

# FINANCIAL ECONOMIES WITH RESTRICTED PARTICIPATION

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Date Defended December 10, 2008

Date Approved December 10, 2008

## Abstract

An abundant literature is concerned with the existence of equilibrium in incomplete markets where participation to financial markets is not restricted. To mention a few, Cass (1984), Werner (1985), Geanakoplos and Polemarchakis (1986), Duffie (1987), Duffie and Shafer (1985) and Magill and Quinzii (1996). Financial economies with incomplete markets assume (in general) a symmetric participation structure, i.e. each consumer is confronted with the same restrictions on her portfolio trades. This is a very limiting assumption: in reality, people get to know about different investment opportunities and not all investors are able to trade in the same markets. In this work we consider institutional restrictions on trading activity in the financial markets. Following Siconolfi (1989), Angeloni and Cornet (2006), and Hahn and Won (2007), the broadest formulation of such restricted participation is to assume that households face financial constraints modeled by closed convex subsets of the portfolio space.

Our contribution to the literature on general equilibrium of financial markets is threefold. In Chapter 2 we refine the definition of reduced financial structure to accommodate the case of financial structures with restricted participation. We then provide a characterization of reduced financial structures in terms of arbitrage-free prices and by the compactness of a set of “admissible” portfolio allocations. In Chapter 3 we introduce an equivalence relation on the set of financial structures and we show that, under mild assumptions, every financial structure is equivalent to a reduced financial structure, and that subsequently, all equilibria in a financial economy are in one-to-one correspondence with the equilibria of an economy where the financial structure is replaced by an equivalent reduced one. Finally, in Chapter 4 we prove a general existence result of equilibria for financial exchange economies with restricted participation in which agents may have nonordered preferences. Our result extends the results by Radner (1972), and Siconolfi (1989), and also extends to the restricted participation case the results by Cass (1984), Werner (1985), and Duffie (1987).