

# Existence of Equilibrium in an Incomplete Market Model with Endogenous Labor Supply

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## Abstract

This paper generalizes the results of Marcet, Obiols-Homs and Weil (2003) and proves the existence of equilibrium of an Aiyagari model with endogenous labor supply. The main contributions are: 1). I find a sufficient condition to guarantee that there is an upper bound for the asset accumulation when  $\beta R < 1$ , 2). I prove the existence and uniqueness of

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the stationary distribution for asset when  $\beta R < 1$  with more general utility assumptions and more general labor productivity shocks than the previous literature, and 3). I prove the existence of the stationary general equilibrium in an incomplete market model with endogenous labor supply.