital for new endeavors. In the six largest migrant-sending regions of Mexico, 21 percent of businesses were initially financed through capital from remittances (Massey and Parrado 1998).

In a study of Turkish emigrants returning from Germany, 50 percent of them started a microenterprise within 4 years of resettling in Turkey, using money saved while working abroad (Dustmann and Kirkchamp 2002). In Mexico, migration is associated with a significantly higher rate of capital investment in microenterprise and higher capital to output ratio, which means the more that is invested the higher the output (Woodruff and Zenteno 2007). Such results show the importance of migration to investing and access to capital. Remittances influence investment behavior and support economic development.

Stability

Whether remittances will hold up in a crisis appears to depend on the type of crisis. Crisis caused by natural disasters often bring about a rise in remittances. Thus, countries in Asia that were hit by the tsunami in December 2004 collectively experienced a 33 percent rise in remittances in 2005 to $21 billion. Similarly, the earthquakes in Turkey in August in 1999 and India in 2001 raised rather than reduced remittances to those countries, though not as much as the post-tsunami increase (World Bank 2007).

Crises caused by economic collapse, on the other hand, yield mixed results on the strength of remittance behavior. Mexico's currency crisis in 1994-1995 led to an increase of funds, while the Asian financial crisis of 1997-1998 resulted in declines in remittances. The Russian experience after its debt default in 1998 was followed by a large 33 percent drop in remittances and took until 2004 to return to pre-crisis levels (World Bank 2007). The altruistic nature of remittances increases the prospects of their resistance to cyclicality.

While remittances may increase during a home-country crisis, if there is a financial downturn in the host country, remittances do suffer. The World Bank revised its remittance projections down by 7 percent in light of the 2008 financial crisis in the United States and elsewhere (Ratha, Mohapatra and Silwal 2009). In Mexico, remittance flows dropped by 11 percent as compared to the year before, and is largely due to the slowdown of the labor market demand in the United States (Ratha, Mohapatra and Silwal 2009).

Remittances and financial development

The billions of dollars that flow through financial institutions in the form of remittances has an added positive externality: they strengthen domestic banking infrastructure and increase the number of those with access to financial services. Higher deposit rates increase stability of banking systems and provide new access to credit for the remittance receivers. Economic studies suggest that financial development leads to economic growth in a “supply leading” argument. Remittances promote economic development by strengthening the financial systems of the receiving countries.

In many cases, an increase in remittances as a share of GDP correlates to an increase in bank deposits (Aggarwal et al 2006; Demirgüç-Kunt 2009; Gupta, Pattillo and Wagh 2009). Aggarwal, *et al* (2006) find strong support in their quantitative analysis of 99 developing countries that remittance flows increase deposit and credit levels. Using balance of payment statistics between the years of 1995 and 2003, they find that a one percentage point increase in remittances share of GDP correlates to a .5 percentage increase in ratio of deposits to GDP, and a .3 percentage point rise in the share of credit to GDP. Demirgüç-Kunt comes to similar conclusions in Mexico about how increases in remittances leads to greater ratio of bank deposits, but also that the number of per capita bank accounts and branches increases (Demirgüç-Kunt 2009). In Sub-Saharan Africa levels of bank deposits also went up in relation to GDP as well, which is an area where financial development is at one of the lowest levels in the world (Gupta Pattillo and Wagh 2009).

Regardless of remittance recipients' demand for credit, overall credit levels might still increase in remittance receiving areas if banks are able to finance previously unfunded or underfunded projects as a result of the increase in liquidity because of the higher levels of deposits. In other words, even if remittance recipients do not have a need to borrow, the increase in loanable funds in banks as a result of remittances might allow banks to increase credit to other households (Demirgüç-Kunt 2009; Giuliano and Ruiz-Arranz 2009).

In this way, remittances provide alternative sources for financing investments, and help to mitigate access to liquid capital problems. Giuliano and Ruiz-Arranz (2009) find that remittances become a substitute for inefficient and highly problematic credit markets, and that they offer entrepreneurs an alternative financing source. The more "shallow" the development of a domestic finance infrastructure, the greater impact remittances have. In countries with highly developed capital markets, the impact of remittances is much less. Remittances solve access to capital problems where the financial sector does not meet the credit needs of the population. Remittances promote investment and encourage the development of stronger, more stable and reliable financial institutions.

Finance and Development

Stronger, more stable and reliable financial institutions are desirable for many reasons. Finance as a precursor for economic development seems to be a relatively undisputed topic. Most literature supports the former, the "supply leading" argument, for financial institutions. If the supply of financial institutions and services is available, then economic development will follow (Calderon and Liu 2002; Ang and Warwick 2007; Yang and Yi 2007; Hassan, Sanchez and Yu 2011).

Patrick (1966) suggested that financial development leads to new opportunities and capital formation depending on what stage of development the country is experiencing. By expanding financial services, a less developed country will stimulate economic growth, but on the other hand, strengthened financial institutions in an industrialized country are caused by economic growth. Empirical evidence for this theory comes from examining data from 1960 – 1994. Findings show that financial development leads to economic growth in 109 countries, but the results were much more positive in less developed countries. It was found that in developing countries, financial deepening encouraged more economic growth than in industrialized countries, or that it had a greater developmental impact. The longer the time period analyzed, the greater impact can be seen with economic development, suggesting the effects of financial institutions take time to show. Strengthening and advancing the banking sector speeds up economic growth in developing countries (Calderon and Liu 2002; Hassan, Sanchez, and Yu 2011).

Yang and Yi (2008) come to similar conclusions in their more specific examination of evidence from South Korea between the years of 1971-2002. Korea presents a good case study for this issue as they experienced exponential economic growth and many financial reforms over the past few decades. Three major events in Korean policy are examined for causality as related to financial growth. One is the interest rate liberalization in 1988, which means the government lets interest rates be largely market determined. Next is the further interest rate liberalization and bond market opening in 1994, and lastly the stock market deregulation of 1999. These policy interventions were shown to have causal effects on subsequent economic growth.

Proxy measures for financial development include amount of domestic credit loaned out by banks, the liquid liabilities held by banks, ratio of domestic savings to GDP, and the ratio of trade to GDP (Hassan, Sanchez and Yu 2009, 91). Using a World Bank data set covering 1980 – 2007 in 168 countries, it is shown that financialization produces economic growth, but results are contradictory in high-income, industrialized countries. This again points to Patrick's "stage of development" hypothesis, that financial development has different effects in countries with different levels of development.

The policy implication of literature that finds that strengthening financial institutions encourages economic development is that governments should take steps to encourage domestic savings, access to credit, investments, and liberalize the financial sector. Economist Hernando de Soto was a great proponent of capital as the key to development. It is not the possession of assets but the *use* of those assets that is crucial. De Soto's observations hold true for remittances as well: “For poor countries to develop, the poor and middle classes must be allowed to use their assets in the same way that wealthier citizens do...[their assets] can become more productive and generate capital for their owners, growth for the nation, and markets for industry” (de Soto 2001, 1).

Financial development is key to economic development, and remittances promote the use of capital to strengthen financial institutions. Despite the large body of literature on this topic, alternative views do exist and address many social concerns for the implications of financialization.

Critiques

Most of remittance literature is written by economists, who often downplay the importance of social contexts. The primary criticisms are that remittances perpetuate existing inequalities and that large-scale migration leads to “de-development” of domestic institutions and a detrimental “brain drain” (Bracking 2003; McHale 2005; Kapur 2007; Ballard 2007).

Models that investigate the role of remittances in the economy as a whole, or within a national developmental frame using a combination of indicators, run the danger of missing the central point that remittances are not uniform in their effects (Bracking 2003). Individuals remit them, largely to their kin, within a specific class and social hierarchy. In Zimbabwe, there is evidence that remittances underpin pre-existing class locations and exacerbate inequalities. One negative effect of such transfers is a furthering of the social marginalization. This effect can contribute to more exclusive and inequitable social and governance in a remittance receiving state, as those who are well off are often members of remittance receiving households, as they could afford to send people in the first place.

Not only can remittances perpetuate inequality and support unequal social and political hierarchies, but some argue that they can be even more damaging by hindering the development of institutions and depriving poorer countries of much needed skilled workers (McHale 2005; Kapur 2007) Large remittance flows could hinder institution building, as the need to develop domestic capacity is lessened.

An extension of this argument is that with no indigenous demand for better institutions, remittances returning home will have limited opportunity to be used productively in investments. The result is a troubling "de-development," where there is "local withdrawal from productive activities in favor of short-term opportunities available in an almost entirely remittance driven service sector" (Ballard 2007). Besides the damaging effects of skilled workers emigrating, what remittances are sent home are not used in a productive way because of a deficiency of infrastructure and opportunities created by the emigration in the first place.

Large migration flows take away much needed human capital, the so called "brain drain," because better opportunities exist outside the country. These opportunities will be hard to develop domestically if everyone keeps migrating. Emigration and the subsequent remittance flows takes away the demand in a developing country for better institutions (Kapur 2007). Countering this point is a possible "brain gain" when migrants return home and transfer their skills to their home country (Castles and Miller 2009; Trager 2005).

Options to Finance Development Through Remittances

Lower Costs to Formalize and Increase Remittances

An increasingly large number of authors focus on lowering transaction costs of remitting funds in order to bring a greater percentage into the formal structure of the economy (Solimano 2005; Brown 2006; Page and Plaza 2006; Ratha, Mohapatra, and Plaza 2009). Just about every study to do with remittances mentions in some capacity that lowering costs would be beneficial for development purposes. The World Bank estimates that 50 percent of remittances do not go through formal channels and are not reported (World Bank 2008). One study found that for a remittance of $200, the cost ranged from about 5.4 percent for remittances sent to Ecuador to more than 11.3 percent for remittances sent to the Dominican Republic (Orozco 2004a, 16). The basic rule of economics is that if cost of doing business is higher in the formal sector, activity will naturally shift to informal channels. Informal channels are sometimes more efficient now for remitters, but such methods do not contribute to social development outside of increasing income of the intended families.

Informal remittance flows are highest in Sub-Saharan Africa, which is partly caused by the high cost of such transactions in that region (Page and Plaza 2006). Transaction costs from Europe to Nigeria were over 14 percent of the original amount (Ratha and Shaw 2007). Reduced fees for remittances would decrease the burden on those in the sending country, the remitters, and encourage them to remit larger amounts at greater frequency if they knew that costs would be substantially lower. It would also encourage more remittances to go through formal channels.

Trying to estimate the amount of additional remittances that would result from decreased transaction costs is difficult. If there was a family emergency at home, senders might not be responsive to costs. One survey does estimate that a 1 percent decrease in cost would increase remittances by .22 percent because of the lower financial burden on the remitters (Gibson, McKenzie, and Rohorua 2006).

While there is large recognition that lowering transaction costs of sending remittances would be beneficial (if only for measurement purposes), there is also realization that domestic options for lowering costs are limited. Financial authorities in developing countries often do not have a role in determining costs, because a large part of the costs are determined by outside remittance-sending companies (de Luna Martinez 2005).

Hometown Associations

In addition to the benefit of remittances to individuals, in recent years migrants abroad have begun pooling their remittances for the benfit of their hometown communities. The number of hometown associations (HTAs) has multiplied rapidly in the past two decades. HTAs are entities formed by immigrants who seek to support their places of origin and maintain a sense of community and connection even as they are living and working in a different country. Migrants send funds back home, separate from individual family remittances, for development purposes. The activities range from charitable aid to investment.

Whereas remittances are received by at least one fourth of the population in a Mexican home town, for example, HTAs can become important to improving the quality of life in all households. They can facilitate projects that would otherwise be impossible for the receiving communities to implement. In Mexico, HTA contributions to public works in towns for less than

3,000 people are equal to over 50 percent of the municipal public works budget. In towns of populations under 1,000, HTA contributions can add up to seven times the public works budget (Orozco 2005, 323).

The Mexican authorities have created incentives for collective remittances by adding $1 to each dollar sent home by HTAs. In some Mexican states (the most famous being Zacatecas) the state government adds another dollar, and the municipal level government one more, creating a *Tres por Uno* or Three for One program (Ellerman 2003).

Nonetheless, collective remittances are only a fraction of those sent back individually to families. Orozco and Rouse (2007) report that Mexican HTAs raised about $20 million for development projects in 2005, which was matched with $60 million from public funds. But this is compared with total remittances to Mexico in 2006 of around $20 billion (Castles and Miller 2009). Only about eight percent of migrants participate in HTAs, and those who do tend to have higher average income in the host country (Orozco and Rouse 2007).

Diaspora Bonds

Diaspora bonds are securities that are purchased by foreign nationals to support the development of their home country. Diaspora bonds tap into the wealth of overseas diasporas without relying on remittances. They are backed by hard currency and issued to individuals overseas usually with long-term maturity, which means that the bonds cannot be redeemed before their time limit is up. This is in contrast to foreign currency deposits that are more volatile because they can be withdrawn at anytime (Shim and Siegel 2001). Foreign currency reserves are therefore less reliable as a funding source for investments compared to diaspora bonds.

The two most successful and well established examples of diaspora bonds are in Israel and India. The Development Corporation for Israel (DCI) has been issuing such bonds since 1951 ranging from $100 to $100,000 in value. The DCI bonds make up over 30 percent of the government's external debt, at over $30 billion as of 2005 (Ketkar and Ratha 2009, 62). This enormous sum has been a stable source of overseas borrowing for Israel, as well as an important means of maintaining ties with the Jewish diaspora around the world. So far, Israel uses proceeds from the bonds to fund infrastructure development projects such as communications, housing, and desalinization (Ketkar and Ratha 2009, 63).

India offered 'Resurgent India Bonds' in the wake of its nuclear tests in 1998 and demonstrated the capacity of a diaspora to supply financing to a home country that had made itself, at least temporarily, an international pariah. Faced with international economic sanctions imposed following its nuclear tests, India raised $ 4.2 billion from emigrants living abroad, enhancing its foreign currency reserves to help withstand the sanctions (Chander 2001). The government State Bank of India has also issued such emergency diaspora bonds in 1991 and 2000, selectively choosing when to call on emigrants to support their home country. This is in contrast to Israel, that uses its own diaspora as a permanent source of external funding.

While diaspora bonds are intriguing and clearly effective source of development funding both long term and during a crisis, they face several conditions that make them impractical for most developing countries. Israel and India have been successful because of the sheer size of their diasporas. The home countries also must have clear, stable legal infrastructure capacity, and be free of internal strife. Instability is never good for investments. India and Israel are good examples of successful diaspora bonds, but such mechanisms would be impossible in less developed, smaller countries.

Securitize Future-Flow Receivables

Many options exist for raising funding from remittance flows as we have seen from the above analysis. Here we examine securitizing future-flows of remittances in more detail as a way for governments to raise capital. Securitizing assets is not a new financial tool, but it has only been applied to remittances in the past twenty years. By securitizing a remittance flow, developing countries can gain access to a reliable, relatively stable source of development financing at a lower cost than the country could otherwise borrow on its own financial strength. Much of the literature focuses on securitization of many types of receivables, such as oil revenues, credit card payments and tax revenue receivables, but only the opportunities relating to remittances are discussed here.

What is Securitization of Receivables?

"Securitization" is the process of converting otherwise non-marketable *assets* (traditionally mortgages or loans) into a financial package that can be bought and sold in the international capital market (Shim and Seigal 2001, 271). Securitization of *receivables* defines future incomes from any economic activity as an asset that can be securitized, even though the bank has not received them yet. The ideal receivable is one which is repayable over a certain period of time, and there is contractual certainty as to its payment. Securitizing receivables was traditionally directed towards housing and mortgage finance companies, car rental companies, and credit cards companies. Soon, however, telephone companies, real estate hiring companies, and airline companies joined as users of securitization, and finally it was expanded to include remittances (IADB 2005).

Securitization of receivables is a different application of the concept of securitization. For most other securitizations, a claim on the issuer himself (a car rental company, for example) is being securitized. In case of receivables, what is being securitized is a claim on a third party on whom the issuer has a claim. For example, the Washington National's baseball stadium was financed through expected future revenues from ticket sales. In our case, banks and governments are selling expected future remittance receivables.

Remittance securitization typically involves a bank pledging its future remittance receivables to an offshore special purpose vehicle (SPV). The SPV issues the debt. Designated correspondent banks are directed to channel remittance flows of the borrowing bank through an offshore collection account managed by a trustee. The collection agent makes principal and interest payments to the investors and sends excess collections to the borrowing bank. Since remittances do no enter the issuer's home country, the rating agencies believe that the structure mitigates the usual sovereign transfer and convertibility risks. These transactions also often resort to excess coverage to decrease the risk of volatility and seasonality in remittances (Ketkar and Ratha 2009).

Benefits of Securitization

As summarized by Kothari (2006), the economic impact of securitization has many benefits. One, it creates a market for financial claims. By creating tradeable securities out of financial claims, securitization helps to create markets in claims which would, in its absence, have remained bilateral deals. Second, it promotes savings. The availability of financial claims in a marketable form, with proper assurance as to quality in form of credit ratings, and with double safety-nets in form of trustees, etc. securitization makes it possible for investors to invest in direct financial claims at good rates. Third, it diversifies risks. Securitization further diffuses risk to a wide base of investors, with the result that the risk inherent in financial transactions gets very widely diffused. Fourth, it relies on use of resources, not ownership. Once an entity securitises its financial claims, it ceases to be the owner of such resources and becomes merely a trustee or custodian for the several investors who thereafter acquire such claim.

By securitizing remittance funds flowing into a country, it makes money cheaper for the issuer to get. Cheaper money means that governments can greatly enhance access to credit and raise funds for development. Developing countries, especially when in a credit crisis, need to access funds quickly to keep economies afloat, but are often limited by poor credit ratings that determine how expensive borrowing my is for them. Ketkar and Ratha present evidence that the sovereign risk level – the domestic credit rating of a country – can be exceeded by securitization. In other words, in some cases remittance flows are more reliable than a country's own economy. Instead of getting loans based on domestic economic performance, which may be difficult to obtain and have very high interest rates, a country can raise money based on expected future remittances.

The involvement of a third party in receivable securitization process raises two issues. One, the legality of transforming a claim on a third party into a financial instrument for your own use. It is easy to understand that this dimension is unique to securitisation of receivables, since there is no legal difficulty when a company creates a claim on itself, but it's totally different when the rights of other parties (the remitters) are being turned into a tradeable commodity.

Secondly, it affords to the issuer to market a financial package that depends on the quality of the underlying asset. According to economist Vinod Kothari:

> The issuer is essentially marketing claims on others, the quality of his own commitment becomes irrelevant if the claim on the debtors of the issuer is either market-acceptable or is duly secured. Hence, it allows the issuer to *make his own credit-rating insignificant* or less-significant, and the intrinsic quality of the asset more critical. (2006, 10) (emphasis added).

This means that a government can access capital based on remittances even if they have a bad international credit rating themselves. In times of financial distress, when faith in a country's ability to payback loans is high, a government could still get access to loans and credit based on remittance (or another kind of) receivables.

Risks

Risks to fluctuations in remittance flows can be addressed by overcollateralization in securitized transactions, which is simply when more collateral is secured in a deal than necessary. Overcollateralization can result in a better credit rating of a deal because it lowers risk in the transaction if you have an excess of funds. It means that the incoming remittances must exceed the maximum periodic debt service by an agreed upon amount to provide an adequate cushion to offset risk caused by the loss of customers, decline in economic activity or other adverse occurrences. The Banco do Brasil securitization example (mentioned later) provided for an excess coverage of debt ratio of over 7 percent (Standard and Poor's 2002).

Another concern is how recipient banks can securitize a flow of remittances that does not belong to them. A requirement of securitization is that funds are channeled into an offshore account and banks give up their claim on them. The answer is the intermediary function of the bank in a securitized transaction. The bank purchases dollars from the originators of remittances (the senders), and promises to deposit the same amount in local currency in the intended recipient's bank account. The actual dollars (or whatever the originator's currency, euro, yen, etc), no longer belong to the bank. The deposits put into recipients bank accounts are funded by the bank's other cash reserves or other assets (Atkinson 2005). Banks rarely have more than ten percent of real cash in their possession, as most is reinvested in stocks and bonds. Banks securitizing remittances flows pose no danger to the migrant's deposits, which are just as safe as if in any other ordinary bank account (IMF 2003).

Examples of Past Remittance Securitization

Ketkar and Ratha find that, in the asset class of future flow-backed transactions, electronic remittances rank second in terms of being the most reliable, along with airline ticket, telephone, and credit card receivables. Paper remittances rank fourth (heavy crude oil receivables are considered the most secure) (Ketkar and Ratha 2001, 12).

There have been no debt defaults on any future flow securities that have been rated by an outside institution. An illustrative example is the Pakistan Telecommunications Company Ltd, which issued $250 million in bonds in 1997 that garnered a rating by S&P of BBB- (four ratings higher than Pakistan's existing sovereign rating of B+). When Pakistan tested nuclear devices in 1998, their credit rating sunk, and they ended up defaulting on some of their loans. Though the future-flow receivable bond rating was downgraded, it was not restructured or defaulted on, showing the resiliency and reliability of this type of asset class (Ketkar and Ratha 2001, 19).

Afreximbank

The African Export-Import Bank (Afreximbank) has been active in promoting future-flow securitization since 1996. The first ever future-flow securitization by a Sub-Saharan country was a $40 million loan to a development bank in Ghana backed by its Western Union remittance receivables (Afreximbank 2005; Rutten and Oramah 2006). After this initial success, the bank launched its Financial Future-Flow Prefinancing Programme in 2001 to expand the use of migrant remittances and other future flows such as credit cards and checks, as collateral to raise funds for agricultural and other projects in Sub-Saharan Africa (Ratha, Mohapatra, and Plaza 2009). Afreximbank states the purpose of the program as "a financial product intended to assist African governments and/or banks with significant remittance receipts...to access reasonably-priced external trade and project financing from the international credits markets using those flows as sources of repayment" (Afreximbank 2007).

Banco do Brasil

This was the first future-flow receivables deal ever conducted in Brazil of any kind, not just of remittance receivables. The 2001 deal involved Banco do Brasil selling its future remittance receivables from Brazilian workers in Japan directly or indirectly to a Cayman Island-based offshore special purpose vehicle (SPV) named Nikkei Remittance Rights Finance Company. An SPV in New York issued and sold the debt to investors for $250 million. Japan was directed to transfer remittances directly to the collection account managed by the New York-based trust. The collection agent was to make principal and interest payments to the investors.

Excess collections were to be directed to the original remitter in Brazil.

The actual remittances never entered Brazil, so the rating agencies believed that the structure reduced the usual risks associated with currency convertibility. The risk of bankruptcy was considered small because of Banco do Brasil's prominent position in the country and it is owned by the government, and also if it were to file for bankruptcy, the investors would still have access to the remittances being sent.

U.S.-Honduras-El Salvador BRIDGE Program

In September of 2010, the Secretary of State Hilary Clinton announced a new U.S. program partnering with El Salvador and Honduras to collaborate on remittances securitization. The plan, called the Building Remittance Investment for Development Growth and Entrepeneurship (BRIDGE), commits the United States to work with the other two countries to develop and support strong domestic financial institutions and bank-to-bank relationships. The goal, besides strengthening ties to the two Latin American countries, is to to “maximize the development impact of remittance flows from the U.S. and to help establish strong foundations for sustainable, inclusive, and transformational economic growth” (U.S. Department of State, 2010).

The program has yet to result in a securitization deal, but USAID has conducted assessments that point to the feasibility of such deals in both El Salvador and Honduras. The program has the possibility of increasing public funds for development projects, infrastructure, and be obtained at a lower cost than the two countries would be able to get on their own.

Constraints

The actual size of the total securitized debt by developing countries is relatively small, the level of securitized remittance flows even smaller. There are several reasons for this, including lacking legal infrastructure, long and expensive set-up costs, and low levels of domestic financializations.

Without tested laws on the books, it is difficult to structure a securitized transaction. An ambiguous or flexibly interpreted legal system can prevent the use of many financial tools, since typically less law implies greater doubt and uncertainty, which makes it more difficult to structure a deal. Bankruptcy law, in particular, is critical for securitized transactions (Ketkar and Ratha 2009b, 48).

High legal costs and lack of specialized skills also prevent more securitization deals from happening. Putting together and maintaining a financial deal of this level that is effective in mitigating risk requires a lot of collaboration between many parties that deters many investment banks from taking it on, especially since most future-flow securitizations are unique and not amenable to standardization (IMF 2003, 16). Legal costs involved in structuring these transactions can reach up to $3 million, making it affordable only when very large amounts of financing is raised (Ketkar and Ratha 2009b, 49).

Low levels of domestic financialization both on the local and national leval are a constraint on further securitization deals. More access to banking services will increase the formal flows of remittances which will further increase investors' confidence. National financial infrastructure lacks the technical capacity or domestic credit rating agencies that would make securitization deals more affordable.

Recommendations

Policy options and recommendations are summarized below that relate to accessing increased funds for development and increasing economic growth by tapping into the new financial opportunities presented by remittances to developing countries.

Reduce Costs of Remittance Transactions

Nobody really knows the real level of remittance flows in the world because of the high instance of money being transferred through informal channels. The high fees formal providers charge is a deterrent for poor migrants who want to send small sums of money home, and even if a migrant has access to banks the recipient may not. So migrants often rely on other means such as retail shops, friends and family, or USPS money order.

The development of alliances between domestic banks in the receiving countries and banks in the sending nations can help increase efficiency and reduce costs in the remittances market. Making it easier to use ATM cards to make transfers directly through banks instead of independent expensive remittance services is one way to do this. Based on Gibson, McKenzie and Rohorua's (2006) estimate that a 1 percent decrease in cost would increase remittances by .22 percent, halving the costs of remitting a $200 sum with 14 percent costs would increase remittances by $1 billion annually.

Remittance sending organizations are mostly based where the funds originate. Thus, cooperation is needed between the sending and receiving countries in order to address the problem of cost. Developed country banks could partner with banks in less developed countries to find mutual benefit in lowering the costs of remittances.

Bank the Unbanked

Bringing more remittances into the formal sector is a prerequisite for increasing access to banking services and financial literacy of a country's population. As discussed previously, remittances have increased the number of migrants with access to bank accounts and financial services, yet many more remain without access to a bank. The unbanked face higher costs and have no ability to establish credit records. Increases to financialization levels can increase access to other bank services that many do not consider before opening a bank account. More deposits will also strengthen the financial system as a whole.

Governments could help senders and recipients of remittances to participate in the banking industry through incorporating more financial education into high schools, subsidizing adult education classes on personal finance, and as mentioned before, lowering the costs of remittances through formal institutions. Helping senders and recipients to participate in the banking industry would help ensure lower transfer fees as a wider base makes costs lower for everyone. Governments and private institutions already engaged in that effort could devise a strategy linking remittance transfers with banking options as a way to attract migrants into the financial system.

Encourage increased credit union and hometown association participation

Credit unions have traditionally been founded to compensate for a lack of financial services available to the poor. They similar to non-profit financial cooperatives that usually have a geographic or occupational focus. If credit unions could also provide remittance services, they would have the opportunity to interact with potential members and increase banking activities of remitters.

The World Council of Credit Unions (WOCCU) instigated a project in 1999 called the International Remittance Network, or IRnet, which allows credit unions access to the remittance business of sending and receiving funds. This is in an effort to increase membership of credit unions, and expand access to capital. When credit unions offer remittance services, it increases competition and lowers costs, increases the number of people with bank accounts, and encourages savings (WOCCU 2009). While there are many challenges to developing cross-border credit unions, there is large opportunity to gain additional members, help finance projects, and lower costs (Grace 2007).

Linking hometown associations and credit unions could be a way to increase membership on both types of organizations. The existing hometown associations, who already finance important and substantial development projects, could partner with banks to also become established as a local credit union. This would require significant education and government effort, but could be beneficial to increase access to capital for development on a smaller level.

Facilitate further securitized remittance deals

The rate of using remittances as a source of finance for development remains low in large remittance-receiving countries. To increase access to the low-cost funding from securitizing remittances governments could take steps to clarify their legal processes, standardize remittance securitization, and develop domestic credit rating agencies.

All the securitization examples in this paper relied on outside financial services companies to structure the future-flow receivables deal. Relying on outside companies to perform all the complicated legal financial footwork makes it hard to repeat the process without incurring high set-up costs again. The outside financial services company can also charge high fees as there is little competition. Governments could make efforts to standardize a remittance securitization deal for future use. This would involve bolstering the technical capacity of domestic financial institutions through education and training.

The lack of domestic credit rating agencies is also an obstacle to more securitization deals. Donor agencies and outside financial services organizations could partner with developing countries' financial officials to begin to develop domestic capacity to rate loans and debt packages. One reason the cost of securitizing debt is so high is that to be packaged and sold back on the international capital markets they must obtain an investment grade rating from an agecny such as Standard & Poor's or Moody's. Developing domestic rating agencies would be a very long process but is ultimately necessary for developing countries to truly emerge with full fledged capital markets.

Conclusion

To meet the challenge of finding ways to access funds for development, governments and banks have many options. Traditional methods rely on foreign direct investment, official development assistance from other countries, and loans either at the market rate or from the IMF or World Bank. These methods do create large credit flows to developing countries and remain the largest source of financing for development. Obstacles and drawbacks to each, however, have spurred governments to look elsewhere for additional financing tools.

Remittances have widespread benefits and implications for development beyond a new financing source, which is one reason encouraging more scholarship and attention to remittances will be crucial in upcoming years. From a developing country's perspective, remittances provide the most benefits at the least cost. At the most basic level, migrant remittances contribute to individual household incomes, which can lead to better quality of health, nutrition, and possibilities for education. The micro effects of remittances on human and social development are important to remember.

On the macro level, remittances strengthen domestic financial institutions that leads to increased trust, stability, and eventually more investments from home and abroad. Increased investments creates jobs and industry that have substantial multiplier effects at all levels of the population. This benefit of remittances to the infrastructure of a developing country comes as a byproduct of an already existing process, and is one reason remittances have so much potential for impact.

In addition to these benefits, remittances present new opportunities for financing development, such as securitizing future-flow receivables. Securitizing remittance flows provides an option of relatively low-cost, stable financing for developing countries and present a way for governments to take advantage of the large flows of foreign currency pouring into their banks every year. Government access to financing is important for large-scale, long-term development projects such as investments in education and the environment. Governments are starting to recognize this, such as in Mexico where they sponsor remittance matching programs to encourage more funds. Governments want to increase remittance flows for development purposes.

While in many cases, remittances provide benefits with no action from the government, such as strengthening financial structures and increasing individual incomes, to gain further benefit action is needed. Taking advantage of new financing options such as securitization is one way, but by lowering costs, clarifying legal processes, and encouraging financial access to more citizens, developing countries can reap more benefits from remittances.

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