Migration, Remittances and Asset Allocations of Spanish Immigrants

Popular literature tends to characterizes international remittances as the flow of resources from better off individuals to family in need. As such, remittances are considered to be altruistic in nature. Migration scholars, however, are well aware that remittances are sent home for various other reasons as well, such as to repay loans to family who financed migration, to accumulate retirement assets, for insurance purposes, to diversify one's portfolio of assets geographically by investing in home-based assets, or to save toward a "target purchase" (e.g. save enough to buy a plot of farm land, a taxi, or a home). Yet, few empirical investigations have sought to thoroughly document these alternative motives for remitting. The study proposed herein will take a step in that direction using a new and rich data set on immigrants. The *Encuesta Nacional de Inmigrantes (ENI-07)* is a comprehensive survey on Spanish immigrants that collects information on immigrants' families, their motives for migration and their migration history, their immigration status, their employment history and their asset accumulation and asset sales both in Spain and in their home countries.

A common finding in the macroeconomic literature on remittances is that remittances tend to rise in response to depreciation of a currency (Faini, 1994). It has been suggested that this response is due to the increase in purchasing power of the remittance inflows sent home when the exchange rate between the home and host countries' currencies rises, e.g. if the peso/euro exchange rate moves from 2 to 3, the euro buys more pesos. This "income effect" induces migrants to remit more money home now that their remittances can buy more goods for their families back home. The increase in remittances following the depreciation of the home currency may be interpreted as migrants becoming more altruistic. Alternatively, if remitters are primarily sending money home with the purpose of accumulating some assets, such as a house or a plot of land, the increase in remittances following the depreciation of the home country may be interpreted as migrants trying to re-allocate assets after a change in relative market returns. Our aim is to distinguish between these two alternative explanations for migrants' changes in remitting behavior following a change in market conditions by assessing the extent, if any, to which migrants reconfigure their asset allocations in response to a depreciation of the home currency.

To this end, we will start modeling Spanish immigrants' remittances to their home countries as follows:

(1) $\qquad R_i = a_1 + a_2 H + a_3 F + a_4 P + e_i$

where R are remittances from the ith immigrant, H is a vector of immigrant personal characteristics –such as gender, age, education, work and immigration status, F is a vector of family characteristics –including the existence and residence of a spouse, children, parents and migration networks, and P is a vector of portfolio variables capturing changes in market conditions, such as the expected and actual depreciation of the home currency, uncertainty in the exchange rate, and economic conditions in the home country (relative to the host country). How will we go about measuring our portfolio variables? We will measure depreciation of each home country currency in the survey against the euro. We will capture expected depreciations via the estimation of any overvaluation of each country exchange rate using deviations from purchasing

power parity exchange rates. Finally, uncertainty in the exchange rates will be measured by calculating the bid–ask spreads in the foreign currency markets of each country of origin represented in the survey. Equation (1) will be estimated as a Tobit model to address the selection into remitting.

What is our testable hypothesis? If migrants' remittances respond to portfolio considerations, then the coefficients on the variables included in the vector P will be statistically different from zero. Specifically, an expected depreciation of the home currency will reduce remittance flows, depreciations of the home currency will increase remittance flows, uncertainty in the exchange rate will reduce remittance flows, and positive GDP growth in the home country should increase remittances if, indeed, remittances are partially driven by portfolio concerns.

As noted earlier, one of the main contributions of this analysis will be the use of a brand new immigrant survey released by the Spanish Statistical Institute. The Spanish immigration survey is an ideal dataset to test our hypothesis owing to the large number of immigrants surveyed –a sample intended to be representative of the current immigrant stock, but also due to the diversity in their origins. As show in Table 1, Spain hosts immigrants from all of Latin America, from numerous African nations, from a diverse number of European countries (members as well as non-members of the European Union) and from a handful of Asian nations. The diversity in exchange rates and the differences in market conditions between Spain and all those countries of origin will provide us with a great laboratory to ascertain whether portfolio variables belong in the remittance equation.

Furthermore, Spain constitutes an interesting country study given the impressive growth in its immigrant population within the past 15 years. Indeed, within a decade, Spain saw its foreign-born population quadruple from 1.2 percent of the Spanish adult population (300,000 individuals) in 1991 to 4.0 percent (1,370,000 individuals) in 2001 (*España en Cifras, 2008*, available at: http://www.ine.es/prodyser/pubweb/espcif/espcif.htm). Between 2001 and 2005, the foreign-born doubled to account for 8.0 percent of the Spanish population (3,100,000 individuals) and, as of January 2007, immigrants represent 10 percent of the Spanish population (i.e. 4.5 million immigrants out of 45.2 million inhabitants). This unparallel growth of the immigrant population has also been accompanied by a rapid growth of remittances, making Spain one of the leading countries from which remittance flows originate following the U.S.

Lastly, why should we care about understanding whether and to what degree immigrants respond to portfolio variables? Because insights into this question will provide us with valuable information about the reliability of immigrant remittances during economic downturns. For instance, are remittances counter-cyclical tending to shore up the economy during an economic downturn? Or are remittances pro-cyclical, rising during an economic boom and falling during an economic downturn as investment conditions deteriorate? The current literature seems to primarily characterize remittances as counter-cyclical or, at the minimum, a-cyclical. In particular, remittances have been found to be a reliable source of foreign exchange and, as a result, countries with large emigrant populations are believed to be less susceptible to currency crises (Ratha 2004, Bugamelli and Paterno 2005). However, if remitters are responsive to portfolio variables and, overall, to changes in market returns, it is possible that remittances may not constitute a reliable source of foreign exchange to counteract speculative outflows. In which

case, developing economies should avoid growing accustomed to remittances due to the potentially transitory nature of international money transfers. This concern has been partially nourished by recent press reports on how the growth of remittance flows to Latin American countries (especially Mexico) appears to have stalled over the past year as can be seen from Figure 1. While the most common explanation for this slowdown has been the U.S. economic downturn and increased immigration enforcement activity, there is also the possibility that variation in flows is due to portfolio considerations. The study proposed herein will shed some light on this crucial policy question.

References

Bugamelli, Matteo, and Francesco Paterno. (2005) "Do workers' remittances reduce the probability of current account reversals?" World Bank Policy Research Working Paper no. 3766.

Faini, Riccardo. (1994) "Workers' Remittances and the Real Exchange Rate: A quantitative Framework" *Journal of Population Economics*, 7, pp. 235-45.

Ratha, Dilip. (2004) "Workers' Remittances: An Important and Stable Source of Development Finance" *Global Development Finance*, pp 157-175.

Table 1: Main Countries of Origin

Nationality	Number in the Survey	Percent of Immigrants in the Survey
Belgium	116	0.75
Bulgaria	313	2.02
Spain	2,562	16.57
France	667	4.31
Italy	152	0.98
Poland	130	0.84
Portugal	388	2.51
U.K.	667	4.31
Germany	475	3.07
Rumania	1,225	7.92
Switzerland	131	0.85
Ukraine	197	1.27
Algiers	179	1.16
Morocco	1,655	10.7
Mexico	115	0.74
Cuba	258	1.67
Dominican Republic	223	1.44
Argentina	678	4.38
Bolivia	389	2.52
Brazil	275	1.78
Colombia	875	5.66
Chile	141	0.91
Ecuador	1,202	7.77
Peru	329	2.13
Uruguay	223	1.44
Venezuela	270	1.75
China	109	0.7

Figure 1
Remittances to Mexico
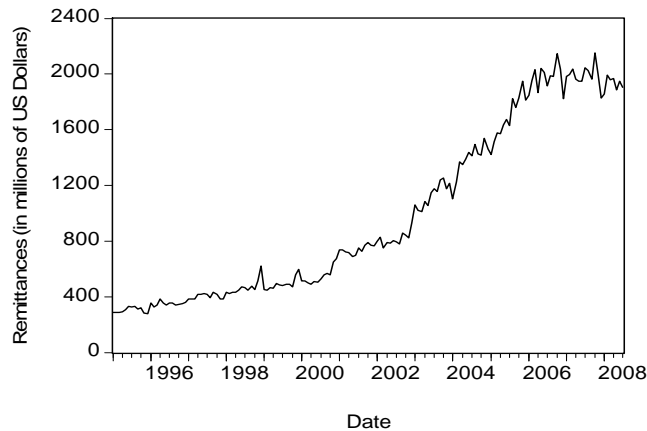
Notes: Data are monthly from the Mexican Central Bank
http://www.banxico.org.mx/polmoneinflacion/estadisticas/balanzaPagos
and are seasonally adjusted by the authors.