

Bond Spreads of Emerging Market Corporate Borrowers: How do Firm-level and Global Factors matter?

The pricing of emerging market corporate bonds has drawn relatively little attention, despite the growing importance of this market. An improved understanding of emerging market corporate bond spreads is valuable as the risk premium presents a large component of the overall borrowing costs to the companies. Furthermore, such an analysis allows us a perspective on the debate on co-movement of emerging and mature asset markets.

In this paper, we, first, provide a detailed analysis of factors that are important in explaining the cross-sectional and time-series variation of corporate spreads on dollar-denominated emerging market bonds, taking into account issuer-specific balance sheet and stock market information as well as country-level determinants and global factors. We find that firm-level information is important for both cross-sectional and time-series variation of spreads, yet the bulk of the explained time-series variation of emerging market spreads is due to changes in the global economic climate as captured by market equity returns. Second, we find that the strong co-movement of emerging market risk spreads with international asset markets is consistent with an international financial accelerator effect arising from a principal-agent framework.

Our analysis is based on a panel of 220 dollar-denominated bonds issued by emerging market corporate borrowers on the international market. Issuers of these bonds are resident in nine emerging market countries located in Latin America, Asia and Eastern Europe. With the exception of economic growth figures (which are available at a quarterly frequency), our data is of monthly frequency spanning the period September 1993 to December 2003.

In order to mitigate the omitted variable bias due to unmodelled firm- and country-specific fixed effects in the level of spread, we use the within-group estimator and apply a correction for remaining autocorrelation in our panel. Furthermore, we repeat our panel regressions using the GMM-system estimator, allowing us to relax the assumption of the strict exogeneity of regressors and eliminate the potential bias in the within-group analysis due to the dynamic specification of the model.

We find that firm-level factors reflecting default and recovery risk, such as leverage, idiosyncratic volatility and equity return, play an important role in explaining cross-sectional variation as well as the changes of spreads over time. In terms of the proportional change in spreads, lower grade bonds are more responsive to a given change in leverage than better rated bonds,

indicating important non-linearities. The US interest rates, aggregate market volatility and market equity returns and – to a lesser extent – US growth and swap spreads account for the bulk of the time-series variation of spreads. We find that a rise in US interest rates is associated with lower spreads and that this link is stronger for lower-rated companies, contradicting a widely held view in the emerging market literature but confirming earlier findings in the US corporate bond literature (Campbell and Taksler 2002, Collin-Dufresne, Goldstein and Martin 2001, Avramov, Jostova and Philipov 2004, Longstaff and Schwarz 1995). Importantly, we illustrate a dominating influence of world equity returns in the time-series behavior of spreads. This result holds in particular for lower rated bonds.

Further examination suggests that the stronger co-movement of lower-rated bonds spreads and global equity returns is mediated through the net-worth of borrowers, consistent with a principal-agent framework where information asymmetry between firms and investors leads to a countercyclical pattern in the premium on external finance for low net-worth borrowers (Bernanke and Gertler 1989 and 1995, Bernanke, Gertler and Gilchrist 1998). Using balance-sheet information of issuers we illustrate in a cross-sectional analysis that the proportional rise in spreads in response to a deteriorating global climate is inversely related to the net worth of the company, standardized by total firm value.