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## Sovereign Credit Risk and Global Equity Fund Returns in Emerging Markets\*

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### Policy Recommendations

The rate of return earned by global fund investors in emerging markets is influenced by sovereign credit announcements by rating agencies. Global investors treat information in upgrades/downgrades differently from that regarding positive/negative outlook. The information contained in the latter is forward looking in nature.

This paper examines the rate of return earned by global funds on equity investment in emerging markets (EMs) particularly the role played by sovereign credit risk. Sovereign credit upgrades or downgrades influence excess (over risk-free rate) returns earned by foreign investors: lower excess returns are associated with lower risk. The effect of credit upgrades and downgrades, however, is not symmetric. By contrast, credit outlook or credit watch announcements do not seem to influence foreign investors' excess returns. When it comes to abnormal or risk-adjusted returns, foreign investors treat the information contained in credit rating announcements differently from that in credit outlook/watch announcements. Furthermore, the paper provides evidence for the superior performance of foreign investors in EMs relative to the return of domestic market indexes, highlighting the influential role of sovereign credit risk announcements on foreign investors' abnormal returns.

## Introduction

During the 1990s many emerging markets (EMs) embarked on programs of financial liberalization, especially the opening of stock markets to foreign investment. This led foreign investors to add EM stocks to their portfolios, providing portfolio exposure to these economies as part of strategies aimed at diversification. Financial liberalization was thought to contribute to the stability of financial markets by providing an alternative (foreign) source of equity capital that would supplement an (often) unstable domestic source. During the last decade, however, financial instability in many EMs has increased as adverse country or region-specific shocks have been transmitted across frontiers, and financial markets of EMs have become more susceptible to short-term international capital movements. For example, several EMs termed the “Fragile Five” (Brazil, India, Indonesia, South Africa and Turkey) saw large international capital outflows in 2013 following the reversal of U.S. Federal Reserve policy action regarding its bond-buyback program (what has become known as the taper tantrum).

Among other factors, rating agencies seem to have played a significant role in increasing market fluctuations, leading to financial instability. The pro-cyclical behaviour of rating agencies (upgrading countries in prosperous periods and downgrading in unfavorable periods) has been criticized as contributing to a boom-and-bust cycle in stock markets (Kaminsky and Schmukler, 2002, Ferri, Liu, and Stiglitz, 1999). In order to investigate the contribution of agency ratings to financial instability, prior studies examined the impact of sovereign credit ratings on emerging markets focusing mainly on

the determinants of sovereign rating changes and their effect on EM stock and bond markets, on an aggregate (national) or firm-specific level (Kaminsky and Schmukler, 2002; Brooks *et al.*, 2004; Lee, Sapriza, and Wu, 2016, Almeida *et al.*, 2017).

The observation that foreign equity ownership accounts on average for 4% of total EM equity ownership (Lee and Chung, 2018) suggests that previous evidence from aggregate/national returns (e.g. index returns) represents largely the behaviour of (local) domestic investors. The previous literature, on the whole, has ignored the role of foreign investors. This paper fills this gap by examining the impact of sovereign credit risk changes on the returns earned by global investment funds on their equity investment in EMs. Our methodology allows us to isolate the direct impact of sovereign credit risk changes on returns earned by foreign investors from other local and/or global macroeconomic factors that may influence these returns. In particular, we examine the factors that determine the returns earned by global funds in EMs, paying special attention to the impact of sovereign credit rating announcements on the returns earned by global funds. We focus mainly on sovereign credit ratings as these have been shown to be an important source of information that foreign investors use to assess the level of riskiness in EMs (Reinhart, 2002). We argue that foreign investors treat sovereign credit ratings as a key source of information in their investment decisions due to the relatively low level of information efficiency in EMs (Griffin, Kelly, and Nardari, 2010).

This paper makes several contributions. First, to the best of our knowledge, this is the first paper to offer a systematic study of sovereign risk along with other factors shaping the performance of global investment funds in EMs. By studying the determinants of the rate of return, it provides an assessment of the factors behind portfolio investment decisions by global investors in EMs. Second, by using the returns earned by investments funds, we isolate the

performance of these funds and the direct impact of sovereign credit risk changes on emerging markets. This also helps to identify corresponding differences between local and foreign investors. This paper contributes to our understanding of the informational role of announcements by credit rating agencies in international capital markets.

## The Rate of Return Earned by Global Investors in Emerging Markets

Event studies are mainly used to examine the behaviour of foreign investors' and stock market returns around credit rating events. A credit rating event refers to announcements of both credit upgrade/downgrade and credit outlook/watch. Our event study reveals a distinct pattern for the effect of credit rating announcements on foreign investors' returns, consistent with studies on the relation between corporate bond ratings and stock returns (*e.g.*, Odders-White and Ready, 2006; Almeida *et al.*, 2017). Our event methodology results are supported by panel-study estimates of the determinants of foreign investors' rate of return. The panel regression results show that a credit-rating upgrade is associated with lower excess (over risk-free rate) returns for foreign investors, consistent with the fundamental risk-return trade-off. On the other hand, announcements of change in credit outlook are unrelated to investors' excess returns.

The paper also studies the abnormal (risk-adjusted) returns earned by foreign investors in

EMs using a two-stage asset pricing procedure. In the first stage, we obtain risk-adjusted returns for foreign investors via three global asset pricing models: the modified international CAPM (ICAPM) and the modified three- and five-factor models of Fama and French (1993, 2015). In the second stage, we estimate the determinants of risk-adjusted returns. We find that the informational content of a credit rating upgrade or downgrade announcement differs from that of a credit outlook (positive or negative) announcement. Finally, this paper examines whether foreign investors' returns outperform market indexes returns in EMs through the same two-stage procedure using as dependent variable in the first stage the foreign investors' return in excess of the domestic stock market index. The findings confirm the superior performance of foreign investors relative to the domestic stock market index, highlighting the key role of credit rating announcements (credit rating downgrade or upgrade and credit outlook or watch) in the determination of risk-adjusted returns. Moreover, we find evidence of "return chasing", *i.e.* equity investment flows to countries where investors anticipate higher risk-adjusted returns.

## Conclusions and Policy Implications

This study adds to the literature on the importance of sovereign ratings in financial markets and particularly on the returns earned by foreign equity investors in EMs. The findings indicate that the information contained in sovereign credit ratings (letter grades) by Standard and Poor's (S&P) is significant in explaining excess (over the risk free rate) returns earned by foreign investors on equity investment in EMs. Foreign investors require a

*This study contributes to our understanding of the informational role of announcements by credit rating agencies in international capital markets.*

lower excess return for lower risk. On the other hand, after taking into account the determinants of excess returns, information contained in announcements of credit outlook/watch by S&P does not seem to influence the excess returns of foreign investors. The effect of credit upgrades and downgrades on foreign investors' excess returns is asymmetric. Downgrades appear to influence foreign investors' returns and the effect is more pronounced when EMs are assigned lower credit ratings by S&P. There is no evidence that upgrades have a significant effect on excess returns.

When it comes to foreign investors' abnormal or risk-adjusted returns, foreign investors treat the information contained in credit ratings differently from that in credit outlook/watch. Announcements of a positive credit outlook/watch by S&P are associated with higher abnormal returns while an increase in the credit rating with lower. The contrasting effect of

credit ratings with credit outlook/watch is related to the forward-looking nature of credit outlook announcements that foreign investors take into account in order to modify their investment strategy accordingly.

This result is confirmed when we examine risk-adjusted returns of foreign investors relative to domestic market returns. Specifically foreign investors earn risk-adjusted returns in excess of domestic markets: alphas from asset pricing models of the difference between foreign and domestic risk-adjusted returns are positive and significant. Credit rating events play an influential role in explaining the difference: foreign investors take advantage of the forward-looking nature of credit outlook/watch announcements to increase their risk-adjusted returns compared to the market. When rating agencies confirm a credit rating by the announcement of either an upgrade or a downgrade, the confirmation of higher (lower) risk is reflected in higher (lower) risk-adjusted returns demanded by foreign investors relative to the market. All our main results are robust to alternative model specifications.

While credit rating agencies have come under heavy criticism especially since the advent of the global financial crisis, our results show that credit rating events (announcements of changes in ratings or credit outlook/watch) provide important signals that foreign investors may exploit in formulating their investment strategies in EMs. It is evident that foreign investors include credit rating events as an important tool of analysis and formulation of equity investment strategies in EMs.

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