

1125-91-650

**Yuanying Guan\*** (guany@iun.edu), Department of Mathematics, Indiana University Northwest,  
3400 Broadway, Gary, IN 46408. *Asset Pricing Models with Heterogeneous Behavioral  
Investors*. Preliminary report.

In the standard framework of classic asset pricing models, investors in financial markets are often assumed to be rational: individuals always try to optimize their expected utility functions based on complete information. In addition, individuals' decisions are not affected by change of descriptions of decision problems. This traditional setting in asset pricing models provides us convenience to study the mechanics of investment markets and solve the equilibrium prices. However, the perspective of markets with only rational individuals is far from empirical evidences such as high volatility of stock markets, high trading volumes, and pricing bubbles, etc.

Behavioral economics is a relatively new field that addresses these sorts of issue. Rather than assume that people generally know what is best for them and make decisions consistent with that knowledge, it acknowledges that people often do not act rationally in the economic sense. Inspired by some recent research (Barberis and Huang, 2009; He and Zhou, 2014), we incorporate heterogeneous behavioral investors into the traditional Lucas asset-pricing model and analyze how that would affect the market dynamics and the volatility of stock prices. (Received September 08, 2016)