Parameter Learning in Production Economies

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April 2019

Abstract

We examine how parameter learning amplifies the impact of macroeconomic shocks on equity prices and quantities in a standard production economy where a representative agent has Epstein-Zin preferences. An investor observes technology shocks that follow a regime-switching process, but does not know the underlying model parameters governing the short-term and long-run perspectives of economic growth. We show that rational parameter learning endogenously generates long-run productivity and consumption risks that help explain a wide array of dynamic pricing phenomena. The asset pricing implications of subjective long-run risks crucially depend on the introduction of a procyclical dividend process consistent with the data.

Keywords: Parameter Learning, Equity Premium, Business Cycles, Markov Switching

\textit{JEL}: D83, E13, E32, G12