

## Predicting Financial Crises

The IMF has released an important new study by the gurus of the Fund's data on net foreign assets, Luis A.V. Catao and Gian Maria Milesi-Ferretti, in which they analyze the determinants of financial crises. Specifically, their objective is to identify what conditions are associated with a default or credit event on a country's **external** debt. Needless to say, this study is particularly germane to the rationale we cite for investing in creditor countries, but also has some interesting twists on when we should make exceptions to slavish rules of thumb. The key to the study is their definition of 'external crises' which encompass defaults and rescheduling events as well as events associated with a country having to resort to large multilateral or IMF support. In other words, their definition of credit events coincides precisely with the losses that investors in external debt should care about, namely not getting repaid principal. The report is worth reading – at minimum the summary and abstract – as it is destined in my opinion to tilt the analysis of sovereign risk in the direction of assessing not only domestic risks but also a country's vulnerability to global financial crises. Here I provide my interpretation of its relevance.

First and foremost, the authors find that risk of external crises rises significantly when a country's net foreign liabilities exceed 50% of GDP - a threshold that corresponds exactly with Stratton Street's threshold for investible countries. We no longer need to say this threshold is arbitrary or judgmentally derived but rather it is an empirical finding of an IMF study based on historical evidence. The devil, however, is in the details. Net foreign **debt** liabilities pose greater risks than net foreign direct investments (equity). Indeed, FDI seems to mitigate risk even if it is a net liability for the country as a whole. This finding appears more robust than the usual indicators that analysts use, namely external debt/GDP and external debt/exports, although it is consistent with those indicators. The other threshold for risk of external crises is an abrupt 20% increase in ratio of net foreign liabilities/GDP relative to the country's historic norm, irrespective of absolute level of that ratio. In other words, country's that suddenly embrace external debt to finance whatever are likely to waste a lot of the money on poor investments that go bad (think Ireland). In short, both the quality net foreign assets (liabilities) and the speed at which they accumulate tend to predict crises as well as the level of net foreign liabilities.

Second, current account deficits, as well as sudden changes in the current account, are powerful predictors of subsequent crises. Similarly, a dramatic improvement in the current account deficit is a powerful predictor of a country's capability to re-enter capital markets and resume creditworthiness after a default. Here in particular is where the Stratton's methodology may miss opportunities since the absolute level of the ratio of net foreign liabilities to GDP tends to recede belatedly long after the current account swings toward surplus, not to mention the horrendous delay in data availability. Markets see the credit improvement long before a strict guideline can confirm it. Fortunately, any former investment-grade sovereign is exempt from this restriction.

Third, foreign reserves held by the central bank tend to reduce the likelihood of crises much more than other foreign asset holdings. This finding is particularly telling because it belies the fact that commercial banks often are the sector that causes the trouble by borrowing in a foreign currency to fund domestic investments in local currency, thereby creating a currency mismatch and likely a maturity mismatch to boot. If the central bank has ample international reserves, it can bail out banks by supplying the requisite hard currency on short notice. Similarly, crises that promulgate contagion often do so because central banks cannot provide adequate liquidity in hard currency of routine trade finance or lack the requisite swap agreements with other central banks to obtain foreign currency.

These findings are strikingly similar to those of a research paper that I wrote at Bankers Trust in the midst of the Asian Crisis of 1997. (See "Risk Indicators for Avoiding Losers", Robert S Gay and Carl W Ross, BT Alex. Brown Research, September 22, 1997). We highlighted two measures of systemic risk as the likely indicators of subsequent crises - net foreign liabilities of the banking sector as a percent of international reserves of the central bank and as a percent of banking system assets. The latter was a proxy for bank equity, that is, banks' capability to cover their own currency mismatches. These ratios proved to be remarkably prescient predictors of the contagious spread of crises to other countries around the world in the wake of the initial devaluations and defaults in Asia.

In my opinion, it is well worth the time to contemplate these findings and to use them in marketing Stratton funds. In short order, all markets will seem expensive including equities as quantitative easing is beginning to fuel asset price bubbles most everywhere. Attention will shift to possible sources of the next bubble-bursting event, which most likely will have roots in some credit event that triggers forced selling and a dash to liquidity. Investors need to be positioned with a toehold in creditors' debt in order to weather the storm. We may not know when the bubble will burst but when it does investors will rush to quality which will be creditors and the USD.

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