

Do Exogenous Uninformed Order Flows Move Stock Prices?

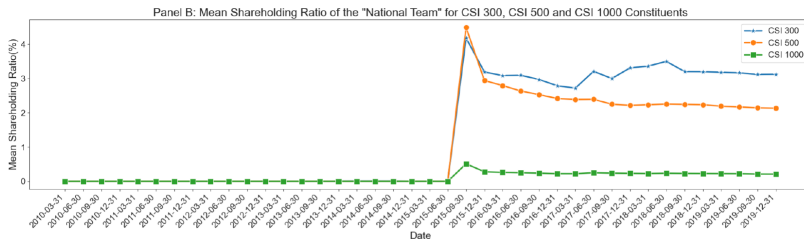
Ketian Guan and Sida Li

Discussant: Boone Bowles

2nd Modern Finance Conference

September 8, 2025

The paper in one slide



Panel B. National Team purchases for CSI 300, CSI 500, and CSI 1000 constituents

- **What:** Isolate a plausibly *exogenous*, *uninformed* demand shock that raises purchases for a subset of stocks.
- **Finding:** Those stocks' risk-adjusted returns rise around the intervention; implied price multiplier $M \approx 1.28$.
- **Why it matters:** Clean, quasi-experimental evidence that *demand moves prices* (downward-sloping demand), grounding demand-based asset pricing à la Kojen-Yogo in an event setting.

Major Point 1: Map *micro* to *macro*

- Result here is **local (micro)**: treated $\alpha \approx 6.4\%$ on a $\approx 5\%$ purchase $\Rightarrow M \approx 1.28$.
- **Ask:** Add a one-paragraph macro calibration to situate this in the Koijen-Yogo (DBAP) literature.

$$\underbrace{\frac{\Delta P}{P}}_{\text{implied market move}} \approx \sum_i \underbrace{w_i}_{\text{market weight}} \underbrace{M}_{\text{micro est.}} \underbrace{\Delta q_i}_{\text{purchase ratio (Figure 1B)}}$$

- Use the observed Δq_i across CSI300/500/1000 and index weights w_i to compute implied market return.
- Compare to the aggregate index move around the intervention and to published macro elasticities.
- Add ≈ 2 sentences in text clarifying scope: “local at the boundary; macro translation shown in Appx.”

Major Point 2: RD validity checks at the cutoff

- Identification is strong; **standard RD diagnostics** to bulletproof it.
- **McCrary density test** on the running variable (rank by mkt cap) to rule out sorting.
- **Covariate continuity** at the cutoff (log size, P/B, momentum, ROA, leverage, inst. ownership).
- **Donut RD**: drop k names nearest the threshold; show robustness across $k \in \{3, 5, 10\}$.

Implementation is quick with existing reconstitution ranks and covariates.

Major Point 3: “Who sold?” $\Rightarrow$ turn figure into DID

- Current evidence is descriptive; formalize with a compact DID and event-study (stock $\times$ quarter panel).

$$\Delta\text{Hold}_{i,t}^g = \alpha_i + \gamma_t + \beta^g [\mathbf{1}\{i \in \text{CSI500 edge}\} \times \mathbf{1}\{t \geq \text{Q3'15}\}] + \varepsilon_{i,t},$$

$$\Delta\text{Hold}_{i,t}^g = \alpha_i + \gamma_t + \sum_{\tau} \beta_{\tau}^g [\mathbf{1}\{t = \tau\} \times \mathbf{1}\{i \in \text{CSI500 edge}\}] + \varepsilon_{i,t} \quad (\text{event study})$$

- Outcome: investor-type g shareholding ratio (small investors, funds, insurers, etc.).
- Expectation: $\beta^{\text{small}} < 0$ in Q3'15; $\beta^{g \neq \text{small}} \approx 0$; no pre-trend ($\beta_{\tau < \text{Q3'15}} \approx 0$).
- Translate Δshares to **flows**: $\Delta\text{Hold} \times \text{mkt cap}$; verify they *sum* to NT purchases.

Stock and time FE; cluster by stock. One main table + one event-study figure replaces several lines of prose.

Recap

What I like

- Clean event setting: a large, plausibly *uninformed* demand shock.
- Clear result: treated stocks' risk-adjusted returns rise; implied multiplier $M \approx 1.28$.
- Careful construction and sensible robustness; nice link to demand-based asset pricing.

Three actionable suggestions

1. Map the *micro* multiplier to a *macro* elasticity (one-paragraph calibration).
2. Add standard RD validity checks at the cutoff (McCrary density; covariate continuity; donut RD).
3. Turn “who sold?” into a compact DID/event study with stock & time FE and pre-trend check; translate share changes to flows.

Overall: strong, policy-relevant evidence that demand moves prices; these additions would make the contribution sharper and more portable.