

國立臺北大學統計學系

專題演講

講題：Systemic risk and interbank lending

主講人：孫立憲 助理教授(中央大學統計所)

時間：105 年 9 月 21 (星期三，13：00~15：00)

地點：三峽校區商學大樓商 **7F01** 教室

Abstract

We propose a simple model of inter-bank lending and borrowing incorporating a game feature where the evolution of monetary reserve is described by a system of coupled Feller diffusions. The optimization subject to the quadratic cost reflects the desire of each bank to borrow from or lend to a central bank through manipulating its lending preference and the intention of each bank to deposit in the central bank in order to control the volatility for cost minimization. We observe that the adding liquidity creates a flocking effect leading to stability or systemic risk depending on the level of the growth rate. The deposit rate diminishes the growth of the total monetary reserve causing a large number of bank defaults. The central bank acts as a central deposit corporation. In addition, the corresponding Mean Field Game in the case of the number of banks N large and the stochastic game on the infinite time horizon with the discount factor are also discussed.

~歡迎參加~

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