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Remittances and economical implications in Latin America and the Caribbean:

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Abstract

Remittances, in many Latin American and Caribbean countries, represented more than 10% of the national GDP in 2010 (Inter-American Development Bank, 2011); they have become an important source of financing in many of these economies, in fact, for countries, like El Salvador, Nicaragua, Guatemala, it is the second largest source of financing after Foreign Direct Investment (Multilateral Investment Fund, 2011). Although this is a significant aspect, it is also important to highlight other consequences. The study shows that increasing levels of remittances could cause an appreciation of the exchange rate; the effects could be even more damaging if these inflows are not managed correctly by public and private institutions, as remittances create a situation similar to the Dutch Disease paradigm. The paper suggests that there is not enough research on the study of migrants' nature; this leads to contrary opinions about the effect of remittances on long term economic growth affecting the findings other authors have reached in this field. The paper concludes that well developped financial institutions can channel remittances inflows to investment projects leading to higher opportunities to promote long term economic growth. Additionally these institutions can offer better instruments to national companies in order to reduce exchange rate volatility.

Key words

Remittances; exchange rate appreciation; Dutch Disease; economic growth and financial institutions.

Introduction

The increasing movement of people across borders has generated a substantial effect on the capital inflows that a country constantly receives from abroad

(International Organization for Migration, 2006). Migrants create a special commitment toward their respective families as they feel it is their obligation to assure their relatives' welfare, these commitments have generated a great expansion of social and economic interaction between countries, making it more difficult to study and analyze the current situation of transnational economic flows, including remittances (Terry & de Vasconcelos, 2006).

Remittances have become one of the most important representatives of these inflows and nowadays they largely contribute to the GDP of many Latin American and Caribbean countries. These inflows create important changes in the local economy, making the beneficiaries of remittances, exporters, importers, banks and other economic agents more vulnerable to the effects of these funds (Grabel, 2009).

Remittances, especially to developing countries, are a relevant factor in the definition of financial and economic policies (Ratha, 2003). In 2008, remittances to Latin America and the Caribbean summed up 69.8 billion US Dollars, and although in 2009 and 2010 they did not reach the level of previews years, they still represent an important source of foreign exchange earnings for many countries in the region (Multilateral Investment Fund, 2011).

As will be seen in this paper, if not handle correctly, remittance flows can create a situation comparable with the one created by a Dutch disease. Remittances can, indeed, appreciate the local currency; this appreciation decreases the competitiveness of exporters and reduces the purchasing power of beneficiaries (Amuedo-Dorantes & Pozo, 2004), and it could even alter the prospects for long term economic growth. But it will be shown that remittances can bring positive outputs when they are used correctly.

The paper is organized as follows; the first section presents a literature review that illustrates some positive and negative outputs generated by remittances. In the same section the main variables to be analyzed, namely exchange rate and economic growth, will be introduced. The following section focuses on analyzing the current situation of remittances in Latin America and the Caribbean, using data from the Inter-American Development Bank (2011).The findings will be presented to show the impact of remittances on exchange rate and economic growth. To conclude, we will discuss the alternatives for reducing the negative impacts of remittances are proposed.

The goal of this paper is to represent both, the effect of exchange rates and growth rates, by making an in-depth analysis of other author's findings, and then, proposing alternatives to improve the performance of these variables.

Literature Review

Remittances, defined as the monetary transfers migrants make to their countries of origin, have grown to be an important source of foreign exchange earnings for several economies (Orozco, 2002). For example, remittances in 2010 represented more than 10% of GDP for many countries in Latin America and the Caribbean, such as Guatemala, Jamaica, Nicaragua, El Salvador, Honduras, Haiti and Guyana (Inter-American Development Bank, 2011).

Remittance flows are the second-largest source, behind Foreign Direct Investment (FDI), of external funding for developing countries (Ratha, 2003). They are a steadier and less volatile source of funding than FDI or portfolio investment in these countries, due to uncertainty and political risk (Solomon, 2009).

There are positive outcomes generated by remittances. These inflows boost the beneficiary individuals' incomes and increase the foreign exchange reserves of the recipient country (Ratha, 2003). According to Martin, Martin & Weil (2002) remittances can serve as a source of finance for many investment projects; they demonstrate that these funds are used in many countries to build schools and clinics. Other authors have found other benefits generated from workers' remittances to recipient countries. They contribute to the enhancement of productivity and economic growth and with a strong institutional system the benefits could be even larger (Rao & Hassan, 2011). Portes (2009) determines that remittances could reduce poverty, because it is mainly poor people who migrate with the goal of helping their relatives in the country of origin. Complementing this view, Koechlin & Leon (2007) demonstrate that if remittances are handled correctly by public and private institutions, inequality among the society could be reduced; with higher income these families could have more availability for consumption leading to a multiplier effect on aggregate demand (Pradhan, Upadhyay & Upadhyaya, 2008).

But it is also worth noting the negative impacts that these funds could generate in a receiving economy. It has been said that remittances may have a positive impact if they are invested correctly, but many recipients use it mainly for daily consumption and this does not represent the same growth that would be generated with investment (Kapur & MacHale, 2005). These people do not feel motivated to enter the labor force because they are already receiving incomes to sustain themselves (Veeramoothoo, Glass & Mohan, 2009). Besides, there is another negative consequence implicit in remittance's practices, the migration of educated labor force, known as 'brain drain'; it will spread out the wealth of developed and developing economies (McCormick & Wahba, 2000). There are two reasons for this: first of all, qualified people will be productive in another wealthier economy, and secondly, the country that educated these people invested time and money in their education, and will need to invest even more to train the labor force that will replace them. (Pradhan *et al*., 2008).

The literature indicates there are economical variables that are directly affected by remittances, therefore this paper focuses on two variables, exchange rate and long term economic growth.

Exchange rates: Remittance flows can cause an appreciation in the value of the local currency, making exports abroad less competitive, discouraging certain sectors of the industry and negatively affecting economic growth in the long term (Lartey, Mandelman & Acosta, 2008).

Remittances could benefit the economic situation of the beneficiaries they are aimed to help, but with an appreciation of the local currency, there may be a loss in external competitiveness for national companies, because export costs would be higher. According to Amuedo-Dorantes & Pozo (2004) this paradox is similar to the one raised by the Dutch Disease where certain sectors of the economy, generally a natural resource based industry would be benefited from a resource boom but this would affect the rest of the economy. In the case of remittances, certain families would benefit from these inflows but the companies in general, especially the ones with international trading activities, would be impacted negatively.

Economic growth: This is an indicator that offers mixed views, for example Pradhan *et al.,* (2008) found that remittances have a positive impact on economic growth, but it is not as representative as they expected. Rao & Hassan (2011) reached a similar conclusion, but found that although the direct impact is limited, remittances could have a larger effect through indirect indicators; families would have more resources to afford going to school, which implies that in the future there will be a better quality of human capital. Therefore they conclude that remittances generate a positive effect on long term economic growth. Portes (2009) suggests that even though remittances do not have an impact on the economic growth, they have a significant effect on poverty and inequality reduction in the long term. Lartey *et al*., (2008) and Amuedo-Dorantes & Pozo (2004), on the other hand, found that remittances could cause a paradox similar to the one of Dutch Disease, affecting long term growth of economies.

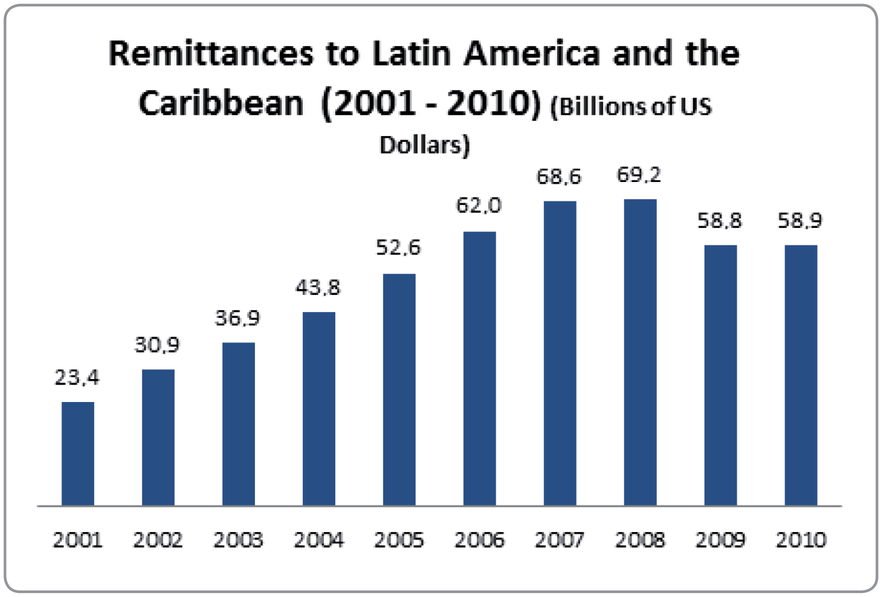
While it doesn't have an impact on all variables, remittances could have an important impact on economic growth, but the nature of many economic variables is its constant change, including exchange rates, which are directly affected by remittance flows (Pradhan *et al.,* 2008). The research aims to explain the impact of remittances on economic growth considering the effect of these inflows on exchange rates.

Remittances in Latin America and the Caribbean

As mentioned previously, remittances represent and important share of the GDP in many Latin American and Caribbean countries. These inflows depend significantly on the situation that the host economies are currently undergoing; that is why the economic crisis sourced in 2008 had significant consequences in remittance flows sent to the home country (Ruiz & Vargas-Silva, 2010).

From 2007 to 2008 there was a growth of only 1%, compared to the expansion shown in previous years with an average of 17% each year. From 2008 to 2009 there was a fall of 15%, explained by the economical problems that emerged in the second semester of 2008, and that have not been completely solved in the United States and Western Europe, the main destinations of Latin American and Caribbean migrants (Multilateral Investment Fund, 2011). Unemployment rates registered large increments in these countries, therefore migrants were not able to send more resources to their relatives back at home, reducing the levels of remittances.

Figure 1: Remittances to Latin America and the Caribbean



Data Source: Multilateral Investment Fund, 2011.

For the year 2010, the scene looked better, the future seemed more prosperous and countries began employing more people, but still, not at the levels shown before the crisis. Last year remittances grew by 0.2% (Multilateral Investment Fund, 2011), which represents a small increase but changes the trend presented in the previous year.

Remittances in developing countries, contrary to other international flows, have a countercyclical nature as they increase during times of crisis, and because they are an essential income for some families, remittances are less volatile inflows compared to others such as portfolio investments (Smith, 2006). "The countercyclicality of remittances contrasts with all other international private flows that are strongly pro-cyclical." (Grabel, 2009:89). These inflows are mainly used for consumption expenditures (Ratha, 2003); this suggests that if the beneficiary in the home country has more needs, there will be a larger amount of inflows in the form of remittances. But the current macroeconomic situation in many Latin American and Caribbean countries can alter the real value of the inflows received. Indeed most of the currencies in the region during 2010 strengthened against the dollar by 4.4% on average (Multilateral Investment Fund, 2011) and inflation rates started to rise in many economies, which affected the purchasing power of the beneficiaries in the home country; inflation increased over 4% in the region in 2010 (Multilateral Investment Fund, 2011).

Table 1: Remittances, Exchange Rate and Inflation

	REMITTANCES GROWTH RATES (2009-2010)			
	REMITTANCES 2010 (MILLIONS US$)	REMITTANC-ES US$ %	IN LOCAL CURRENCY	IN LOCAL CURRENCY AND ADJUSTED FOR INFLATION
South America (1)	17,677	-5.33%	-6.40%	-11.00%
Argentina	886	3.87%	7.70%	-2.50%
Brazil	4,044	-14.79%	-22.30%	-26.10%
Chile	820	8.47%	3.30%	0.80%
Guyana	374	5.06%	5.10%	0.70%
Paraguay	723	4.63%	-0.10%	-4.50%
Uruguay	120	3.45%	-9.50%	-15.10%
Suriname	109	5.83%	5.80%	-1.00%
Andean	10,601	-4.07%	-2.10%	-6.90%
Bolivia	964	-5.76%	-5.80%	-8.10%
Colombia	4,023	-2.69%	-12.50%	-14.40%
Ecuador	2,324	-6.86%	-6.90%	-10.10%
Peru	2,534	-4.92%	-9.90%	-11.20%
Venezuela	756	3.14%	106.30%	64.20%

	REMITTANCES GROWTH RATES (2009-2010)			
	REMITTANCES 2010 (MILLIONS US$)	REMITTANC-ES US$ %	IN LOCAL CURRENCY	IN LOCAL CURRENCY AND ADJUSTED FOR INFLATION
Central America	12,066	3.13%	2.70%	-0.70%
Belize	100	-0.30%	-0.30%	-1.20%
Costa Rica	509	-4.86%	-11.60%	-16.40%
El Salvador	3,540	2.15%	2.10%	1.00%
Guatemala	4,127	5.48%	4.10%	0.20%
Honduras	2,529	1.85%	1.90%	-2.70%
Nicaragua	966	5.57%	9.50%	3.80%
Panama	297	2.06%	2.10%	-1.40%
Caribbean (2)	7,934	8.30%	-3.60%	-10.60%
Dominican Republic	2,908	4.23%	5.90%	-0.40%
Haiti	1,971	20.11%	19.50%	13.00%
Jamaica	1,911	6.27%	6.80%	-5.20%
Trinidad & Tobago	123	6.03%	6.80%	-3.50%
Mexico	21,271	0.12%	-7.00%	-10.60%
Mexico	21,271	0.12%	-7.00%	-10.60%

(1) The South America category includes the Andean category

(2) This category aggregates more data from other countries in the sub-region

Data Source: Multilateral Investment Fund, 2011.

The previous table shows that although remittances inflows as a whole increased from 2009 to 2010, when these funds are converted into local currencies and adjusted for inflation, in many cases the remittances registered a decrease in real value. “Adjusted for inflation and expressed in local currency terms, 2010 remittance flows to Latin America and the Caribbean show a drop of -8.7% with respect to the previous year” (Multilateral Investment Fund, 2011:19). To compensate for this reduction the migrant would be forced to send more money if he wanted his relatives to maintain the same purchasing power as prior to the crisis.

Findings

This section of the paper presents an overview of the results drawn from the study that focused on the analysis of two variables, the exchange rate and economic growth, and on how these indicators are affected by remittance flows in Latin America and the Caribbean.

Exchange rates. As it was said previously, remittances in Latin America and the Caribbean are mainly used for consumption purposes (Kapur & MacHale, 2005); they act as an economical and social insurance for the beneficiaries. Therefore, it is essential to consider some factors when analyzing remittances.

Veeramoothoo *et al.* (2009) make a distinction about the nature of remittances; they differentiate between two types of inflows, those that are based on transitory income and those based on permanent income: "If family members believe remittances are based on transitory income, they will be more inclined to save, thus leading to more investment expenditure. On the other hand, if family members believe the flow of remittance is based on permanent income, they will not forego present consumption" (Veeramoothoo *et al.,* 2009:174).

Veeramoothoo *et al.* (2009) also explain the characteristic of migrants to define how much capital will be remitted back to their countries of origin; they suggest that the longer migrants stay away from home, the more money they send to their family. But, there is a special attribute, as migrants' families increase their income, migrants have less responsibilities and reduce the amount of capital sent back to their respective territories (Hunte, 2004).

The economic and political situation of the territory where the beneficiary lives also plays a fundamental role when deciding how much inflows these countries are receiving. Higgins, Hysenbegasi & Pozo (2004) expect that when the currency of the home economy is depreciated this will encourage the flow of remittances, and the beneficiaries will see that their capital once exchanged is increased. But as mentioned, when there is a constant and increasing amount of remittances sent, this produces an appreciation of the local currency (Solomon. 2009). As a result, the benefit to the receiving family created from the depreciation will not last long.

The general environment and the expectancy of changes in the local currency also alter the amount of remittances sent. According to Higgins *et al.,* (2004) when there is an increase in exchange rate volatility, the level of capital remitted decreases. Political risk also has an effect on the level of remittances sent, when the receiving country cannot count on stable institutions to channel the inflows appropriately and when the political environment is negative, these pitfalls affect negatively the amount of capital remitted (Solomon, 2009).

As revealed by the study, there are many features that can trigger fluctuations of the exchange rate, being the nature of migrants and the economic situation of the home country the main reasons that explain the quantity and frequency of remittances and consequently, the key variables to explain the pressure on the local exchange rate (Grabel, 2009).

Dutch Disease and exchange rate appreciation. The term Dutch Disease refers to a currency appreciation caused by large capital inflows directed to a country such as a natural resource boom, foreign aid, or in this case, remittances (Barajas, Chami, Hakura & Montiel, 2010).

In accordance with Acosta, Baerg & Mandelman (2009) the pressure on the exchange rate can be explained by one of these two mechanisms:

- If there is an increase in wealth originated by higher capital inflows, this creates a spending effect, which causes the prices of non-tradable goods and services to rise1. There is an expansion on the non-tradable due to a higher demand. An increase in the price of non-tradables relative to the price of tradables translates into real exchange rate appreciation. "The expansion of the non-tradable sector creates a 'resource movement effect,' drawing additional resources toward the sector. Both the spending effect and the resource movement effect put upward pressure on the local currency" (Acosta et al., 2009:2).
- The second mechanism explains that remittances increases the wealth of beneficiaries, and because they have enough capital to satisfy their economic needs, they will not be motivated to work. However it does not mean complete idleness on their side; it could mean that they prefer to invest the resources in education or better healthcare (Acosta et al., 2009). Employers would need to increase wages, but rising wages raises production costs, which can lead to a contraction of the tradable sector. And again, this leads to an appreciation of the local currency, and therefore, international competitiveness for national companies is reduced (Acosta et al., 2009).

Empirical evidence and other authors' findings suggest similar results: Amuedo-Dorantes & Pozo (2004), Grabel (2009), Lartey *et al*., (2008), Solomon (2009) also found that remittances could lead to real exchange rate appreciation.

Economic Growth*.* For Latin American and Caribbean countries remittances are an important source of income and have become an important contributor in the GDP of many of these economies (World Bank, 2011). These inflows have given

1 Non-traded goods have been defined to be goods which do not enter into international trade either because their transportation is not feasible, transportation expenditures are too costly, or tariffs are too high (Obstfeld & Rogoff, 1996).

families guarantees and the capacity to satisfy basic needs (Naufal, 2007). Some findings prove that the levels of inequality among civilians in a given country could be diminished if the remittances flows were used correctly (Shen, Docquier, &Rapoport, 2009). But clear consensus does not exist on whether remittances have an effect on long term economic growth. As mentioned previously, some reviews have demonstrated a positive effect on growth caused by remittances (Pradhan *et al.,* 2008; Rao & Hassan, 2011). Some find a negative effect (Lartey *et al*., 2008; Amuedo-Dorantes & Pozo, 2004) while others find that although there is no change on economic growth, levels of inequality are reduced (Portes, 2009; Shen *et al*., 2009).

According to Grabel (2009) these contradictory findings are the result of an incomplete definition of the parameters to analyze. She thinks that before solving each paper hypothesis, there are other aspects that should be clarified first: "(1) how migration affects labor markets and therefore wages in sending countries, (2) the characteristics of emigrants and of the households that receive remittances, (3) and whether emigration is a temporary response to an economic shock or instead a permanent response to existing opportunities and constraints" (Grabel, 2009: 98).

For example, Naufal (2007) suggests that remittances stimulate economic growth directly through investment and indirectly through consumption. Nonetheless the latter is a weaker source to stimulate growth that can only be observed through large quantities of capital for this purpose. Thus, the ideas shown in the previous paragraph should be considered; the migrants' characteristics and whether the inflows are for poor or wealthier households are parameters that should be examined. Beneficiaries with lower resources will use the capital received mainly for consumption, whereas beneficiaries with higher resources are most likely to use it for investment (Grabel, 2009); and although the risk for 'brain drain' exists (Pradhan *et al*., 2008), the chance that wealthier households promote economic growth is higher.

Additionally, migrants flows should be considered a priority too when studying remittances. If migration is south to south, contrary to the frequent south to north, remittance flows could be diminished because the level of development in the southern hemisphere tends to be equal and opportunities to find a job and send resources from the host country are smaller, due to lower wages (Grabel, 2009). These characteristics reduce the potential for economic growth stimulation.

As we have seen, empirical evidence can offer different results, but in general, when remittance flows are used for investment, in the long term they will almost certainly be a stimulus for economic growth, regardless of the exchange rate values (Grabel, 2009). With an appreciation of the currency, remittances intended for investment purposes are less likely to suffer the volatility that characterizes portfolio flows in developing economies. In this case, remittances would assume the role of portfolio flows and could create opportunities for economic development (Ratha, 2003). Furthermore, when large amounts of remittances are used for consumption, this may stimulate the demand for goods and services in the receiving country, leading to increases in production and employment (Naufal, 2007).

Discussion

Studies have shown that remittances can change the economic environment of a country: these inflows alter real exchange rate values and the prospects for national corporations (Barajas *et al.,* 2010), they can modify the purchasing power of a family (Koechlin & Leon, 2009), and they can have important consequences on long term economic growth (Rao & Hassan, 2011). Most of these outcomes depend on the type of migrants who leave the country and on the type of households receiving the inflows, because these characteristics will define the purpose of remittances.

There is a clear pattern according to which remittances used for investment could induce greater benefits for the receiving country (Naufal, 2007). As Pradhan *et al.,* (2008) explain "One of the important factors that determine growth is the rate at which a country saves and invests. Most past research attributes a significant portion of per capita income growth to the share of investment in GDP." (Pradhan *et al.,* 2008:501).

Therefore, as Solomon (2009) suggests, it is necessary to improve the institutional environment in Latin America and Caribbean countries, because strong institutions in receiving economies can stabilize the value of the local currency and can guide these inflows toward more productive and valuable options such as investment.

Acosta *et al.* (2009) reached similar conclusions but focused on the financial sector. They proved that remittances cause an appreciation of the local currency but the effect is reduced if the inflows are channeled to investment projects; they suggest this is only possible through well-developed financial markets and institutions. Mundaca (2009) reaches comparable findings, demonstrating that well-developed financial institutions can manage Dutch disease effects, and hence, help domestic economy keep its international competitiveness. Financial institutions can offer national companies a series of instruments to reduce their exposure to exchange rate volatility, the use of derivatives such as options and forwards can help companies forecast and hedge their international incomes (Bodie, Kane & Marcus, 2005).

To understand the effects of remittances in a country it is necessary to study the characteristics of migrants and the incentives they have to migrate. These features generate different outputs on economic variables and these changes affect considerably people's positions in domestic economies, such as in the case of Latin America and the Caribbean, where an appreciation of domestic currencies cause a decrease in purchasing power for beneficiary families.

Conclusion

This study presents an overview of the nature of remittances: it takes into account the characteristics of migrants and reveals the different effects these inflows can have in a country, mainly by examining exchange rates and long term economic growth.

We have seen that in developing countries, remittances play a fundamental role in the definition of economic and commercial policies. They have a significant impact on exchange rates and growth rates especially where there are no appropriate institutions, public and private, to deal with this type of issues.

In the domestic economy, it would directly affect several agents: the beneficiaries of remittances suffer from a loss in their purchasing power and exporting organizations are impacted by the appreciation of the local currency. But at a larger scale, consumption could be altered and other local companies, suppliers as well as distributors are vulnerable.

As it was explained here, there are still contradictory opinions about the effect of remittances on economic growth. It is necessary to make more in-depth studies on the nature of migrants and their economic and cultural conditions before they decide to migrate; this is one of the main reasons that explain the quantity and frequency of remittances flows and their destination. This study tries to give a close approach to this subject and aims at providing an explanation on the effects that remittances flows have in the domestic economies of Latin American and the Caribbean countries.

REFERENCES

Acosta, P. A., Baerg, N., & Mandelman, F. S. (2009). Financial Development, Remittances, and Real Exchange Rate Appreciation. *Economic Review (07321813)*, 94(1), 1-12.

Amuedo-Dorantes, C., & Pozo, S. (2004). Worker's remittances and the real exchange rate: A paradox of gifts. *World Development,* 32, 1407-1417.

Barajas, A., Chami, R., Hakura, D. S., & Montiel, P. (2010). Workers' Remittances and the Equilibrium Real Exchange Rate: Theory and Evidence. *IMF Working Paper,* 10(287), 1-42.

Bodie, Z., Kane, A., Marcus, A. J. (2005). Investments. New York: McGraw-Hill/Irwin.

Grabel, I. (2009). Remittances: Political Economy and Developmental Implications. *International Journal of Political Economy*, 38(4), 86-106.

Higgins, M. L., Hysenbegasi, A., & Pozo, S. (2004). Exchange-rate uncertainty and workers' remittances. *Applied Financial Economics,* 14, 403-411.

Hunte, K. C. (2004). Workers' Remittances, Remittance Decay and Financial Deepening in Developing Countries. *American Economist*, 82-94.

Inter-American Development Bank. (2011). Report on remittances. http://www.iadb.org/en/annual-meeting/2011/annual-meeting-article,2836.html?amarticleid=9200 . Accessed on March 25th, 2011.

International Organization for Migration. (2006). IOM and Remittances: Definition, Scale and Importance of Remittances. http://publications.iom.int/bookstore/free/iom_remittance_EN.pdf . Accessed on March 18th, 2011.

Kapur, D., & McHale, J. (2005), Give Us Your Best and Brightest: The Global Hunt for Talent and Its Impact on the Developing World, Washington, DC: Center for Global Development.

Koechlin, V., & Leon, G. (2007). International Remittances and Income Inequality: An Empirical Investigation. *Journal of Economic Policy Reform*, 10(2), 123-141.

Lartey, E. K., Mandelman, F. S., & Acosta, P. A. (2008). Remittances, Exchange Rate Regimes, and the Dutch Disease: A Panel Data Analysis. *Working Paper Series (Federal Reserve Bank of Atlanta)*, (12), 1-27.

Martin, P., Martin, S., & Weil, P. (2002). Best Practice Options: Mali. *International Migration,* 40(3), 87–99.

McCormick, B., & Wahba, J. (2000). Overseas employment and remittances to a dual economy. *Economic Journal*, 110(463), 509-534.

Multilateral Investment Fund. (2011). Remittances to Latin America and the Caribbean in 2010 – Stabilization after the crisis. http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=35788832 . Accessed on March 16th, 2011.

Mundaca, B. (2009). Remittances, Financial Market Development, and Economic Growth: The Case of Latin America and the Caribbean. *Review of Development Economics*, 13(2), 288-303.

Naufal, G. S. (2007). Remittances: Determinants, motivations and effects. Office of Graduate Studies, Texas A&M University, College Station, TX.

Obstfeld, M., & Rogoff, K. (1996). Foundations of international macroeconomics. Cambridge, MA: MIT Press.

Orozco, M. (2002). Globalization and Migration: The Impact of Family Remittances in Latin America. *Latin American Politics and Society,* 44(2), 41-66.

Portes, L. S. V. (2009). Remittances, Poverty and Inequality. *Journal of Economic Development, 34*(1), 127-140.

Pradhan, G., Upadhyay, M., & Upadhyaya, K. (2008). Remittances and economic growth in developing countries. *European Journal of Development Research*, 20(3), 497-506.

Rao, B., & Hassan, G. (2011). A panel data analysis of the growth effects of remittances. *Economic Modeling*, 28(1/2), 701-709.

Ratha, D. (2003). Workers' Remittances: An Important and Stable Source of External Development Finance. *Global Development Finance,* 157-175. Washington D.C. The World Bank.

Ruiz, I., & Vargas-Silva, C. (2010). Another consequence of the economic crisis: a decrease in migrants' remittances. *Applied Financial Economics*, 20(1/2), 171-182.

Shen, I. L., Docquier, F., & Rapoport, H. (2009). Remittances and Inequality: a Dynamic Migration Model. *Springer Science,* 8(2), 197-220.

Smith, J. (2006). Sending the Money Home: The Market for Remittances. *LatinFinance*, (176), 53-55.

Solomon, B. (2009). The Impact of Risk and Uncertainty on Remittances into Latin American Economies. *Journal of Business Strategies*, 26(1), 99-117.

Terry, D., & de Vasconcelos, P. (2006). Remittances to Latin American and the Caribbean. *LatinFinance*, (176), 50-52.

Veeramoothoo, S., Glass, R. S., & Mohan, R. (2009). Macroeconomic determinants of worker remittances for Latin American and Caribbean Countries. *Journal of International Business & Economics*, 9(4), 173-184.

World Bank. (2011). Migration and Remittances Factbook 2011. http://data.worldbank.org/data-catalog/migration-and-remittances . Accessed on April 29th, 2011.