

Perceptions of Financial Crises: Economists vs. Market Participants

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In the 1990s, financial interdependence was no longer confined to mature democracies, as more and more currencies became fully convertible into each other. Across the global economy, national financial policies came under increased scrutiny from international investors and rating agencies. Spreads of emerging markets over established borrowers fell. On the other side, few opportunities at testing the credibility of exchange rate parities were missed by market operators. Though not always successful in triggering a currency devaluation, these market tests call for policy responses or at least for statements about policy credibility.

With regard to perceptions of financial crises, there are two sources of information, both of which can help national and international policy-makers develop and implement appropriate responses. One of these inputs into crisis management comes from economists, the other from market participants.

The views of international economists are distinct from where the profession might be, and the danger of bias is exaggerated when they belong to a circle of friends or colleagues². Similarly, a relevant part of the world financial community resides in New York and in East Asia but any sample of individual opinions is likely to be an inaccurate reflection of the market itself³.

Some definitions and caveats lead into a **primer on crises**, showing results from recent academic work. An attempt at summarizing the views of market participants and their implications for policy follows.

The conclusion suggests that lessons from the crises in the Exchange Rate Mechanism (ERM) of the European Monetary System may be helpful in emerging markets to the extent that they were overcome by more effective coordination mechanisms among monetary and fiscal authorities⁴. These may be more relevant than grandiose plans for the reform of the international monetary system.

Definitions and caveats

There were three waves of crises in the 1990s, the last one of which is still on. The first wave broke in September 1992 over the ERM and was solved one year later, after the

¹ Revised version of comments presented at *Session #7: Financial markets, Implications for policy from financial market behaviour* of the expert group meeting on **What have we learned one year into the crisis in emerging market economies?** held at the United Nations Headquarters, New York, 21-23 July, 1998.

² Krugman 1998b contrasts his views with those of other Charles River economists turned policymakers and sees evidence that these opinions are being more listened to than is typical in calm periods. A corollary of Murphy's law (called Blinder's law in Cambridge, Mass) is that *economists are more listened to when there is less agreement in the profession and when the issue is one where economists have less of a professional answer to provide*.

³ Rude 1998 concentrates on Wall Street while Sharma 1998 interviews market participants from Asia.

⁴ As Finance Minister of Portugal responsible for the *escudo*'s entry into the ERM in April 1992, I followed this crisis and the responses that were found by the European Council of Finance Ministers. The story is told in Braga de Macedo 1997, together with some tests about how the *escudo* fared under the attacks.

fluctuation bands were widened. The second wave followed from the attack on the Mexican peso in December 1994 and had ripple effects in 1995 in both South America and Central Europe. The third began in Spring 1997 with a minor attack on the Czech *koruna* resulted in its devaluation. However, the Thai baht floated in the Summer of 1997, reversing an implicit dollar peg which had been pervasive in the fast growing East Asian economies, and Malaysia, Indonesia and Phillipines also experienced attacks on their currencies. Perceptions of financial crisis began to form.

Currency and banking crises spread to other Asian economies in the Fall, threatening the role of Hong Kong as a financial center ruled by, but separate from, China. The Republic of Korea, like the Czech a recent member of the OECD, suffered a combined currency, banking and debt crisis. Japan, a mature democracy and a prominent member of the G-7, was seen as part of the problem. China, whose transition to market and to democracy has yet to begin, was seen as capable of keeping financial stability in the region.

The prevailing perception was of an emerging markets crisis which hurt the borrowing capacity of Asian, Latin American and Central European debtors. The continued weakness of the Japanese currency exacerbated the negative impact of the financial turmoil on Asian growth throughout the Spring of 1998. South Africa followed while Russia floated the rouble and defaulted on its debt in late August⁵.

Among the large emerging markets, only Egypt seems to have escaped a speculative attack on its currency whereas Brazil has so far succeeded in keeping its dollar peg. The fear is that this emerging markets crisis will spread from the Pacific to the Atlantic and hurt growth prospects in the EU and the US.

Since almost all but a dozen mature democracies qualify as emerging market economies, the notion hides a lot of different national and regional circumstances⁶. If the notion of emerging market encompasses too many varieties, that of financial crisis is often misused. The term applies best to a combination of currency, banking and sovereign debt crisis with strong negative effect on the national economy⁷.

With the definitions of emerging markets and financial crisis in mind, we turn to the appropriate level of policy response, which may still be national, regional or global, depending both on contagion mechanism and on the availability of instruments and institutions.

Contagion patterns are not well understood, but geography and hegemony seem to play a role⁸. Both are at work, for example, when it comes to the economic policy autonomy of Hong-Kong relative to China - neither a market nor a transition economy or to the role of Japan - not an emerging market and yet it is part of the Asian problem, rather than helping solve it⁹.

The recent turmoil in Russia has a strong domestic component and threatens to reverse the transition process. The sequels of a debt moratorium and of currency inconvertibility, let alone a bank run, will remain economically and politically hazardous for some time to come, especially due to the lack of a North Atlantic economic dialogue. The informal

⁵ Brinkman 1998 deals with the attack on the rand in Spring and Summer 1998 and compares it to the 1996 episode. Belanger 1998 shows the deteriorating situation in Russia. See also Dornbusch 1998c.

⁶ Even among Thailand, Malaysia, Indonesia and Korea as documented in Ito 1998. While China does not qualify as emerging market, Dornbush 1998b asks whether it is next in line for a devaluation, an option we strongly rejects.

⁷ This is the definition proposed in Portes 1998

⁸ Krugman has popularized the superstar model in connection with income distribution within professions. It may also apply to crisis contagion.

⁹ Krugman 1997b emphasizes this point

apportionment of responses to financial crises emerging markets to the major mature democracy in the same continent suggests a pattern of contagion reminiscent of "the Monroe doctrine" and probably inadequate in today's global markets. Nevertheless, possible effects in Brazil, or in Latin America, would no doubt be seen as primarily calling for a US response. Instead, given Russia's status as former hegemon in Europe and parts of Asia, perceptions of crisis elicit stronger responses by the US and by the EU, hopefully in a coordinated fashion.

The so-called architecture debate features a reform of the system of international relations and its main institutions, which for the most part were established half a century ago. The reflection of regional cooperation arrangements such as the EU is one of the issues in the debate where the geographic/hegemonic pattern of contagion matters. The role of Japan acquires special salience because it was seen as the major player in South-East Asia, where the current crisis originated. Now reforms of the international system have been resisted by the G-7 and by its members in the EU but they may now have a better chance if they are not overly grandiose. One reason is that markets' resistance to change is lower in times of crisis.

Economists' controversies

The main source of debate among economists hinges on the role given to fundamentals vs. financial panic. Because both are probably at work, interpretations often depend on a balancing of each factor¹⁰.

If structural problems and policy inconsistencies make it inevitable that a combination of currency, banking and debt crises will lead to a financial crisis with severe real consequences for the national economy, then the root causes must be addressed, at the risk of encouraging moral hazard behavior¹¹.

But because crises are cumulative processes, which have a self-fulfilling character, their costs end up being much greater than called for by the fundamentals. Then prevention efforts make sense almost always.

One way to solve the debate between the two camps is to look for areas of agreement in what are causes of a financial crisis. The **list of favourite causes** still leaves a great deal of room for interpretation but it helps focus on the disagreement¹².

That bad shocks and policy mistakes make things worse is uncontroversial but the practical question is rather how the severity and duration of the bad shock and the irreversibility of the policy mistake make a difference to the perception of crisis. The attack on the Czech *koruna*, for example, was short-lived because devaluation was coupled with a temporary import deposit and measures to deal with the fragility of some of the financial institutions¹³. Financial fragility is seen as decisive in the combination of currency, banking and debt crisis. In that context, the maturity of capital inflows matters more than their size, because

¹⁰ Krugman 1997a describes the "canonical model" of currency crises and adds in closing "But everyone agrees that a sufficiently credible currency will never be attacked, and a sufficiently incredible one will always come under fire.". See also Krugman 1997b

¹¹ The interview to the US Treasury Secretary in the *New York Times Magazine* of 19 July used the word often.

¹² The discussion by Perotti of Velasco 1998 included a list followed in the text

¹³ Drabek and Brada 1998 claim that the Czech peg lasted too long and led to an unstable trade policy. They also point out that before the crisis most economists viewed the currency experience favourably. Another cost of this policy was that capital account liberalization was conducted to alleviate exchange rate pressure even when it aggravated problems of corporate governance. This pattern is reminiscent of the recent relaxation of the import deposits in Chile. See references in note 18 below.

financial fragility comes from failures in the maturity transformation of short-term assets into long-term liabilities banks are suppose to provide.

Another uncontroversial point it that financial liberalization and banking deregulation require improved prudential supervision, the question being how to achieve this supervision in global markets. In particular, does this require a new institution? Instead, can the BIS and the IMF substitute for the role of an international lender of last resort? The architecture debate continues on this issue.

There is again consensus on the statement that large and free foreign exchange reserves, and/or a flexible exchange regime reduce the probability of a crisis. Yet it may not be possible to agree on what finite level of free foreign exchange reserves and exchange rate flexibility averts a crisis.

The state of the architecture debate is that an international lender of last resort helps if it does not exacerbate moral hazard. For fundamentalists this is a bigger "if" than for those who hold that crises are self-fulfilling. Finally, both sides agree that a crisis always has a combination of causes.

A financial crisis comes in many forms - because it combines a currency collapse, with or without resort to exchange controls, a bank run or the threat thereof and a debt default or moratorium. Its **anatomy** often includes the expected bailout of private debts by the state, or by interantional institutions. Such expectations are easier to form in the presence of cronyism and with weak corporate governance¹⁴.

The converse of the previous point, that financial liberalization and banking deregulation require improved prudential supervision, is that capital account liberalization without improved banking supervision is also found in most crises. Over-investment is the mechanism through which the combination results in banking and currency crises¹⁵.

Even in countries with high savings ratios, over-investment generates large current account deficits and real appreciation. If these deficits are financed by short term foreign currency unhedged liabilities and by the ever greening of bad loans, it is tantamount to making private debt into an implicit public debt.

Once the issue of anatomy is clarified, the **geography** of a crisis depends on the pattern of contagion. Suppose a financial crisis is going to occur in country X; will it spread and if so how¹⁶? In the emerging markets crisis, the spread is global, from Singapore to Chile ot to Egypt.

But lessons can be learned from cases when the scope is regional, as in the ERM crises of 1992-93. At that time, Portugal and Ireland suffered currency attacks based on what was happening to the Spanish and British currencies, in what was described as "geographic fundamentals". These attacks were short-lived but they nevertheless led Ireland to request a realignment in January 1993 and Portugal had to partly follow several realignments of the peseta. Given that the ERM code of conduct is based on multilateral rules for exchange rate changes, fundamentals should be less of a geographic than of a policy problem. Yet this peculiar form of neighbourhood contagion was pervasive at the time¹⁷.

¹⁴ This is emphasized in section 4 of my 1998b, drawing on work carried out at EBRD, [Transparency International](#) and elsewhere.

¹⁵ What Krugman 1997b and 1998a calls "Panglossian values". See also Corseti, Perotti and Roubini 1998.

¹⁶ Tornell 1998

¹⁷ One possible reason id that the financial reputation of these countries was not fully established as their regime change was quite recent (1987 for Ireland, 1989 for Spain and 1992 for Portugal). A related reason is that testing the ERM parity made sense when the real appreciation was perceived as excessive by export oriented firms and the government may have been sensitive to their pressure. The bet proved correct for Spain, who initiated two realignments during the ERM turmoil. The Portuguese response was to follow in

National policy responses to a large capital outflow may be a combination of allowing reserves to drop, increasing interest rates, and depreciating the currency. The relative importance of each one depends in turn on the particular circumstances of each country. May be depreciation is ruled out by an exchange rate arrangement, as in Brazil or is very costly in terms of financial reputation as was the case in Mexico and Korea, who had just joined the OECD, and in Russia, who had just been accepted into the G-7.

There may be constraints on the rise in interest rates that is politically or socially viable, and the increase in interest rates is more costly the weaker the banking system. Allowing reserves to drop, on the other hand, is less likely the lower the ratio of reserves to liquid liabilities. And if reserves are low, and cannot drop further, one of the two other alternatives, no matter how unpalatable, must be contemplated.

The exchange rate option will be more likely to be chosen the greater the real appreciation observed. But devaluation is a beggar thy neighbor policy to the extent that it attempts to restore competitiveness at the expense of trading partners and may elicit retaliation. It therefore needs to be coordinated.

The same is true of exchange controls, which almost always function as a devaluation in disguise. Even when they seek to prevent excessive inflows, they are often not matched by free outflows, or even by a relaxation of existing controls. This was true in Portugal in the early 1990s but can also be found in the Chilean experience¹⁸. The issue is then how can devaluations and exchange controls be coordinated at the regional or global level, to lessen their beggar thy neighbour character?

Systems like the ERM and its code of conduct come to mind, but they are difficult to adapt in the current world system. It may be, then, that the current crisis serves as a **coordinating device** by allowing responses that would not obtain in calm periods.

Even if they serve as coordinating devices, crises should be avoided. When crises loom, there is a great deal of interest in advance warning systems. Nevertheless there has been little progress in developing practical crisis **indicators**.

Foreign exchange reserves, for example, are still compared to imports with reference to the so-called "3 month IMF rule", without taking into account the exchange rate regime¹⁹. A better candidates for normalization, especially for inconvertible currencies, would be external debt. Under a fixed rate and free capital mobility, reserves should instead be compared to the broad money stock (M2). While reserve adequacy depends on the exchange rate regime, none of these average measures are satisfactory under uncertainty. Reserves should ideally be related to the volatility of the current account or of short term capital flows.

A high ratio of bad loans to total loans is another indicator which has been used in looking for evidence of a lending boom. The increase in real lending to private sector and state owned enterprises is in turn how a lending boom is identified. The usual criterion for internal balance, namely a sustainable fiscal position, was absent in the Asian economies but it remains a serious problem in transition economies and especially in the Russian crisis²⁰.

part, so as to reinforce its own credibility without suffering the direct consequences of a competitive depreciation. See my 1997b for details.

¹⁸ Ricardo Ffrench-Davis 1998. See also Dornbusch 1998a, Cotrella 1998 and De Gregorio 1998 and note 13 above on the Czech experience.

¹⁹ Ghosh et al 1998

²⁰ Criteria for policy sustainability in the context of transition economies are described in Branson et al 1998. See also Belanger 1998 and chapter V in the IMF **World Economic Outlook** 1998

Real appreciation in terms of effective rates is another early warning indicator. There again, care must be taken to net out the equilibrium component of real appreciation which has accompanied any successful development experience.

Propositions heard on Wall Street

Opinions commonly found among market participants do not allow us to pass judgement on the different aspects of the current emerging market crisis, but they help suggest some implications for policy. The following four market-informed propositions suggest that the surprise element was genuine.

First "investment prospects were good until the crisis hit". This would seem to dispute the over-investment story and it may reflect active involvement in the financing of such investments. Second "sentiment changed abruptly and turned inflows into outflows". This also shows the surprise element but it also underscores the severity of the crisis, to the extent that such reversals would be very short-lived otherwise. Third, "exposure was complex and opaque yet it was reduced very quickly". This proposition exacerbates the previous two points, to the extent that it shows panic, also a feature of the fourth observation, that "liquidation induced herd behavior".

Other propositions go more towards opinions on the state of the world and may therefore be more influenced by professional opinion. Thus "the crisis was like worldwide deflationary shock" and "confidence on unregulated globalized financial markets was damaged" imply views about what to do and whether or not economists are useful in sorting out the implications for policy²¹.

In addressing this question, market participants often reflect a confusion between their opinions as businesspeople (who prefer to keep free markets, perhaps flexible exchange rates) and their views as market professionals²². Similarly, they may accept to strengthen regulation and supervision, including risk management techniques, before further liberalization of the capital account²³. And the so-called Tobin tax proposal may also be acceptable on this market professionals perspective²⁴.

Indeed, the fact that top rated academic economists with policy roles disagree and markets care about it would seem to confirm that "these are not normal times".

There is widespread agreement between academics and market organizations such as the group of thirty that some improvements in orderly workouts are desirable and easy to achieve²⁵. Nevertheless, the traditional difference remains between national action on private debt and international action on sovereign debt. In the absence of international enforcement, the "pre-nuptial agreement problem" makes these improvements less likely to be accepted outside of a broader set of changes in the international system.

²¹ Leading columnists provide a more or less idiosyncratic combination of the two primary inputs. For example Wolf 1998 combines market sensitivities with citations from academic economists.

²² For Rude 1998, the latter perspective might instead favor promoting orderly workouts and regional institutions like the "resolution trust".

²³ Dornbusch 1998b suggests mandatory value at risk reviews as called for by the Basle committee of the BIS. While developments in the technology may allow this, the concepts are still foreign to many financial institutions. See practical examples in my [risk.htm](#)

²⁴ Dornbusch 1998b quotes the literature including the original pieces by Jim Tobin. Krugman mentions the opinions of Larry Summers, and Stan Fischer. See also Stiglitz 1998 and Radelet and Sachs 1998.

²⁵ For example the IMF should lend in arrears and there should be sharing or majority voting clauses in bond and bank loan contracts, allowing IMF to shelter countries from legal action (art 8.2b of Articles of Agreement). This list draws on the conclusions of the TAED meeting, on Portes 1998 and on Eichengreen and Portes 1995.

Lastly, the current crisis has uncovered an unusual amount of disagreement within the Bretton Woods institutions. And if they do even appear to agree with each other, the IMF and World Bank may not be capable of influencing the architecture of the international economy.

Conclusion

The immediate effect of the crisis is to underscore a lesson from the inter-war period which could well spread from the tariff escalation to non-tariff barriers like exchange controls. Liberalization and globalization must be better managed to prevent protectionist pressures from taking over. Avoiding contagion by reverting into trade and financial protectionism could well prove as ultimately futile a beggar-thy-neighbor policy in the late 1990s as it was in the early 1930s.

Managing the emerging markets crisis means therefore avoiding a relapse of protectionism while fostering reform in the international system to allow for a more effective regional and global response to threats of contagion of national crises.

The issue is then how can devaluations and exchange controls be coordinated at the regional or global level, to lessen their beggar thy neighbour character?

Over and above the parallels between the current emerging markets crisis and the Mexican devaluation of December 1994, the lessons from the crises in the ERM may be helpful in emerging markets to the extent that they were overcome by more effective coordination mechanisms among monetary and fiscal authorities²⁶.

Systems like the ERM and its code of conduct rely on shared economic and societal values. They may be difficult to adapt to the variety of emerging markets in the current world system, but they are certainly useful in both Central Europe and Latin America, where regional arrangements like CEFTA and Mercosul are spreading from trade to investment.

²⁶ The comparison among emerging markets is in Chinn and Dooley 1998. Krugman 1997b includes the ERM

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