Ozkan, F. Gulcin, and Alan Sutherland. 1995. Policy measures to avoid a currency crisis. *Economic Journal* 105:510–19.

Comment   Carmen M. Reinhart

Drazen's paper represents a first effort to formalize the role of political considerations in the process of how currency crises are transmitted across international borders. The theoretical literature on "contagion" is scarce, and the empirical literature equally so. Yet the EMS currency crises of 1992–93, the aftermath of the Mexican peso crisis of late 1994, and the meltdown of several Asian currencies in 1997 all have a flavor of "contagious currency crises." Thus gaining a better understanding of the channels for contagion is a fruitful and timely line of inquiry.

The concept of *political contagion* stressed in the paper has been largely ignored in the literature, if not in the statements of those individuals ultimately responsible for monetary and exchange rate policy decisions, as we are reminded in this paper. Political contagion revolves around the policy trade-off between the political losses incurred if policymakers decide to devalue and the economic gains achieved by doing so. The political losses arise primarily because policymakers wish to belong to a "club" that requires them to maintain the exchange rate peg as the fee for membership. The benefits from staying in the club are largely political and may accrue over the medium to long term. Contagion, in this context, arises if an "important" member of the club devalues, thereby reducing the resolve of other club members to maintain the peg. This is referred to as "true" contagion and distinguished from "monsoonal effects," which arise from economic transmission mechanisms. Importantly in this model, it is assumed that it is policymakers who decide which of the other club members influence their decision to devalue. Furthermore, devaluation is a political decision, not the inevitable outcome of the depletion of central bank reserves following bouts of speculative attacks.

The trade-off between the economic gains of abandoning the peg and the credibility losses incurred in this model is common to "second generation" models of currency crises. For instance, the cost of maintaining the peg is rising unemployment or prohibitive debt-servicing costs (see Obstfeld 1996). In any case, the policymakers' decision to devalue improves the economic situation even if it ruins their credibility.

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I will group my remarks into three areas: the first pertains directly to the model outlined in this paper, the second is addressed to a broader family of second-generation balance-of-payments crisis models, and my final remarks apply to an even broader family of balance-of-payments crisis models that encompass first-generation, Krugman-type models.

As regards the *political contagion* model, it is evident that this paper offers valuable insights in understanding a "peer pressure" mechanism that may play a key role in influencing whether a country devalues or not, especially in the context of a club, such as a currency union. The EMS during the ERM currency crises of 1992–93 stands out in this regard. Besides introducing political considerations into the contagion process, the model is also useful in explaining why contagion may be regional rather than global. Perhaps this is an area that merits more attention and discussion in the paper. Specifically, the parameter Z, which summarizes the value to the country of being in the club, could be a weighted sum of the number of countries that satisfy the membership criteria, with weights depending on the importance for the home country of a given country's participation. Hence, a member of the European Economic and Monetary Union may attach very little consequence to the collapse of a peg in far-away Thailand but a great deal of importance to a similar event in a neighboring country, one that is perceived to be an important member of the club. Though the empirical literature is scanty, the results in Calvo and Reinhart (1996) and Frankel and Schmukler (1996) suggest contagion tends to be regional rather than global. The evidence of contagion in Eichengreen, Rose, and Wyplosz (1996) may also point in that direction, as the bulk of their sample countries are in Europe.

Having said this, I do not think this model (in its present form) helps us to understand contagious crises in emerging markets. Judging from the emphasis on the ERM crisis, perhaps this was intentional. First, there is the assumption that devaluation is a matter of political choice. This presumes, as acknowledged in the paper, that the central bank has access to ample lines of credit should it need it to support the currency. The central banks of most emerging markets have limited access, if any, to international credit. At the time of devaluation of the Mexican peso in December 1994, the stock of central bank reserves at hand could be best characterized as pocket change. The same can be said of the flotation of the Thai baht in July 1997, once the forward position of the central bank was taken into account. Devaluation was a necessity, not a choice.

Second, the club is exclusively defined by the politicians. It is they who determine which countries weigh heavily in their resolve to maintain the peg and which do not. Yet many emerging countries do not get to choose which club they belong to. Korean politicians in 1997 thought they were joining the club known as the OECD; financial markets became convinced that Korea was a member of a different club, that of ailing tigers. Argenti-

na's currency board came under severe attack and Brazil's real less so following the peso's slide, not because these countries shared an explicit or implicit currency arrangement with Mexico, but because international financial markets decided they belonged to the failed exchange-rate-based inflation stabilization club. Thus is may be a fruitful exercise in the context of this model to explore the possible endogeneity of Z, which may be time varying and depend on both the types of shocks the economy is subjected to, η, and the market's assessment of the probability of devaluation, p.

Third, it is assumed, and this applies to other models that stress conflicting policy objectives, that the political and credibility losses of abandoning the peg are compensated by the economic gains from doing so. Central to this argument is the premise that devaluations are expansionary. Indeed, rumor has it that Nigel Lawson was happily singing in the shower hours after the devaluation of the pound during the ERM crisis. I would argue that a better characterization of the emerging market dilemma is as follows: If the country does not devalue and maintains tight monetary and fiscal policies to defend the peg, it has a recession—witness Argentina's 5.8 percent decline in GDP in 1995. If, on the other hand, the central bank caves in and devalues, the country also has a recession—recall Mexico's 6.2 percent decline in GDP during 1995 and Indonesia's 13.7 percent collapse of GDP in 1998. The bulk of the empirical evidence suggests that devaluations are contractionary in developing countries (see, e.g., Edwards 1989)—so much for relieving pressures on the unemployment rate. Furthermore, devaluation does not help relieve debt-servicing burdens through the mechanism of lower interest rates, as in industrial countries, which primarily have domestic currency debt. Foreign currency debt weighs heavily in both public and private sectors in most developing countries.

Hence, I would argue that models (such as this one) that focus on conflicting objectives provide insights into the crisis and, in this case, contagion process in industrial countries but are less helpful in understanding currency crises in emerging markets, which are usually followed by output collapses. In recent months, for instance, growth forecasts for the infected Asian countries have been continuously marked down, highlighting that their experience does not differ from others in this regard. Calvo's time-to-build model, for instance, suggests outcomes that are more in line with the stylized facts just described (see chap. 3 in this volume).

Last, to understand the causes and timing of crises and mechanisms of contagion, it may be necessary to rethink some of the assumptions embedded in both first- and second-generation models. Central to these models is the shared feature of the rational forward-looking speculator. Yet the empirical evidence is far from conclusive in providing support for the view that markets are forward looking. In our work we found that interest rates and domestic-foreign interest rate differentials had no valuable predictive

power, either in absolute terms or relative to other indicators, when it came to anticipating currency crises (see Kaminsky and Reinhart 1999). Goldfajn and Valdés (2000) reach a similar conclusion when analyzing the predictive ability of currency forecasts culled from the *Financial Times* surveys. Rating agencies do just as badly (see Goldstein, Kaminsky, and Reinhart 2000). The widespread use of mechanical backward-looking filter rules for trading decisions in financial markets also suggests that not all speculators know or care about economic or political fundamentals. Perhaps it is time to incorporate some of these features when we attempt to model "true" contagion, which I would define differently than in the paper, since I would suggest that medium- to longer-term political goals are also part of the broader set of "fundamentals" and the spirit of "true" contagion is to be found in herding behavior or animal spirits.

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