Discussion of "Do Intermediaries Matter for Aggregate Asset Prices?" by Valentin Haddad & Tyler Muir

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Does Intermediary Asset Pricing matter?

- Claim: Intermediaries price assets
  - Empirical evidence shows limits to arbitrage
    (see references in Duffie 2010)
    $\Rightarrow$ frictions in asset markets & institutions matter
    $\Rightarrow$ drive wedge between investors and investing agents
  - Micro-evidence connects price dispersion to dealer net worth
  - Theory of intermediary asset pricing w/ agg effects
    e.g., He&Krishnamurthy 2012; Brunnermeier&Samnikov 2014

- Frictionless alternative: fundamentals and household specific state variables matter for asset prices

- This paper: seeks *causal* evidence that intermediaries are important for *aggregate* asset prices

Theoretical Framework

- Two period model with intermediaries & households
  Hs subject to investment costs take D_I as given
- Optimal demands for risky assets

$$D_I^* = \frac{\text{expected risk premium}}{\gamma_I \Sigma}$$

$$D_H^* = \frac{\text{expected risk premium} - \gamma_H \Sigma D_I}{\gamma_H \Sigma + \text{Cost}}$$

$$\text{expected risk premium}^* = \mathrm{S}\, \gamma_H \Sigma \, \frac{\Sigma + \frac{1}{\gamma_H}\text{Cost}}{\Sigma + \frac{1}{\gamma_I}\text{Cost}}$$

- Intermediary state variables matter iff
  (i) H & I different effective risk-aversion *and*
  (ii) H face positive asset specific investment costs

Identification Proposal

- Goal: identify movements in asset prices *due* to movements in intermediaries' state variables
- Challenge: Δ in γ_I could be caused Δ in γ_H
- Proposed solution:
  - Intermediaries matter more where costs are high
  - Identify impact off of cross-section of risk premia

    Step 1. Rank assets acc. to how easy H can invest
    Step 2. Predict norm. risk-premia with intermediary states
    Step 3. Check whether coefficients line up with ranking
- The higher the costs, risk-premia respond
  - more to γ_I shocks
  - less to γ_H shocks (implies Hs sit out shocks)

Main Finding

Panel A: Quarterly Returns							
	(1) Stocks	(2) Bonds	(3) Options	(4) Sovereigns	(5) Commodities	(6) FX	(7) CDS
γ_{Int}	0.71	0.48**	1.30**	1.03**	3.49**	0.43*	2.67***
	(0.57)	(0.21)	(0.64)	(0.40)	(1.69)	(0.25)	(0.74)
N	167	148	103	65	105	116	47
R^2	1.4%	1.4%	3.6%	14.0%	4.1%	3.0%	33.1%

- Risk premia elasticities wrt γ_I increasing in asset costs
- Across specific. intermediary states matter most for CDS
- R^2 suggest relevant role for CDS & EM sovereign bonds
- Broker/Dealer Leverage only seems to matter

Comments

1. Identification

2. Reframing suggestions

Identification concerns for the skeptic

- Identification based on differential response to γ_j and γ_H shocks likely to affect all assets proport.

  E.g., dynamic model with learning about eff. costs

- Shock to γ_H could lead to observationally equivalent results $\Rightarrow$ Unless intermediaries learn/react faster (plausible)

- Timing matters - quarterly measures imprecise

Need γ_I shocks orthogonal to γ_H shocks

- Explore intermediaries based in different country with exposure to U.S. housing market as in Ma's JMP (2018)
- Team up with FED folks to explore higher frequency measures of broker-dealer leverage (or VaR)
- Look at episodes that likely had γ_H moving less relative to γ_I (e.g., US banks exposure to European banking/debt crisis) and vice versa

Who are households? Right measure of γ_H ?

- Retail investors? Warren Buffet? Pensions? Hedge Funds?
- CAY & habit good measures of γ_H?
- Question not whether retail investors or intermediaries matter but in which situations/ for which assets intermediaries matter over sophisticated investors / institutional investors / retail investors

Framing: for which asset classes do intermediaries matter the most

- Plausible that arbitrageurs/intermediaries matter for asset prices as suggested by wealth of evidence

  $\Rightarrow$ Plausible that this aggregates meaningfully

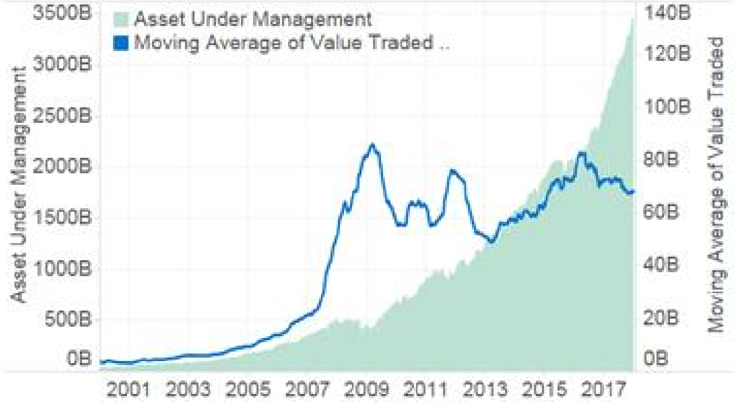
- Reframe: under what conditions & for which asset clases intermediaries matter for aggregate asset prices

- Measure conditions (e.g. trading & search costs, product complexity (Célérier & Vallée 2017)) & their time variation

- When do micro effects aggregate?
  Compare your measures to microstudies - informative to evaluate external validity of event studies

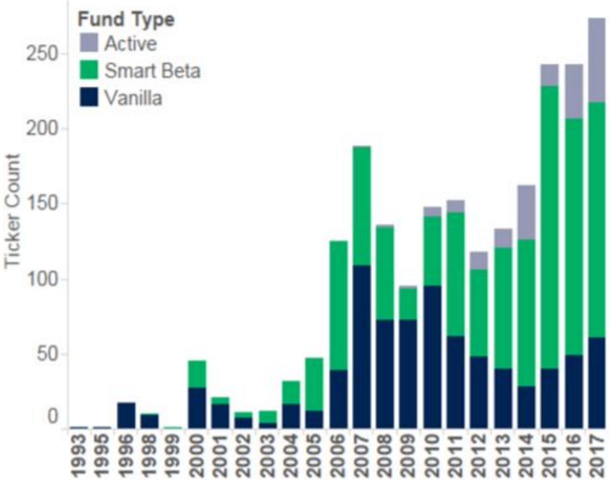
Rise of ETF

- Are ETFs going to mitigate the role for intermediaries?
- ETF market grew enormously



Rise of ETF - Death of Intermediary Asset Pricing?

- Disintermediation of specialized intermediation activities
- Active/smart beta ETF funds on the rise



Conclusion

- Interesting paper tackles identification of aggregate effects
- Does it change any priors?
- Reframe as to what type of & when intermediaries matter