

# EQUILIBRIUM IN CONTINUOUS-TIME FINANCIAL MARKETS: ENDOGENOUSLY DYNAMICALLY COMPLETE MARKETS

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[Joint work with Roberto Raimondo.]

We prove the existence of equilibrium in a continuous-time financial market in which the securities are potentially dynamically complete: the number of securities is one more than the number of independent sources of uncertainty. We derive dynamic completeness of the endogenously determined equilibrium prices entirely from mild exogenous assumptions on the endowments and utility functions of the agents, and the dividends of the securities. Our result is universal rather than generic: it follows from a mild exogenous nondegeneracy condition on the terminal security dividends. We find that the equilibrium prices, consumptions, and trading strategies are well-behaved functions of the stochastic process describing the evolution of information. We prove that equilibria of discrete approximations converge to equilibria of the continuous-time economy.

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