Discussion of 'The Costs and Beliefs Implied by Direct Stock Ownership' By Daniel Barth

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What is this paper about?

Analysis of households' direct ownership of stocks

- Fact: many U.S. households hold stocks directly
- Unless they end up holding the market — and hence avoid the fee of the corresponding index fund — why would they like to do that?
- Proposal: HHs believe that they can predict stock returns, at the expense of a research cost
- Relation to literature on investor confidence and optimal portfolio choice

What the paper does

- Documents facts about HHs direct stock ownership in the SCF:
  - How direct ownership of stocks varies with wealth
  - How share of stocks as % of total equity varies with # of stocks
- Writes down a portfolio choice model with costly endogenous research about expected returns
  - q_i governs per stock research cost
  - α_i governs investor belief relative to market ($\sigma^2_{\alpha,i}$ beta-distributed)
  - "Outside option": risk-free bond and broad stock market index
- Estimates parameter values for cross-sect. distributions of costs and beliefs

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- A very good paper!
- Addresses an important question with a novel model
- Complete: includes fact documentation, model and estimation (!)

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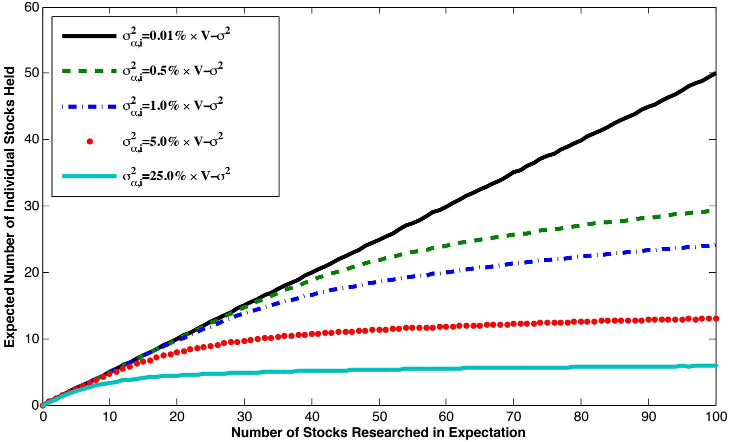
2. Propose some robustness checks on the regressions and the calibration
3. Propose another paper, using essentially the same model

MODEL INTUITION (1)

- The number of stocks is increasing in research
- The more you can learn from research, the more stocks are rejected

Figure 1: Expected Number of Stocks Held Given $\sigma^2_{\alpha,i}$

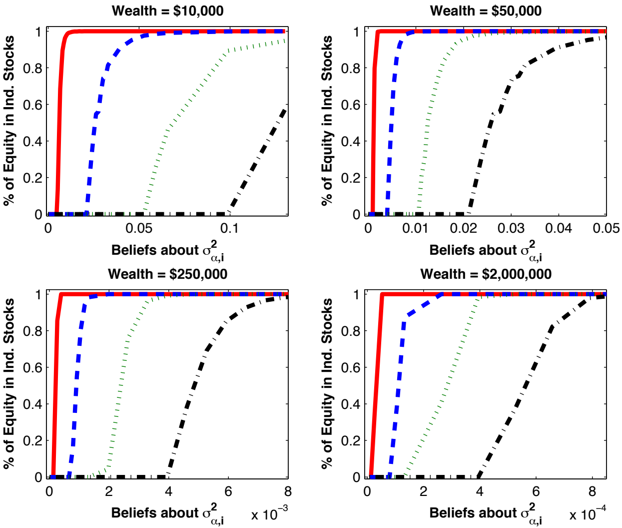


$\Rightarrow$ Over confidence is closely tied to perceived research value

Model intuition (2)

- Even a small research value (small $\sigma^2_{\alpha,i}$) produces a lot of direct ownership

Figure 2: Fraction of Equity Allocated to Individual Stocks for Different Values of $\sigma^2_{\alpha,i}$



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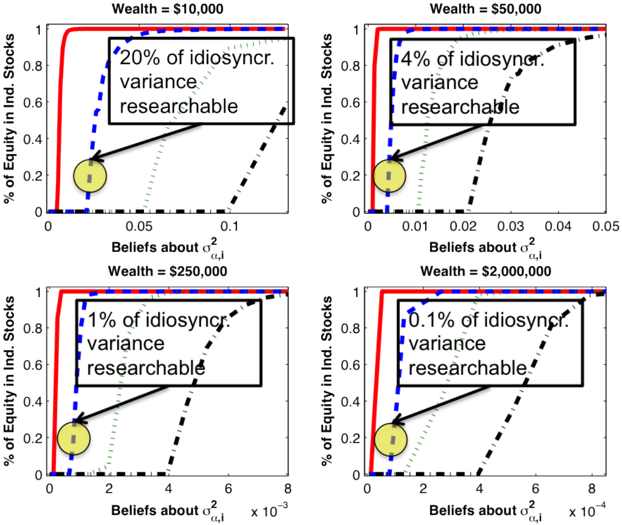

Remark 1: Choice of regression specification

- Regressions do not include intercept
- Makes me nervous about which of our "standard" regression properties and metrics that remain valid and which ones that do not (even R^2)
- Flexible functional forms for financial wealth (e.g., dummy variables or splines) together with intercept seems like a better choice

Remark 2: Choice of key parameter values

A wish list of robustness checks

- $\gamma = 6$:
  - Leads to a higher estimated value of research, e.g. $\sigma_\alpha^2 \uparrow$?
- Cross-correlation among stocks (instead of iid assumption in calibration):
  - Reduces incremental value of research $\Rightarrow$ reduces cost $\Rightarrow$ $\sigma_\alpha^2 \downarrow$?
- Relatedly, results for different magnitudes of idiosyncr. variance $(\sigma_\alpha^2 + \sigma_\varepsilon^2)$:
  - Current volatility of $\sqrt{0.033} = 0.182$ seems about right, but would be interesting to use CAPM / asset pricing estimates
  - Also interesting to see how sensitive the model results are to the assumption

Proposal for another paper using the same model

- If the perceived research value is in the order of magnitude of an over-performing mutual fund, then why do HHs not search for skilled fund managers instead?
  - We have some stylised facts on *some* mutual funds delivering *some* persistent returns (suggests trivial research process)
  - Provides better diversification than direct stock ownership at (possibly) the same rate of return
- Proposal: analysis of costly stock research and costly fund research
  - Trade-off
  - How do HHs perceive the relative gains?
  - To rationalise stock ownership, need there be "joy" of doing stock research?
- Household level data with security-level holdings:
  - Within HH distributions of portfolio weights (e.g. biggest stock weight, biggest mutual fund weight)
  - Relative magnitude of idiosyncratic variance stemming from stocks (big) and from mutual funds (small)
  - Data: Vestman (2013), Koijen, Van Nieuwerburgh and Vestman (2013)