Discussion of:

Efficient Bubbles?

by V. Haddad, P. Ho and E. Loualiche

Edouard Challe

CREST, Ecole Polytechnique

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Basic mechanism

- disagreement generate asymmetric trading, which raises asset prices and firm entry

- symmetric eq’m satisfies optimality & market-clearing conditions:

\[
W'(b_j) = p_b = p_i = \int_{a}^{\infty} \pi(a) \, dF^n(a)
\]

\[
\int b_j \, dj = b_j = M^e
\]

- conditional distribution of profits is trucated (as in, e.g., models of bubbles based on limited-liability)
Prices and Turnover for Internet and Non-Internet Stocks, 1997–2002

Source: Hong & Stein (2007)
Turnover in Value and Glamour Stocks, 1986–2005

Source: Hong & Stein (2007)
Question/comment 1: Source of disagreement

- **trick**: all households share same beliefs about distribution of firm productivity, conditional on the firm being the winner

- **tension here**: how to get a complete, deterministic ranking **and** symmetric, random productivity draws?

- suppose there are 2 households (“hh1”, “hh2”) and 2 ex ante identical firms (A, B)

- hh1 gets to think firm A will win; how could that have happened?
  - hh1 has ranked (A, B) on the basis of signals about (a_A, a_B) (case 1)
  - hh1 is told (say, by God) firm 1 will win regardless of a (case 2)
Question/comment 1: Source of disagreement

**Case 2** is unrealistic but simple: CDF of profits is \( F \), not \( F^n \)

**Case 1** is more realistic but trickier:

- if 1 ***knows*** \( A \succ B \), it means 1 ***knows*** nature’s draw \((a_A, a_B)\) w.p. 1, i.e. signals are perfectly revealing; what is there to disagree upon?

- if 1 does **not** know \((a_A, a_B)\) w.p. 1, it means the signals are noisy; 1 and 2 can disagree, but in general the rankings are probabilistic

  - ⇒ nontrivial portfolio choice (tilted diversification)

  - ⇒ conditional payoff distribution is neither \( F \) nor \( F^n \)

**Bottom line**: beliefs are non-Bayesian; ok, but then **what are they?**

**Welfare paradox** follows (more disagreement-based speculation is better)
Question/comment 2: Persistence of disagreement

- Households must “agree to disagree” in eq’m

- This cannot happen in a frictionless REE with info revealed by prices

- But this can (in principle) occur with short-selling constraints that prevent pessimistic traders from bidding down assets (Miller 1977)

- However, evidence on pervasiveness/implications of short-selling constraints is mixed (e.g., Lamont & Stein 2004)
Question/comment 3: Relation to macro literature

- large macro literature on “rational” asset bubbles due to
  - dynamic inefficiency
  - financing constraints
  - wealth-in-the-utility

- sub-literature on rational bubbles and knowledge spillovers

- Olivier (IER 2000) vs. Grossman & Yanagawa (JME 1993): impact of bubbles on productivity depends on what asset is speculated upon

- but overentry of high productivity firm cannot occur in existing models of rational bubbles