# Reducing the likelihood and impact of currency crises *Barry Goss & Joost Pennings*

*The Bracken column is named after Brendan Bracken, the founding editor of The Banker in 1926 and chairman of the modern-day Financial Times from 1945 to 1958. This column reflects his enormous contribution to the open discussion and understanding of international finance and banking. It focuses on providing views and perspectives on how to improve the global financial system.*

**THE ASIAN CURRENCY CRISIS** of 1997/98 has received attention from banks, international organisations, governments and researchers. Commentators have discussed alleged causes including systemic deficiencies, shortcomings of debtor nations and culpably soft attitudes by lenders. Critics have claimed that rescue packages were accompanied by inappropriate conditions on borrowers, that they did not provide an incentive for debtor nations to help themselves, but led to moral hazard, that they did not involve the creditor banks directly and were not 'market-based' solutions.

Many remedies have been suggested, including restructuring the International Monetary Fund (IMF) and the World Bank, and while some may lessen the impact of a currency crisis, none can reduce most of the consequences of such an event. That is the objective of this proposal, especially in light of a fresh round of large currency devaluations in countries such as Ukraine and Nigeria that have aggravated the impact of the global financial crisis on these countries' banking sectors.

We assume the participation of debtor nations, whose aim is to service their debts; major banks that have exposure to debtor nations; an international organisation, which contributes market co-ordination; other participants such as hedge funds, who may be counterparties to market transactions; and finally a clearing house, which guarantees all derivatives transactions. These parties participate in a market which trades suitably specified futures and options contracts, denominated in US dollars, quoted in the currency of a debtor nation, with cash settlement.

## USING FUTURES CONTRACTS

Suppose that Gallia, an emerging market economy, which relies on foreign capital for development, has at the beginning of a year (time t1, where t is time in quarters) negotiated a loan with annual interest payments due in the third quarter of each year. Suppose further that market confidence has eroded in the Gallia currency (GC), which has depreciated by 5% at time t6. Some foreign investors have become nervous and threatened to withdraw their capital. This threat, if realised, will lead to further devaluation of 50% and Gallia will default on its interest payment because the cost in local currency terms has increased dramatically.

Gallia, however, could take a long position in a US dollar futures contract at time t1. This is consistent with the views of some IMF directors, who indicated that they favoured 'appropriate hedging'. The short position would be taken by major banks and other private lenders. If the GC devalues, the higher cost of US dollars to Gallia in the spot market will be offset by the gain from hedging. The debt interest payment likely would be made even if the GC devalues. With 5% devaluation, the banks' loss on their short futures positions almost certainly would be smaller than that from a debtor default.

## USING OPTIONS CONTRACTS

Alternatively, Gallia could hedge its currency risks in specially designed options contracts. For example, to purchase US dollars at the exchange rate GC4 = $1, it could at time t1 buy $ call options with a strike price of GC4 and expiration at time t7; and then write an equal number of $ put options with identical strike price and expiration.

This strategy, which is a long position in synthetic futures, would lock in the exchange rate GC4 = $1. While the banks, as writers of call options, would suffer a loss in the case of a 5% devaluation, this loss would, again, almost certainly be less than that from debtor default, which again would likely be avoided.

Creditor banks have much to gain from these schemes because the banks carry developing country debt at book value, although this debt is heavily discounted in the secondary market. An event of default forces banks to realise the loss on their credit books.

## BETTER THAN A BAIL-OUT

This scheme also has several advantages compared with an IMF rescue package. It encourages debtor nations to help themselves, as advocated by the IMF. It also involves the banks in the risk management process, consistent with the views of some IMF directors, whose aim is to 'bail in' the private sector.

By reducing the likely incidence of default, it will reduce moral hazard and this will also reduce calls for cancellation of developing country debt. Finally, the role of international organisations would be to co-ordinate the market, rather than the more controversial task of being involved in the internal affairs of debtor nations.

Of course, this proposal is no substitute for good fiscal and monetary management in debtor nations. Indeed, the futures price discovery process provides an incentive for the pursuit of sound policies – the greater the policy-driven volatility in Gallia's markets, the higher the premium on derivative contracts would be. But what this proposal can certainly be expected to do is to reduce the frequency and severity of currency crises so that the cost of assistance packages, and the net cost to private sector lenders, will be reduced. TB

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