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Smoothing sudden stops

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Abstract

Emerging economies are often exposed to sudden shortages of international financial resources. Yet domestic agents do not seem to take preventive measures against these sudden stops. We highlight the central role played by the limited development of ex ante (insurance) and ex post (spot) domestic financial markets in generating this collective undervaluation of international resources. We study several policies to counteract the external underinsurance. We do this by solving for the optimal mechanism given the constraints imposed by limited financial development, and then considering the main financial policies—in terms of the model and practical relevance—that implement this solution.

JEL classification: E40; E50; F00; F30; F40; G15

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1. Introduction

An emerging economy external crisis can be described as an event in which a country's international financing needs significantly exceed its international financial resources. Given that such events are a "fact-of-life" in these economies, it is puzzling that domestic agents do not take preventive measures against them. Indeed, quite the contrary: they often increase the likelihood of these events by over-borrowing during capital inflow booms, contracting dollar liabilities, and so on.

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A common explanation for this behavior is distortions created by anticipated official interventions, such as crony capitalism, fixed exchange rates, and IFI's bailouts.[1]

We have argued elsewhere that the *external underinsurance problem* in these economies is more structural in nature than one would conclude from looking only at potentially misguided interventions. Underdeveloped financial markets, a basic feature of emerging economies, lead to a distorted valuation of international resources that, in turn, leads to external underinsurance. In this paper, we take this structure as given, and explore a series of financial policies that solve the underinsurance problem. Since the strategies we discuss are all used in varying form by governments in emerging markets, our main interest is in identifying which strategies work better under certain constraints. We focus on the strategies that work within our model and discuss some of the difficulties they may encounter in implementation.

In our framework, when a country's international financing needs exceed its international collateral (or liquidity), the domestic price of the latter rises vis-à-vis that of domestic collateral (or liquidity). One manifestation of this phenomenon is a depreciation of the exchange rate, for example.[2]

However, when domestic financial markets are underdeveloped—in our terminology, when the domestic collateral value of projects is less than their expected revenues—then agents' external insurance decisions are distorted. Domestic agents in need of external resources cannot transfer the full surplus generated by these resources to other participants in domestic financial markets that do have access to the scarce external funds. Thus, in equilibrium, the scarcity value of external resources is depressed, and private decisions are biased against hoarding international liquidity and thereby insuring against these events. The underinsurance with respect to external shocks takes many forms: excessive external borrowing during booms; a maturity structure of private debt that is distorted toward the short term; dollarization of international liabilities; limited international credit lines; and so on.[3]

In this paper, we study several of the main financial policies that solve this underinsurance problem, within a unified framework. Section 2 describes the environment that we have used in earlier work, and reproduces the result: collective external underinsurance in the competitive equilibrium with only spot loan markets. One difference in the current model is that we suppress all aggregate shocks. The reason is that our focus is on domestic arrangements to deal with the underinsurance problem. To keep matters simple, we do not discuss international credit lines and other valuable insurance mechanisms that involve foreigners at all.[4] Alternatively, one can think of our discussion as "net" of these external insurances. A binding aggregate external constraint will be anticipated fully and will still occur. External

[1] See, for example, Krugman [12], Burnside et al. [3], or Dooley [9].
[2] See Caballero and Krishnamurthy [5].
[3] See Caballero and Krishnamurthy [4,6].
[4] See Caballero and Krishnamurthy [4,6] for discussions of insurance arrangements with foreigners.