Edwin Hu

Securities and Exchange Commission
100 F St NE
Washington, D.C. 20549

Last Updated: 2019-07-15
☎: (202) 551-8993
✉: hue@sec.gov
: edwinhu.github.io

Research and Interests

I am interested in the industrial organization and regulation of financial markets. My research currently focuses on equity market structure and banking. I am also interested in applied statistical learning in financial economics and advances in causal inference.

Employment

2018–Present: Counsel to Commissioner Robert J. Jackson Jr.
Securities and Exchange Commission, Washington, D.C.

- I advise on market structure, disclosure, asset management, and economic analyses.
- I provide technical assistance to other agencies, Capitol Hill, and the media.
- I assist in writing policy speeches and statements.

2016–2018: Financial Economist Fellow
Securities and Exchange Commission, Washington, D.C.
Division of Economic and Risk Analysis

- I studied the economic implications of rulemaking on financial markets.
  - I conducted independent research suggesting that 'speed bumps' may improve market quality, (see coverage in Wall Street Journal).
- I was involved in modernizing the Commission's technology infrastructure through data science and cloud initiatives (see SEC Strategic Plan 2018–2022).

Education

2010–2016 Rice University

- Ph.D, M.A. Finance. Jones Graduate School of Business.

2006–2010 University of Washington

- B.S. Applied and Computational Mathematical Sciences.
- B.S. Economics *Cum Laude*.

Working Papers

Loan Syndication Networks *with Jeffrey Harris, and Ioannis Spyridiopoulos*

Banks develop network connections through repeated co-syndication relationships with multiple lenders. We create measures of network centrality based on banks' historical co-syndication ties, and find that well-connected lenders are more likely to gain lead underwriter status and offer better loan terms. Our results are robust to variation in network connections generated

by bank consolidations. Well-connected banks offer lower spreads to firms with higher levels of information asymmetry, underwrite loans faster, and retain a smaller fraction of the loan. The evidence is more consistent with recent theory suggesting networks mitigate information asymmetry in syndicates, rather than superior screening or monitoring.

Intentional Access Delays, Market Quality, and Price Discovery: Evidence from IEX Becoming an Exchange

- Covered in the **Wall Street Journal (1) (2)**, **Globe and Mail**, **Traders Magazine**, **TabbFORUM**, **Financial Times**, **Fast Company (Video)**
- Presented at Securities and Exchange Commission (2019), DC Juniors Finance Conference (2019)

This paper exploits cross-sectional variation in trading activity and the staggered securities phase-in when the Investors Exchange (IEX) becomes a national securities exchange to study the effects of intentional access delays on market quality and price discovery. Market quality improves after IEX becomes an exchange for securities with high historical IEX market share. Price discovery improves overall, although IEX's contribution to price discovery remains small. Intermarket Sweep Order activity decreases overall, coinciding with improvements in price discovery. In a second natural experiment where IEX's ECN goes dark in 28 symbols there is no change in market quality or price discovery. The findings in this paper suggest that protected markets with symmetric speed bumps may be a feasible solution to deemphasize speed in lieu of regulatory intervention.

A comparison of some structural models of private information arrival *with Jefferson Duarte, and Lance Young*

- **Forthcoming in Journal of Financial Economics**
- Presented at Rice University (2015), Texas A&M (2015*), Multinational Finance Society Conference (MFS, 2015*) **Best Paper Award**, China International Finance Conference (CICF, 2015*), Society of Financial Econometrics Conference (SoFiE, 2015*), Instituto Technologico Autonomo de Mexico Conference (ITAM, 2015*), American Finance Association Conference (AFA, 2016), University of Washington (2016*), University of Virginia (McIntire) (2017*), Southern Methodist University (2017*).
- **Data and Previous Refereed Versions**
- Previously circulated under: "Does the PIN Model Mis-Identify Private Information and If So, What is the Alternative?"

We show that the PIN and the Duarte and Young (2009) (APIN) models do not match the variability of noise trade in the data and that this limitation has severe implications for how these models identify private information. We examine two alternatives to these models, the Generalized PIN model (GPIN) and the Odders-White and Ready (2008) model (OWR). Our tests indicate that measures of private information based on the OWR and GPIN models are promising alternatives to the APIN's $Adj.PIN$ and PIN

Financial Integration and Credit Democratization: Linking Banking Deregulation to Economic Growth *with Elizabeth Berger, Alexander Butler, and Morad Zekhnini*

- **Revise and Resubmit Journal of Financial Intermediation**

- Presented at Rice University (2012*), Financial Management Association Conference (FMA 2013), Securities and Exchange Commission (SEC, 2014*), Fordham University (2014*), University of Cincinnati (2014*), University of Kentucky (2014*), Yale School of Management (2015*).

We document a positive effect of financial integration on economic growth. Using US state-by-state financial deregulations, we find that economic growth occurred in states where bank deregulation solved a capital immobility problem. We use a matching method that constructs synthetic counterfactual states to identify the channels that link bank deregulation to financial integration, and thereby to economic growth. Our results reveal a correlation between financial integration and subsequent banking sector changes including improved bank efficiency, better lending and borrowing rates, and an expansion in loan recipients. We show that financial integration democratizes lending and spurs economic growth.

Policy Work

Rules Governing Investment Advice (Regulation Best Interest)

- Conducted research showing that the proposed interpretation of the fiduciary standard was related to higher rates of conflicted advice.
- Received support from prominent legislators including Senators Warren, Booker, Speaker Pelosi, and Chair Waters
- House Passed Amendment 78 to H.R. 3351 over concerns from Chair Maxine Waters about lowering the fiduciary standard.
- Selected coverage: Washington Post, New York Times, Wall Street Journal, Bloomberg, Money Stuff

Amendments to Sarbanes-Oxley 404(b) Accelerated Filer Definition

- Conducted research on the costs and benefits of rolling back auditor attestation requirements for smaller firms.
- Received support from accounting and law faculty.
- Selected coverage: Wall Street Journal

Stock Buybacks and Corporate Cashouts

- Letter, Data Appendix
- Conducted research showing that the market reacts negatively to insider selling after stock buyback announcements in reponse to a letter from Senator Chris Van Hollen.
- Cited in leglisation proposed by Senator Tammy Baldwin, and Petition to SEC
- Selected coverage: CNN, Washington Post, CNBC, Fox Business

Rule 610T: Transaction Fee Pilot

- Advised on market structure, routing practices, and pilot design.

Disclosure of Hedging by Employees, Officers and Directors

- Advised and conducted original research on existing hedging disclosures, use of derivative hedges, and stock performance.

Bats Market Close: Off-Exchange Closing Volume and Price Discovery

- First SEC economic analysis to use regulatory audit trail and TRF data.
- Led to NYSE cutting its top tier MOC fees by two-thirds.

Tick Size Pilot Program and Market Quality *with Paul Hughes, John Ritter, Patti Vegella, and Hao Zhang*

- We find evidence that market quality deteriorates after the Tick Size Pilot widens quoting increments to five cent increments.

Skills

Data analysis, financial econometrics, high performance scientific computing, parallel computing, data visualization, causal inference, matching.

`Python`, `R`, `SAS`, `STATA`, `SQL`, `bash`, `git`, `awk`