Po-Keng Cheng*, Math Tower B-148, Stony Brook, NY 11794, and Frank J. Fabozzi and Young Shin Kim. Speculative Bubbles and Crashes: Fundamentalists and Positive-Feedback Trading.

In this paper, we develop and examine a simple heterogeneous agent model, where the distribution of returns generated from the model takes into account two stylized facts about financial markets: fat tails and volatility clustering. Our results indicate that the risk tolerance of fundamentalists and the funding rate of positive-feedback traders are key factors determining the path of price fluctuations. Fundamentalists are more able to dominate the market when they are more willing than positive-feedback traders to take risks. In addition, more crises occur as positive-feedback traders' funding costs rise. Our model suggests that fundamentalists cause heavy-tailedness, and positive-feedback traders cause the formation of speculative bubbles. Our model also indicates that the traders' attitudes towards risk vary across time and the generally low level of risk bearing by fundamentalists could explain the frequent occurrence of bubbles. (Received August 20, 2015)