On December 20, 1994, the news struck the wires like a thunderbolt: Mexico had devalued! It was a 14.7 percent devaluation, modest by EM standards, but still significant enough to capture one’s imagination. The official voice of international financial institutions did not take long to make itself heard. Predictably, the message was: “Nothing to worry about, this is just a correction.” But there was a great deal to be worried about. The exchange rate went through the roof, and output fell by more than 6 percent. Wall Street cried foul, and after only a few days the shock wave spread over EMs—even South East Asian economies that were believed to be immune to this type of crisis—and some feared that it could spread to the US. I had been warning about a meltdown in Mexico in the event of a currency devaluation (see Calvo [1994]), but the spreading of the crisis across EMs took me—and everybody I know, including financial institutions—almost completely by surprise. The papers in this section try to make sense of these new phenomena that were to be repeated in the 1997 South East Asia crisis, and most shockingly in the 1998 Russian crisis—not to mention the tremors that shook up EMs after the Turkish, Brazilian, and Argentinean crises that were to follow. I will now say a few words about the central themes covered.

Chapter 7 (“Varieties of Capital-Market Crises”) was written in the heat of the Tequila crisis. As I recall, a first draft was finished before the end of January 1995. The title reveals the first tremors of a paradigm shift. It does not say Balance of Payments or Currency crises, which would have been the natural title at the time, but Capital Market crises. The objective of the paper was to take stock of what we knew at the time, to extend some of the models (specifically Krugman [1979]), and to offer new vistas, all of which turned out to be perspectives on the credit market—thus the title. Extensions of Krugman (1979) show
several subtle ways in which policymakers can momentarily hide unsustainable situations and, most importantly, generate contingent central bank liabilities. Typically these liabilities are linked to banks requiring financial support during bank runs or when banks are unable to roll over expiring debt obligations.

As discussed in chapter 11, Krugman’s framework is incomplete because it cannot account for the steep output fall and large currency devaluation that has accompanied most recent crises (Brazil 1999 is an exception). To be sure, large currency devaluation could be accounted for by incorporating large random shocks into the Krugman (1979) model. However, that would take much of the appeal away from the model because its explanatory power would rest on the exogenous random shock. These considerations played a role in the search for alternative explanations. One of them, pioneered by Obstfeld (1986), highlights equilibrium multiplicity, and it is explored in chapters 7, 9, and 10. As pointed out in the Introduction, the drawback is that unless more constraints are imposed, there is nothing in those models that pins down equilibrium, making them an imperfect tool for positive economics. Equilibrium-multiplicity models have thus been appended with extra details that succeed in yielding uniqueness.

An example appears in chapter 13 of this book. The model in chapter 13 is capable of producing several key features of recent crises without having to rely on large random shocks. Actually, the model presented there is non-stochastic, but a salient characteristic is that the mapping from fundamentals to the set of equilibria is discontinuous. Thus, a small change in fundamentals could result in a large change in equilibrium values. This implies that a small random shock would be able to cause a major impact on the economy. This type of magnifying effect is very interesting, especially because of the high incidence of Sudden Stops, i.e., large capital account reversals (see Calvo, Izquierdo, and Mejía [2004]).

Another magnification channel is imperfect information. Imperfect information is a fundamental characteristic of capital markets, which, when combined with market frictions, for example, could yield large magnification effects. This subject is explored in chapters 7, 9, and 12. Chapter 12, for instance, combines imperfect information with margin calls (i.e., constraints on portfolio leverage). This insight was inspired by the Russian 1998 crisis, which spread like wildfire through EMs, even though no traditional fundamental could be singled out as a possible cause. Chapter 12 shows that a shock that triggers margin calls—and thus causes liquidity problems in the capital market, as was
widely reported in the press at the time of the Russian crisis—has the
potential of creating confusion among investors, ion, driving them to
dump EM securities. What is interesting about this example is that,
while traditional fundamentals may be intact, EMs could suffer severe
credit-access problems as a result of market confusion.

Chapter 8 is an intermediate input for the architecture of crisis
models. It does not directly refer to crises, but shows that the effects of
regime-change expectations vary depending on market completeness.
In particular, if credit contracts are not state-contingent, then expecta-
tions of future regime change lead to equilibrium outcomes with
interesting dynamics—even in the case in which the conditional expec-
tation of a regime change (conditional on the regime change not hav-
ing taken place) is constant over time. This is relevant for EMs because
(1) crises are usually accompanied by some regime change, and (2)
state-contingent credit contracts are still rare. In fact, the standard prac-
tice is for international loans to EM to be non-state-contingent and
denominated in foreign exchange (liability dollarization).

My sense is that theoretical developments after the Tequila crisis (a
vast literature that I am not surveying, although most of the topics are
represented in this volume) have revealed the relevance of concepts
like vulnerability, somewhat to the detriment of traditional concepts
like sustainability. To be sure, the two are connected. A vulnerable
economy is unlikely to be sustainable for a long time (in the sense that
a regime change is likely to occur). However, the shift of emphasis has
put researchers on the track of cataloguing vulnerabilities and identify-
ing those that are more likely to cause major damage. If successful, this
research agenda will provide the practitioner with a fresh menu of
warning indicators and suggest structural policies to prevent financial
crises and attenuate their harmful effects.

References

Calvo, Guillermo A., 1994, “Mexico: Stabilization, Reform, and No Growth” Rudiger
Dornbusch and Alejandro Werner, eds., Brookings Papers on Economic Activity, comment,


Krugman, Paul R., 1979, “A Model of Balance-of-Payment Crises,” Journal of Money,
Credit, and Banking, vol. 11, no. 3, August, pp. 311–325.

Obstfeld, Maurice, 1986, “Rational and Self-Fulfilling Balance-of-Payments Crises,” Amer-