Ozler, Sule, and Harry Huizinga. 1992. Bank exposure, capital, and secondary market discounts on developing country debt. NBER Working Paper no. 3961. Cambridge, Mass.: National Bureau of Economic Research.

Comment Sylvia Maxfield

This paper fits into a growing body of literature exploring the determinants of capital flows into and from emerging market countries. One of the main points of debate is over when and to what extent "pull" and "push" factors or irrationality operate in the rapidly growing international market for developing country bonds. "Pull" refers to investors attracted by the fundamental characteristics of the issuing country. In this case one could assume a globally stable appetite for emerging market country bonds where demand, prices, and yields for a particular country's bonds depend on investors' careful evaluation of that country's past, present, and future creditworthiness. "Push" refers to investors turning to the emerging market asset class when their risk-free rate falls below a certain threshold. Here the price of bonds depends to a greater extent on the strength of demand for the emerging market bond asset class. When global liquidity falls and the risk-free rate rises, capital will move more or less indiscriminately out of emerging market bonds. These studies focus varyingly on bond prices, balance of payments, trade balances, actual flows as best as they can be measured, and other variables.

What is new in this paper is an effort to explain the likelihood of a new issue and variation in bond yields at the time of new issue launching. This emphasis should make the authors' effort interesting to Wall Street, but is perhaps not as exciting as an effort to predict variation in spreads as bonds trade in the secondary market. The authors have also assembled a huge number of observations. The paper is replete with interesting findings pointing to valuable follow-up work.

The authors' model includes a number of variables standard to Wall Street's own models of spread behavior. These capture the fundamental variables shaping credit worthiness such as the debt service ratio or GDP growth. These fundamentals are what is expected to motivate investors who are "pulled" into emerging market investment. U.S. Treasury yields are also included to control for changes in the risk-free investment rate and the "push" logic. The model explains cross-national variation better than change over time and points to some interesting differences between

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Latin America and Asia. The "pull" logic appears to operate more consistently in Asia than Latin America.

For example, the debt service ratio has the expected positive impact on spreads in Asia but not Latin America. Investors do not behave as though they expect conventional market discipline to operate in Latin America. One possible explanation is a belief that the higher the debt burden, the more likely an international bailout and the lower the default risk. Another explanation is that irrational exuberance operated to a greater extent in Latin America than Asia. Another result is that GDP growth has a negative effect on spreads in Asia and positive one in Latin America, suggesting that investors believe Asians will harness growth to help repay debt but Latin Americans might not. Overall these results could be interpreted as suggesting that, for the period studied, the market for Asian international bonds behaved more in line with expectations than the Latin American markets. This should not be surprising given that the period covers the Mexican peso crisis. The data on error term correlation suggest that unobservables are doing much of the work to explain new issue launch spreads in Latin America.

The authors also use their results to tell a novel story about demand and supply in international markets for developing-country bonds. They find that as U.S. interest rates rise, new issue launch spreads fall. This contravenes the "push" logic that investors buy emerging market assets when the risk-free rates falls. Their explanation is that when U.S. rates rise only the more credit worthy issuers come to the market. Supply is constricted and spreads compress.

This result suggests the need for more nuanced study of the interaction of supply and demand for emerging market assets. Wall Street refers to these considerations as "technical" factors, while determinants of credit worthiness such as debt service ratios are called "fundamentals." Most experienced fixed income traders will tell you that in any relatively illiquid market, technicals (supply and demand considerations) are key to price behavior. An interesting extension of Eichengreen and Mody's research would be to separate the sample according to the extent of liquidity. The conventional Wall Street wisdom is that technical factors matter more the less liquid the market. A related consideration is variation in the size of the issue and the issuers' total outstanding bond stock. Larger issues will be more liquid. If diversification is an important investor motive, demand could be unexpectedly high and spreads tight for issues from countries with few bonds outstanding.

The results also suggest a different and to me more plausible conclusion than the one offered by the authors. This explanation returns to the demand side and is simply that investor exuberance swamped the rate differential logic throughout the entire period studied. Perhaps the impact of the risk-free rate on investors' behavior corresponds not to simple variation in the rate but to accumulated changes in the risk-free rate over time. The authors might consider looking for threshold levels that trigger changes in demand; this would, however, require longer time series than we have available. The authors' suggestion about supply behavior is striking and counterintuitive, but on Wall Street and for issuing country debt managers the more interesting question would be whether spreads in the secondary market follow the same logic.

In summary this paper contributes to the debate on determinants of investment in foreign currency denominated emerging market bonds. It suggests that "pull" logic operated more strongly in Asia than Latin America. Future research should aim to illuminate whether this happened due to cross-regional differences, informational inefficiency, moral hazard, irrationality, or some other factor. The paper also suggests a need to explore the interaction between global liquidity, the risk-free rate, and exuberance.