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Are working remittances relevant for credit rating agencies?

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Abstract This paper studies the impact of workers' remittances on sovereign ratings in 55 developing countries over the period 1993–2006. First, it looks at the determinants of sovereign ratings, including remittance flows. Second, it builds an empirical model for remittance-dependent countries to capture the effect of remittances, through a reduction of debt vulnerability and volatility of external flows, on Fitch, Moody's and S&P ratings. Third, it assigns ratings to unrated Latin American and Caribbean countries for which remittance flows are high. Our results suggest that there is no single model to rate countries and the impact of remittances on ratings is enhanced for small, low and middle income economies.

1. Introduction

Research on the access of sovereigns to international capital markets suggests that sovereign creditworthiness could be improved by including remittance flows in key indebtedness indicators, such as debt-to-exports and debt service to current account ratios. These have been identified in the literature as common determinants of sovereign ratings (Ratha, 2005; World Bank, 2006).

Two series of surveys at the crossroads of the literature on sovereign ratings and remittance flows are worth mentioning. First, Ratha et al. (2007) define a standard ratings model and find that a number of unrated countries would be likely to have higher ratings than expected, notably on account of foreign currency inflows such as remittances. According to Ratha (2005), "country credit ratings by major international rating agencies often fail to account for remittances". Second, rating agencies note in their country studies that remittances matter to determine ratings for countries in which these flows are considerable. At a time when economic growth was high, Fitch – Fitch Ratings – (2008a) underlined that remittance flows could positively impact ratings (e.g., El Salvador). Fitch comments are consistent with its sovereign methodology that "takes into account the volatility and potential vulnerability of receipts, such as remittances, to domestic and external shocks" (Fitch Ratings, 2007). In its outlook for Mexico, S&P – Standard and Poor's – (2005) stressed remittances' importance as an income source for the balance of payments, and their impact on other determinants

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of sovereign ratings, such as public finances. In May 2009, S&P lowered El Salvador's credit rating to "BB" from "BB+", stating that "the weak performance in 2009 is due to falling consumption, investments, and exports as a result of a significant pass-through from the global recession" and that "remittances from the United States fell by 8 per cent in the first two months of the year".[1] In the same way, in February 2009, Moody's – Moody's Investors Service – highlighted that, for a country like the Philippines, a slower economic growth for 2009 would also be explained by a decline in remittances, which account for more than 10 per cent of domestic output and are a major driver of consumption.[2]

Despite these stylised facts, little research has been devoted to analyse the impact that remittances have on sovereign ratings assigned by credit rating agencies (CRAs). Our paper attempts to address this issue by building a rating model over a long time span (1993–2006), and estimating the ratings of the three main CRAs for a sample of 55 emerging countries. This study aims at answering four key questions: how can we capture the effect of remittances on ratings? Do rating agencies really take remittances fully into account in their analyses? What is the potential effect of remittances when included in market variable estimations? And finally, what is the "shadow rating" for unrated countries highly dependent on remittances?

This issue is crucial given the importance of remittance flows towards the developing world. In order to capture the effects of remittances, we focus on the country's Balance of Payments, which is part of any government's financial strength (see Moody's Investors Service, 2008a for the importance of balance of payment considerations in determining ratings). First, we analyse a common channel to measure the importance of remittances in sovereign risk assessment (Ratha, 2005; World Bank, 2006). We wonder to what extent remittances can contribute to improve sovereign ratings when they are included in a traditional *solvency ratio* (*i.e.*, the debt to exports of goods and services ratio). Second, we introduce the *volatility of external flows* (FDI flows, portfolio flows, ODA, bank loans, exports and remittances) as an additional variable explaining sovereign ratings. These flows are particularly important for developing and emerging economies, where saving rates are low and dependence on external financing is high. Migrants' remittances are considered a stable source of financing compared with other financial flows (Ratha, 2004).[3] Remittances, in the same way as foreign investment or exports, are important items in the balance of payments, contributing to mitigate credit risk at the country level. More precisely, remittances strengthen financial stability by reducing the probability of current account reversals (Bugamelli and Paterno, 2005). This, in turn, can be related to the probability of default studied in country risk models. Besides, remittances can have a countercyclical effect in some emerging economies, significantly reducing growth volatility (Fajnzylber and Lopez, 2007).[4] Of course, as pointed by the report *Close to Home,* the comprehensive World Bank study on Latin America, remittances are an engine for development, but they are neither "manna from heaven" nor a substitute for sound development policies.

The remainder of this article is organised as follows. Section 2 provides a review of the literature on sovereign ratings and in particular on the relevance of sovereign ratings for emerging economies as well as the determinants of these ratings. Section 3 presents the most important stylised facts and analyses the results of the econometric model. In particular, this section emphasizes the impact of remittance flows on ratings. We also provide an empirical analysis for countries with a high share of remittances (as a percentage of GDP). Finally, Section 4 provides concluding remarks and sketches the major policy implications that follow from this research.

2. Review of the literature

Two dimensions are related to the analysis of rating agencies. The first considers the impact of ratings on capital markets. The second, characterised by a vast and relevant literature, studies the determinants of ratings. This section presents that literature and can be omitted by a familiar reader.

Focusing on the impact on capital markets, Kaminsky and Schmukler (2001) find that downgrades and upgrades have an impact on country risk and stock returns: these rating changes are transmitted across countries, with neighbour-country effects being more significant. They conclude that rating agencies may contribute to heighten financial instability. The study of sovereign risk assessment has mainly focused on comparing ratings to market spreads. For the period 1987–1994, Cantor and Packer (1996) find a greater impact on spreads from a rating change in the case of Moody's or if it is related to speculative-grade countries. Reisen and Von Maltzan (1999) show that, during the period 1989–1997, Fitch, Moody's and S&P downgrades have a significant impact on spreads, contrary to upgrades, which were anticipated by the market. Sovereign ratings have the potential to moderate euphoria among investors on emerging markets but rating agencies failed to exploit that potential in the 1990s. Sy (2001) highlights the strong negative relationship between ratings and EMBI+ spreads declines during periods of high risk aversion. Mora (2006) examines Moody's and S&P ratings and concludes that the procyclicality of ratings is not ascertained when considering the post Asian crisis years. Analysing sovereign ratings issued by the three agencies for 1993–2007, Gaillard (2009) finds that the procyclicality of ratings was much sharper during periods of high risk aversion (1997–1998 in particular) than periods of low risk aversion (2005–2007). He also highlights the greater stability of Moody's ratings. In a different way, Cavallo et al. (2008) develop a simple Hausman specification test and find that there is some informational content in sovereign ratings that is not completely captured by market spreads. Additional tests reinforce their conclusion that ratings matter. Lastly, going beyond the traditional "ratings vs. spreads" view, Roubini and Manasse (2005) present an original sovereign risk assessment methodology by using a binary recursive tree. With this approach, they discuss appropriate policy options to prevent crises. A key result that follows from this research is that ratings do matter and they are an important piece to understand the behaviour of capital markets.

[1] "S&P lowers El Salvador rating to 'BB' from 'BB+'", *Reuters*, May 12, 2009 (online article).

[2] "Moody's: Slowing remittances hurt RP", *Manila Bulletin*, February 14, 2009 (online article).

[3] See Esteves and Khoudour-Casteras (2009) for similar findings regarding the late 19th century in Europe.

[4] However, as pointed out elsewhere, migrant-based income can become costly to emerging countries when resources are mismanaged. Remittances may reduce the government's incentive to maintain fiscal policy discipline (Chami et al., 2008). Moreover, this dependence raises a moral hazard problem by reducing the political will to implement reforms and pushing real exchange appreciation. These findings are consistent with Amuedo-Dorantes and Pozo (2004) who relate higher remittance flows to the reduction of the receiving country's competitiveness.