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Understanding International Financial Crises

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Abstract

This review article presents an overview of the themes developed in the theoretical literature on international financial crises before the Global Financial Crisis in 2008. The directions that future research might take are discussed in conclusion.

The international financial crises that affected a number of emerging countries from the mid-1990s are sometimes seen as a pathology associated with financial globalization. It could then be regarded as a contagious pathology, when one considers how quickly the crisis spread from one country to another the other. At the level of a given country, the symptoms were as follows: 1) a currency crisis; 2) a banking crisis; 3) a sovereign debt crisis; 4) a balance of payments crisis (capital flight).

These symptoms are sometimes present in all four but this is not always the case. Southeast Asian countries, for example, did not have a sovereign debt crisis (Kirrane, 2018), and Brazil did not have a banking crisis declared in 1998. The only truly common denominator of international financial crises is the concomitance of sovereign debt, a currency crisis and capital flight in several countries.

The international financial crises have inspired abundant literature with a number of articles identified by EconLit having international, financial and crisis like keywords. There is a first surge in literacy following the Mexican crisis of 1994-1995, followed by a real explosion from 1998, at the time of the crisis in Southeast Asia. The purpose of this article is to give an overview of the main themes developed in the theoretical part of this literature. As the contributions to this special issue illustrate, the international financial crises have given rise to divergent interpretations, which sometimes have very different implications in terms of economic policy and reform of the international financial system.

This article presents a brief overview of staff that theoretical research on international financial crisis has taught us, and directions that she could follow in the future. This is not an exhaustive literature review. In particular, I omit mentioning contributions that are sometimes important, but

which are not easily related to the themes I have chosen to discuss. The reader will find more complete literature reviews for example in Cartapanis (2002) or Allen et al (2002).

The concept of "contagion" is generally used in reference to the international spread of crises. But this concept can also be useful to think about the generalization of the crisis at the domestic level as when, for example, a sovereign debt crisis degenerates into a banking crisis in a given country. The mechanisms of domestic contagion explain the generalization of the crisis at the level of a country rather than its spread from one country to another. Domestic contagion explains why crises of different kinds tend to arise together at the level of a given country, in an international financial crisis.

The four symptoms of international financial crises and all possible interactions between them . Each of the twelve arrows corresponds to a channel of contagion through which a crisis of one nature can degenerate into another. The observation of recent crises suggests a certain number of channels of contagion, and the theoretical literature offers us several ways to model them. I review some of these mechanisms below.

Foreign exchange rate crisis has different effects depending on whether one places oneself before the devaluation, when the authorities still resist speculation, or after the devaluation. Before the devaluation, the rise in the interest rate weakens the banks and increases the servicing of the public debt (Obstfeld, 1994). Devaluation in turn causes problems if domestic agents (banks, firms, state) are indebted in foreign currency and have not hedged their foreign exchange risk, a problem currency mismatch that is endemic in emerging economies.

As Kaminsky and Reinhart show (1999) in their study of "twin crises", the association between currency crisis and banking crisis does not date from the Asian crisis. The links between the banking crisis and the currency crisis are modeled in a number of recent articles. At Chang and Velasco (2000), for example, a run on dollar deposits in domestic banks is depleting the central bank's lending reserves as a last resort, causing a currency crisis. Authorities may also want to devalue to limit the real consequences of the financial crisis and stimulate the economy, (Jeanne and Wyplosz, 2001). Moreover, the loss of production caused by the banking crisis may imply a depreciation of the real exchange rate of equilibrium, which results in a currency crisis in the sense that no one anticipates that the necessary adjustment will take the form of domestic deflation.

The devaluation reduces the net wealth of the indebted agent, leading to a crisis debt roll over if, in addition, its debt is short-term, as in the banking crisis models of Burnside et al (2001). , 2002) or Jeanne and Wyplosz (2001). The erosion of net wealth can also lead to credit rationing for domestic firms or the state, as in the models of Aghion et al (2000, 2001), Céspedes et al (2002), Jeanne and Zettelmeyer (2002), Krugman (1999).

In general, the stabilizing power of monetary policy is reduced when domestic agents are indebted in foreign currency (Aghion et al., 2000; Bacchetta 2000; Jeanne and Wyplosz 2001). Authorities are caught in a dilemma between raising high interest rates and allowing the currency to depreciate, two options that are both damaging to the economy. The banking crisis can also degenerate into a sovereign debt crisis since the cost (often very high) of bank bailout is financed by government bonds. At Burnside et al (2002), for example, the banking crisis raises public debt to unsustainable levels, resulting in a sovereign debt crisis.

Authorities may be tempted to solve the debt crisis through monetization, which creates pressures on the exchange rate (Obstfeld, 1994, Burnside et al, 2002). In addition, the fall in the price of government bonds weakens the banking system if domestic banks have a lot of public debt to their credit (as it was the case in Argentina). The sovereign default gives bad reputation to country (Cole and Kehoe, 1998); it can thus raise the fear of expropriation and capital flight.

It seems obvious that a currency crisis, a banking crisis or sovereign debt causes a flight of capital. This should not make us forget that, on the other hand, the flight of capital is in itself a source of problems. In particular, a capital flight reduces domestic demand, which weakens all domestic agents at once - businesses and households, the banks that lent them, and the state that sees its tax revenues decrease. Paradoxically, the negative impact of capital flight on domestic demand is an issue that has been relatively neglected in the theoretical literature. A Keynesian theory of international financial crises (as opposed to the more Fischerian models of which there are many examples in the recent literature) remains to be developed (Calvo, 1998).

The multiplicity and reciprocity of the causalities has two consequences. First, these propagation mechanisms amplify the impact of exogenous shocks. A localized shock can cause a generalized crisis after reverberated throughout the economy. In an environment of high international capital mobility, emerging economies are weakened by their own vulnerabilities, including financial structures often marked by short-term debt and foreign currency, and macroeconomic suffer from a chronic deficit of credibility.

Secondly, emerging countries may be vulnerable to pure anticipation shocks. The new models of international financial crises generically have multiple equilibria because of the multiple circularities (for example, Burnside et al, 2002, Jeanne and Wyplosz, 2001, Schneider and Tornell, 2001). For example, speculative access to the domestic currency can trigger a chain reaction that justifies a posteriori investor anxiety and further speculation. We can also imagine a scenario where panicked investors withdraw their capital and thereby create the problems they feared. This type of circularity can make emerging countries vulnerable to changes in market sentiment without real economic fundamentals. Capital mobility contributes to this problem, as it makes capital flows very sensitive to changes in expectations.

Another approach, proposed in particular by Guillermo Calvo, tries to explain the international contagion channels as more financial. According to this approach, international financial centers can spread the crisis between countries on the periphery of the system, or even be an autonomous source of shocks. Foreign investors tend to group emerging countries into the same risk class, and do not necessarily engage in a detailed country-by-country risk analysis (Calvo and Mendoza, 2000). In this context, bad news about one country can negatively affect other countries belonging to the same class, even if they have little in common. Calvo (1999) presents a model of the contagion of the Russian crisis in Brazil based on a different mechanism. Investors must sell Brazilian bonds following losses on their Russian bonds. This lowers the price of Brazilian bonds, causing a crisis in Brazil

Emerging-country crises tend to spread rapidly from one country to another, sometimes between countries with very little in common, as in the case of the contagion of Russia to Brazil in 1998. This type of contagion seems difficult to explain purely by commercial links or by an objective analogy between the countries affected by the crisis. It seems to imply a systemic fragility. The international contagion can be interpreted first of all from the domestic fragilities that I mentioned earlier, which are also systemic insofar as they are made possible by an international financial system characterized by a great mobility of capital. Given that the economies of emerging countries are vulnerable to small shocks, the crisis can spread from one to the other without necessarily having a very strong mechanical link between them. The limit of this reasoning is reached with the models of multiple equilibria. The contagion can then be explained as the simultaneous passage of the good equilibrium to the bad equilibrium in several countries which would have nothing else in common except to be vulnerable to self-fulfilling speculation (Masson, 1999).

Wall Street could be, not just a vector of propagation, but also a source of shocks. Capital flows to emerging countries are characterized by boom and bust dynamics that are difficult to justify in terms of economic fundamentals, a phenomenon that we see examples in many other financial markets. So Wall Street could be a source of correlated shocks between countries whose only point in common is to belong to the same risk class. Where do these boom and bust dynamics come from, and how economic policies should respond to them, are questions still poorly understood.

Conclusion

Do economists understand international financial crises? This article may have suggested that theorists do not miss hypotheses on the factors of vulnerability, shocks at the origin crises, and the mechanisms involved in their propagation. Some assumptions have received special attention in the efforts of recent modeling (the link between the currency crisis and the

banking crisis, particular). Other mechanisms deserve more attention in the future research (I think, in particular, the link between capital flight and domestic demand, and the phenomenon of boom-bust in the flows from capital to emerging countries). Understanding the essence of international financial crises however, needs to go beyond the conjecture stage. First, we can ask, in the set of possible causalities which are really essential, in the sense that this would they, much more than the others, who would determine the form international financial crises that we observe. Another question is what is the relative responsibility of the center and of the periphery of the international financial system in the genesis of crises.

The empirical literature on international financial crises is rich teachings on many aspects of crises, but it does not establish consensus in response to these questions. These questions are decisive when it comes to thinking about crisis management or reform of the "international financial architecture".

There is obviously some correspondence between the diagnosis crises and recommended remedies. If we think that speculation against fixed exchange rate regimes is a determining factor in the outbreak of international financial crises, it is natural to put their hopes on the adoption of more flexible by emerging countries. This is the sense in which evolved the speech of the International Financial Institutions (Fischer,2001). If, on the other hand, the origin of crises is attributed to imbalances budgetary or banking vulnerabilities, it will be recommended that countries emerging countries, greater rigor in their budgetary policies and their banking regulation. Finally, if we believe in intrinsic instability international capital flows, even the rigorous application of previous recommendations may not be sufficient to protect countries emerging from international financial crises - and it would then be difficult to avoid seeking the solution from the side of restrictions in the capital mobility. The correct way to look at the problem is maybe a combination of the previous approaches but the question then asks how to set priorities. We can hope that research on international financial crises will advance to base the study of these questions on a more solid empirical basis.

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