Discussion of:

Efficient Bubbles?

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Basic mechanism

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

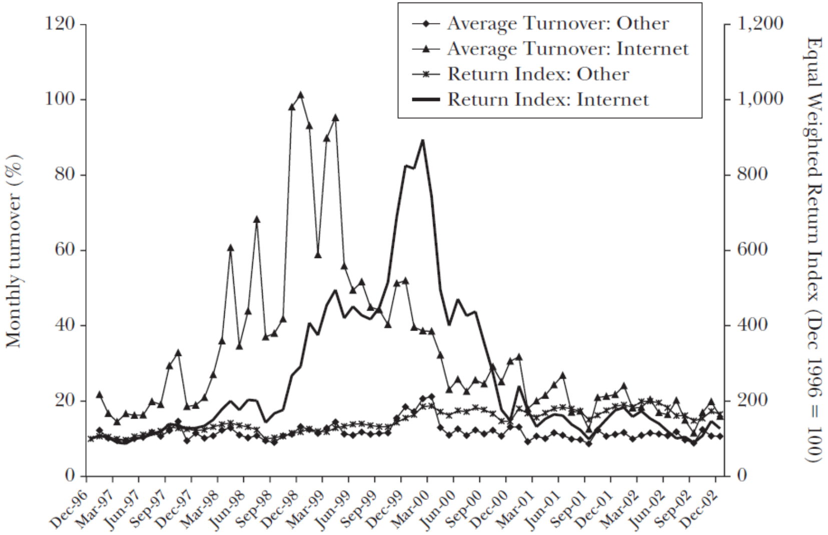
- symmetric eq'm satisfies optimality & market-clearing conditions:

$$\underbrace{W'\left(b_j\right)}_{\text{MC of blueprint}} = \underbrace{p_b}_{\text{price of blueprint}} = \underbrace{p_i}_{\text{price of firm}} = \underbrace{\int_{\underline{a}}^{\infty} \pi\left(a\right) \mathrm{d}F^n\left(a\right)}_{\text{expected payoff } \mathbb{E}^j(\pi(a))}$$

$$\int b_j \mathrm{d}j = b_j = M^e$$

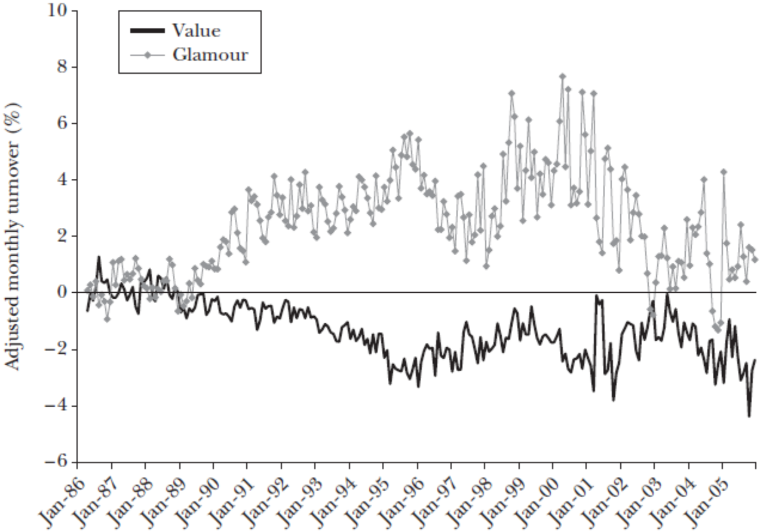
- conditional distribution of profits is trucated (as in, e.g., models of bubbles based on limited-liability)

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
  - $\Rightarrow$ nontrivial portfolio choice (tilted diversification)
  - $\Rightarrow$ 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