

Article for Neue Zürcher Zeitung (Christoph Eisenring)

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04/10/2002

Emerging Markets' Economics

Argentina today is in economic, political, social and constitutional chaos. Who would have guessed it only a few years back, when things looked so rosy? Argentina finally was living up to its potential and the entire international financial community was there ready to foster and share in that prosperity.

What went wrong? Before we can answer this question, we need to split the Argentine crisis into two phases. The first phase corresponds to the period around the Russian crisis and the Brazilian devaluation (late 1998 and early 1999). The second phase begins as investors and depositors start to realize that, when faced by adversity, Argentina is quick in returning to its old populist ways. The structural-cultural-political changes of the 1990s were not as deep as most investors had thought, after all.

The events that followed that disillusionment have been dramatic, and we may not have seen the worst yet (see Caballero and Dornbusch, 2002a,b). However, since my goal in this article is to discuss advanced emerging economies more broadly, I shall disregard this second phase and focus on what is common to most crises of modern emerging markets. All my references to Argentina can be interpreted in this context --- within the narrow context of Argentina. The question is: Why did the crisis start?

There are many factors to choose, perhaps the most visible of which is the chronic public deficit there, fueled by rampant tax evasion and an ill-designed federal system that has put too few constraints on the provinces' excesses. Indeed, fixing this problem is mandatory for Argentina, if its new economic package is ever to enjoy the blessing of the IMF, investors and other international players.

Is the focus on public deficits and related matters warranted in the case of Argentina? Yes and no. The answer cannot be an unconditional yes, because if it were, Belgium, Italy and many other European economies would have gone belly up a long time ago. Their chronic public deficits and corresponding debt many times exceeded those of Argentina.

What is the key difference between Argentina and these European economies? Argentina's financial underdevelopment, this is the core of the problem. Public deficits and other conventional maladies are just the periphery --- they are important, very important indeed, but primarily because an underdeveloped financial infrastructure is much less tolerant of these weaknesses. Absent financial underdevelopment, Argentina would look more like Belgium, and severe crises would be a lot less likely.

This is the essence of modern emerging markets economics: every emerging market crisis of the 1990s --- in Mexico, Southeast Asia, Russia, Brazil, Argentina--- has had financial underdevelopment written all over it, either as a source or as an amplification mechanism.

What exactly is financial underdevelopment? It takes many forms, but broadly it means that there are many productive activities that cannot find the financial resources they need and therefore are wasted. During a crisis, this shortage is particularly acute, and leads to a spike in bankruptcies and liquidations, that are both privately and socially inefficient. The reason for this lack of connection between funds and projects often is rooted in the institutional problems that limit the credibility of the borrower or the entrepreneur's pledges. Some of these institutional problems have to do with the absence of basic financial infrastructure, such as a well endowed supervisory agency, business courts, and adequate corporate governance legislation. Others have to do with sovereign risks, such as the possibility of a sudden suspension of convertibility and restrictions on capital flows, devaluations, or swift changes in the "rules of the game" more generally.

Financial underdevelopment does not affect all potential investors equally. This simple observation has many implications for our understanding of emerging markets'

economics. In my work with Arvind Krishnamurthy, we highlight one first order split: between foreign and domestic investors. We have advocated a view that distinguishes between the financial constraints affecting borrowing and lending among agents within an emerging economy and those affecting borrowing from foreign lenders or investors. Financial claims on future flows that can be sold to foreign and domestic lenders alike are labeled “international liquidity,” while those that can be sold solely to other domestic agents are labeled “domestic liquidity.” From our perspective Belgium is a country in which most claims are international liquidity, while Argentina is a country in which most claims are domestic liquidity.

This stark distinction misses some important dynamic effects that occur during crises as foreign and domestic investors try to anticipate each others’ actions. However, it is an extremely useful conceptual framework to seeing the “big picture” of emerging market crises. The dual liquidity model offers a parsimonious description of the behavior of firms, governments, and asset prices during financial crises. It also provides prescriptions for the optimal policy responses to these crises.

From this perspective, in an external crisis the country’s international liquidity declines sharply. There are many factors behind such a sudden loss of international confidence --- reinforced by the run of well informed residents who anticipate the demise following such a loss of confidence--- including a sharp decline in terms of trade, the perception of an erratic local government, or external factors, including the financial contagion that follows the collapse of other risky assets around the world. Whatever the reason might be, the result is that the country suddenly finds itself with very restricted access to external funding. This is a serious problem for emerging economies that need to run significant current account deficits while catching up with the developed world. In sharp contrast to Argentina, for example, Japan has been able to gradually melt rather than to crash, because it does not depend on external funding and its domestic savers seem to accept any domestic asset, regardless of how low its return might be.

As the country's international liquidity shrinks, domestic firms and borrowers compete forcefully for limited resources for which they can only pledge their domestic liquidity. The outcome is a sharp decline in the value of all local assets that are not part of international liquidity, including the local currency, real estate, and much of the domestic equity market. Fire sales, and the correspondingly high effective interest rates, reduce firms' ability to borrow, causing a sharp decline in domestic investment and a surge in bankruptcies and unemployment.

These are very traumatic events, with costs that go well beyond those of a normal recession in the developed world. In some cases, the costs persist for years, because an inadequate initial response may lead to prolonged social unrest, populism or military coups.

If they are so costly, why don't countries take more precautions to avoid these crises? Why don't they cling to their international liquidity for in case of crises? Aside from simply not knowing how to do this (discussed below), there are two possibilities: either the government does not want to do it, or the private sector doesn't want to do it. The former used to be the norm but is no longer so, although Argentina is the most recent exception to the new pattern. The central manifestation of an imprudent government is a chronic fiscal deficit. This is often the result of entrenched interests within a fragmented government, unresolved distributional conflicts, corruption, and short sighted populism. Not very different from what we often observe in the developed world, but more extreme, and in a much more fragile environment because of financial underdevelopment. Public debt-to-GDP ratios are seldom as high as those in many of the leading economies of the world --- but public debt-to-financial depth ratios are considerably worse. As case in point was Argentina in the mid-1990s, with a public debt to GDP ratio below 0.4 while the USA was hovering around 0.5; at the time the ratio of debt-to-private-domestic-loans was only around 0.4 for the USA but was above 1.5 for Argentina. This is significant, because any need to finance a decrease in revenue puts strong pressure on the financial system.

However, most recent emerging market crises have been driven largely by private sector imbalances rather than by government excesses. What is behind these imbalances? One view holds that it is the government and the IMF's fault. By providing implicit insurance to investors, they both incentivize risky investment and overborrowing. I'm sympathetic to some aspects of this "moral hazard" view, but I suspect that its importance has been vastly exaggerated. Investors do lose huge amounts of money in these crises, and the bailouts are seldom even close to compensate for these losses.

A second view is that the problem is more structural and does not derive exclusively from blatant government misbehavior or incompetence (this is the view I explore in work with Krishnamurthy). Financial underdevelopment reduces domestic liquidity. That is, during crises, distressed firms have only limited ability to pledge the return from their investment to the domestic suppliers of scarce international liquidity. As a result, the business of hoarding and supplying international liquidity to these markets does not look attractive. That is: (a) during capital inflow booms domestic lenders undervalue the act of saving their international liquidity for potential crises; and (b) natural international arbitrageurs of crises have a limited incentive to set up shop in the country. The circle is closed: more risk and less protection. Countries borrow too much during good times and are left with too little slack and insurance for tighter times. Crises loom just around the corner.

How can this structural problem be solved? Part of the solution lies in the redesign of international financial architecture, but much of the effort must come from the countries themselves.

Two types of measures must be undertaken by emerging economies if they hope to reduce the frequency and severity of external crises. First, there must be structural reforms aimed at deepening financial markets. These reforms will include changes in corporate governance, increased transparency and supervisory reforms (see Caballero 2001a). But they also will include the mere passage of time: In emerging markets' financial development, there is a chicken-and-egg component. The lack of development

leads to volatility and uncertainty about the stability of the rules of the game and the macroeconomic environment. This uncertainty, in turn, leads to financial underdevelopment. Over time, as crises are handled responsibly and reforms undertaken, the chicken-and-egg mechanism begins to operate in reverse: reduced volatility increases financial depth, which further reduces volatility, and so on. In my view, one of the greatest costs of Argentina's poor handling of its ongoing crisis is precisely the loss of this virtuous-cycle. Argentina will have to start from ground zero again.

The second type of measure recognizes how slowly structural change occurs and aims in the meantime to reduce the extent of the "underinsurance" problem. That is, these measures seek to reduce the private sector's tendency to "underinsure" against external crises during times when capital flows are abundant. This underinsurance takes the form of excessive external borrowing, particularly short-term and foreign currency denominated, limited international credit lines, excessive development of the nontradable sector vis-à-vis the tradable sector, and so on. Correspondingly, local governments and central banks tend to resort to taxes on capital inflows, especially short term infows, international liquidity requirements on banks and corporations, limits on the mismatches in the currency denomination of assets and liabilities, and so on.

These desperate measures sometimes are unavoidable. However, they are not my preferred option because they hamper financial development, which is the problem to begin with. That is, while the additional stability they bring about helps macroeconomic stability on net, and thereby facilitates financial deepening, the latter is also hampered by the fact that financial transactions are being taxed and discouraged. Furthermore, over time, financial engineering allows investors to circumvent these taxes. This "evolutionary" reaction undoes the effectiveness of the measures in reducing the underinsurance problem and creates a series of costly distortions along the way.

It turns out that there is an alternative and potentially less costly mechanism for dealing with underinsurance problems (see Caballero and Krishnamurthy 2002a): monetary policy. Remember that the main reason for the underinsurance problem was limited

domestic liquidity, which hampered borrowers' ability to pay and credibly pledge enough for scarce international liquidity. An injection of money that succeeds in raising real balances during external crises effectively increases domestic liquidity, thus increasing the equilibrium price paid for international liquidity. The private sector's anticipation of such a practice can offset the structural bias toward external underinsurance. Expecting a large depreciation in the exchange rate in the event of a reversal of capital flows discourage foreign currency borrowing and creates incentives for hoarding international liquidity and for arbitrage.

Of course, few emerging economies can afford this luxury; in most cases, the external crisis develops with a loss of confidence about the central bank's commitment to its inflation target. If this occurs, a monetary injection is unlikely to raise real balances and hence (real) domestic liquidity. But this scenario underscores the value of monetary credibility, which endows the central bank with an incentive device that is far less costly than the alternative precautionary measures.

Already there are emerging economies, even in inflation-prone Latin America, that could use this strategy if they wished. Chile is a case in point, and Mexico is heading in that direction. More importantly, most advanced emerging economies soon will be in that situation. Historical factors have made inflation credibility the main consideration for monetary policy in emerging economies. Fixed exchange rate regimes were the "king" from that perspective. But inflation is largely under control in these economies, and external crisis prevention now should be given more weight in the design of monetary policy. Medium-term inflation targeting should be combined with a credible commitment (a rule?) to a countercyclical monetary policy response to external shocks. During crises, some anticipated short run inflation is traded off for more adequate insurance incentives.

Such a change in perspective about the role of monetary policy will not be easy. It goes against the basic instincts of modern central bankers. When international financial constraints tighten in emerging markets, monetary policy can do little to prevent a sharp fall in real activity. The primary binding constraint is international, not domestic

liquidity; monetary policy influences only the latter. On the other hand, it can be shown that monetary policy has a very large effect on the exchange rate --- larger than it would have in a developed economy--- even with full inflation credibility. That is because during a crisis both domestic and international markets become segmented: domestic liquidity has as its counterpart not the entire world's international liquidity but only the limited international liquidity that remains in the country. In this environment, small changes in domestic liquidity can trigger large changes in the exchange rate. A central banker faced with this tradeoff ---impotence on the real side of the economy and a large impact on the exchange rate--- will be inclined to tighten rather than expand monetary policy, to protect the only thing it can, the short term inflation target. This is exactly what happens in practice. Very appropriately, Guillermo Calvo and Carmen Reinhart have dubbed this phenomenon "fear of floating." The warning from the literature I have discussed in this article is clear: by adopting this pro-cyclical monetary policy strategy, the central bank inadvertently worsens the chronic underinsurance problem that is behind severe external crises.

Finally, the discussion in this article points to fruitful directions for improving the international financial architecture (IFA). Even well-managed emerging economies will be subject to occasional costly reversals in capital flows, often for reasons that have little to do with their performance. The question that ought to concern the IFA is how to reduce the impact of these swings. Leaving this to self-insurance, as is happening now through countries' stabilization funds and the accumulation of large international reserves, is unreasonably expensive. No well run corporation would be advised to follow such practice.

The IMF is doing its part by modifying its role, becoming a provider of liquidity and a facilitator of orderly workouts. However, the demands of a globalized and financially integrated world undoubtedly will exceed any resources the IMF may have. Any comprehensive and sustainable solution must be developed by the private sector. I believe that one of the most productive developments waiting to happen is the creation of insurance and hedging markets for the aggregate risks that these economies face. Fairly

priced (or nearly so), the insurance premia required to virtually eliminate the costs of external crises are very low. For example, my back-of-the-envelope calculation shows that fairly priced insurance which would remove most of Chile's externally caused business cycle would cost only US\$60 millions a year (Caballero 2001b).

This therefore is the way to go. The problem is not with excessive reliance on financial markets, as the anti-globalization movement argues. Rather, the problem is with the insufficient development of the financial markets that are needed to reduce volatility. More, not less, is the forward-looking answer.

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