Risk and Ambiguity in the Twin Crises*

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Abstract

We study the financial crisis model, where both banking and currency crises are correlated by the connection of two markets. Depart from classical financial crises models in the literature, we allow strategic complementarity not only within a group and but also in the two different sectors like Goldstein (2005). We also accommodate the situation where agents face ambiguous information about the underling fundamental value. Under the model, we explore how degree of risk (i.e., the variance of information about the fundamental value) and ambiguity affect the possibility of the crises. We show that, under certain conditions, more noisy and more ambiguous information can reduce the possibility of correlated crises, by cutting the vicious cycle. Moreover, in the small limit of noise and ambiguity, we can show that if the strategic complementarity among two groups from the currency sector to the banking sector is high enough, correlated crises can be prevented by manipulating the degree of noise and ambiguity. As a result, some policy implications to stabilize the economy can be drawn.

JEL classification: C72, D81, D82.

Key words: Financial crises, twin crisis, ambiguity, strategic complementarity, global game.

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