Currency Crisis as a Coordinating Device of Heterogeneous Investors: A Game-Theoretic Analysis of Financial Contagion

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Abstract

This paper proposes a game-theoretical framework to highlight an alternative mechanism of financial contagion. In particular, drawing upon the method of Morris and Shin (1998), this paper emphasizes that a crisis per se is information that can be the decisive coordinating device of investors' expectations, thereby functioning as a trigger for crises elsewhere. It is shown that in the environment where the actions of speculators hinge on the behavior of others and there is only private information, they cannot coordinate their actions. As coordination takes time, the actual date of the speculative attack depends on how quickly the speculators are able to coordinate their actions. However, a crisis in another country creates an externality in the form of commonly observed information about the underlying fundamentals that helps speculators to coordinate their actions and, therefore, the subsequent attacks will occur with shorter time intervals in-between. At the same time, this additional commonly observed information introduced in the model of Morris and Shin (1998) may reverse their result of unique equilibrium and reestablish multiple equilibria as in the model of Obstfeld (1996) if the credibility of this new information is greater relative to the private information. Thus, by restoring multiple equilibria, it may lead to a paradoxical result: it may help a country that would have faced a crisis otherwise to escape it. The model fits well with the Asian crisis elucidating why the speculative attack emerged so suddenly and unexpectedly though the economic conditions had been steadily deteriorating for some time and allows us to draw some conclusions on the role of increased transparency.

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