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Remittances, financial development, and growth[☆]

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ABSTRACT

Despite the increasing importance of remittances in total international capital flows, the relationship between remittances and growth has not been adequately studied. This paper studies one of the links between remittances and growth, in particular how local financial sector development influences a country's capacity to take advantage of remittances. Using a newly-constructed dataset for remittances covering about 100 developing countries, we find that remittances boost growth in countries with less developed financial systems by providing an alternative way to finance investment and helping overcome liquidity constraints. This finding controls for the endogeneity of remittances and financial development, does not depend on the particular measure of financial sector development used, and is robust to a number of robustness tests, including threshold estimation. We also provide evidence that there could be an investment channel trough which remittances can promote growth especially when the financial sector does not meet the credit needs of the population.

1. Introduction

Remittances by international migrants to their countries of origin constitute the largest source of external finance for developing countries after foreign direct investment (FDI). Officially recorded remittance inflows amounted to $125 billion in 2004, exceeding total development aid by 50% (Fig. 1). Despite the increasing importance of remittances in total international capital flows, the relationship between remittances and growth has not been adequately studied. This contrasts sharply with the extensive research on the relationship between growth and other sources of foreign capital, such as foreign direct investment (FDI) and official assistance flows.[1] Moreover, the conventional wisdom seems to be that, because remittances are used mostly for consumption, they have a minimal impact on long-term growth.

This paper attempts to fill a gap in the existing literature of the macroeconomic impact of remittances, contributing to the debate of the impact of remittances on growth in two important ways. First, we construct a new measure for remittances, covering about 100 countries, substantially improving data limitations on remittance flows. Second, we analyze the importance of remittances in promoting economic growth, looking specifically at the interaction between remittances and the financial sector, an aspect ignored in the literature. In particular, we explore how local financial sector development influences a country's capacity to take advantage of remittances.

The relationship between remittances, financial development, and growth is a-priori ambiguous. On the one hand, well-functioning financial markets, by lowering costs of conducting transactions, may help direct remittances to projects that yield the highest return and therefore enhance growth rates. On the other hand, remittances might become a substitute for inefficient or nonexistent credit markets by helping local entrepreneurs bypass lack of collateral or high lending costs and start productive activities.[2] The empirical analysis finds strong evidence that the second channel works: remittances boost growth in countries with less developed financial systems by providing an alternative

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[1] See Alfaro et al. (2004) for an analysis of the relationship between FDI and growth and Easterly (2003) and Rajan and Subramanian (2005) for the link between aid and growth.

[2] Entrepreneurs in developing countries confront much less efficient credit markets, and available evidence indicates that access to credit is among their biggest concerns (Paulson and Towsend, 2000). Several papers also suggest that credit constraints play an especially critical role in determining growth prospects in economies characterized by a high level of income inequality (Banerjee and Newman, 1993; Aghion and Bolton, 1997; Aghion et al., 1999).

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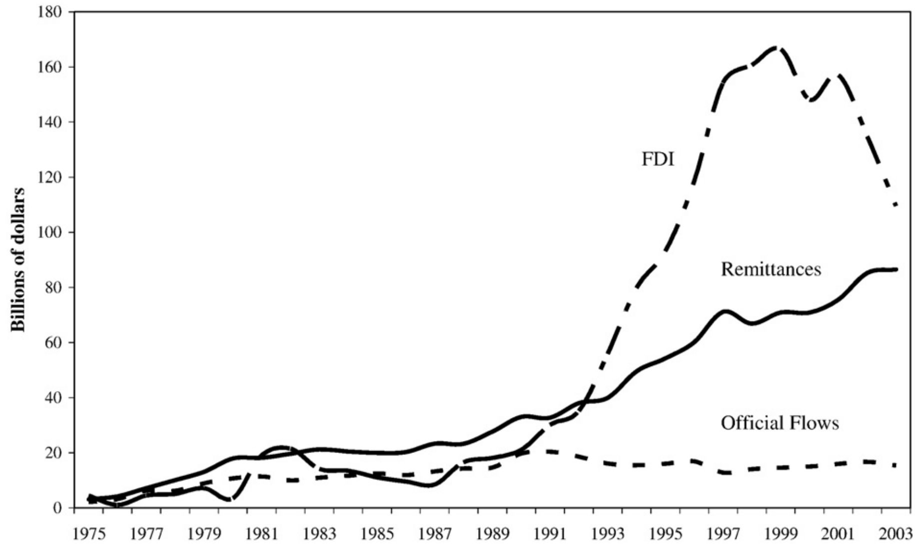

Fig. 1. Remittances, official flows and FDI, 1975–2003. Source: IMF balance of payments statistics and authors' calculations.

way to finance investment and helping overcome liquidity constraints.[3] In contrast, while more developed financial systems seem to attract more remittances (the volumes of remittance inflows increase with lower transaction costs and fewer restrictions on payments), they do not seem to magnify their growth impact.

Although this mechanism has not been studied in a macro context, there is some evidence at the micro-level. Dustmann and Kirchamp (2001) find that the savings of returning migrants may be an important source of startup capital for microenterprises. Similarly, in a study of 30 communities in West-Central Mexico, Massey and Parrado (1998) conclude that earnings from work in the United States provided an important source of startup capital in 21% of the new business formations. Woodruff and Zenteno (2001) also find that remittances are responsible for almost 20% of the capital invested in microenterprises throughout urban Mexico.

This paper is at the crossroads of two strands of literature. One is the development impact of remittances.[4] Most of the work done on the macroeconomics of remittances and their impact on growth is qualitative and tends to suggest that remittances are mostly spent on consumption, and are not used for productive investment that would contribute to long-run growth. The second strand of literature looks at the determinants of remittances and how the financial sector infrastructure, and in particular transaction costs, influences the propensity to remit. Authors stress the need to promote competition among money transfer operators to reduce transaction costs and stimulate remittances through formal channels. To the best of our knowledge, this is the first paper that analyzes the evidence of complementarity/substitutability between remittances and financial development in promoting growth.

Our empirical analysis suggests that agents compensate for the lack of development of local financial markets using remittances to ease liquidity constraints, channel resources toward productive investments and hence promote economic growth. To assess the merits of our guess, we analyze the interaction of remittances and financial development using a large sample of developing countries. In our analysis we use standard financial market indicators and employ them in growth regressions to study the impact of the interaction of these variables with remittances on economic growth. The result that remittances may play a significant role in promoting growth in countries with shallower financial systems holds true after addressing concerns regarding endogeneity.

We also provide evidence that there could be an investment channel trough which remittances can promote growth where the financial sector does not meet the credit needs of the population. First, we show that remittances indeed boost investment, especially in countries with a less developed financial sector; second, in two thirds of the countries in our sample remittances appear to be mostly procyclical, an indication that they tend to respond to investment opportunities at least as much as to altruistic or insurance motives.

The structure of the paper is as follows. Section 2 describes the data. Section 3 presents the empirical analysis and results. Section 4 identifies possible channels through which remittances affect growth, by looking at the impact of remittances on investment and their cyclicality. Section 5 concludes.

2. Data

This section describes the data used in the growth regressions. The new remittances variable constructed in this study considers a sample of over 100 countries for the 1975–2002 period. The variable represents an improvement over existing remittances series in several dimensions. Previous studies have generally used a broad definition of remittances that includes the following three items of the IMF's Balance of Payment Statistics Yearbook (BOPSY) (all the details are in Appendix A): workers' remittances, compensation of employees, and migrant transfers. The use of this definition across the board entails the risk of including flows, such as earnings of locals working for foreign embassies and international organizations, which do not conform with the view that remittances typically refer to transfers of money by foreign workers to their home countries. Some other countries do not classify remittances separately from other current transfers in the balance of payments (BOP). In such cases, the standard definition understates the true flows. For these reasons, we decided to adopt a country-specific measure of remittances as opposed to a standardized one.

As a first step, we followed the country specific notes in the BOPSY, where in many cases, detailed definitions and description of

[3] In recent years, securitizing future flows has become increasingly common among emerging market issuers as a way of accessing international capital markets (Ratha 2003.) Future-flows of workers' remittances have been used by banks in many emerging countries (Turkey and Brazil most notably) to raise billions of dollars of capital from international markets, thus directly contributing to financial deepening, avoid credit rationing and raise external financing (see Ketkar and Ratha, 2001).

[4] Lundhal (1985), Stark (1991), and Kirwan and Holden (1986).