

# Passive Investing and the Rise of Mega-Firms

Hao Jiang, Dimitri Vayanos, and Lu Zheng

Discussion by Savitar Sundaresan  
Imperial College

July 11, 2023

- Why I liked this paper:
  - Topic right up my alley.
  - Interesting new mechanism that combines investor/size/multidimensional shocks.
  - *Lots* of results.
- Where I struggled:
  - Placement in the literature.
- What's coming:
  - Overview of mechanism/results.
  - Shameless plug.
  - Context

## Simple Version

- Suppose there are two firms in the index,  $A$  and  $B$ .
- $\eta_A = \epsilon$ ,  $\eta_B = 1 - \epsilon$  where  $\epsilon \approx 0$ .
- Dividend process, utility, information, etc same.

## Mechanism: Increase in non-experts (entry)

- 1 Reduction in idiosyncratic and systematic supply  $\Rightarrow P_A \uparrow, P_B \uparrow$ .
  - $D_{At}^i$  not priced, because  $A$  is small.  $b_A$  assumed to be big.
  - Price increases because PV of systemic component increases.
  - $D_{Bt}^i$  is priced, because  $B$  is large.  $b_B$  assumed to be small.
  - Price increases because of both (less from systematic, more from idiosyncratic).
- 2 Reduction in idiosyncratic and systematic supply  $\Rightarrow$  increased vol  $\Rightarrow P_A \downarrow, P_B \downarrow$ .
  - Lower idiosyncratic and systematic supply.
  - Dividend shocks have quadratic vol, so both scale.
  - Higher vol means lowered expert demand, price increase attenuates (less for idiosyncratic).
  - Larger attenuation for  $A$ , as priced risk is systematic and they're high  $b$ .

## Additional Results

- Passive flows raise stock return volatility (especially for large firms)
- Passive flows matter most for overvalued firms.
- Passive flows drive up aggregate market.

# Asset Pricing Implications of Passive Investing

- Price Informativeness: Disagreement

Bond and Garcia (2017), Malkov (2019) Sammon (2023), Kacperczyk et al (2023)

Kacperczyk et al (2021), Buss and Sundaresan (2023), Lee (2022)

- Price / Return Levels: Increases

- Price / Return Volatility: Increases

- Cross-sectional implications less well understood!

## Alternative Hypothesis: Buss and Sundaresan (2023)

- Passive investors reduce cost of capital and increase stock price.
- Firms use passive investors' presence to increase investment.
- Increased investment raises stock returns and volatility.
- Increased volatility attracts active attention.
- Increased attention increases prices (lower risk premium) and price informativeness.

Key assumption: cross-sectional variation in passive investment within an index.

# Empirical variation within index

Abid (2020)

- Passive investment increases significantly with size (10.1% to 30% in S&P 500)
- Passive investment not restricted to firms in any one index. (8% for S&P 500-600).
- Which predictions are unique to the setting?
  - Price level, vol, index level, vol *could* be cross-sectional variation in passive levels.
  - Over/undervaluation results are unique to this setting!
  - Cross-sectional implications are testable once passive investment is controlled for.

# State of Play

- Excellent paper with a novel mechanism and lots of interesting results.
- Large literature on passive investing that covers a little of the same ground.
- New results on the impact of noise traders on passive effects!
- Highly recommend reading and look forward to the next iteration.