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References:

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EDUCATION

Ph.D., Applied Economics, University of Illinois Urbana-Champaign, 2022

M.S., Applied Economics, University of Illinois Urbana-Champaign, 2017

B.Sc. (*Bacharel em Ciências*), Economics, University of São Paulo, 2014

POSITIONS

Postdoctoral Research Scholar, Department of Economics, Columbia University, 2022—

RESEARCH INTERESTS

Financial Markets and Institutions, Market Microstructure, Climate Finance

JOB MARKET PAPER

“Manipulating Algorithmic Markets”

This paper develops a new methodology for causal price impact in high-frequency financial markets to study a widespread form of market manipulation and its consequences. I identify directly from data when a trader takes both sides of the same transaction but instead of letting orders cross uses a compliance tool to prevent legal exposure. This functionality is offered by every major exchange and in US futures markets its default use option allows the tool to be exploited strategically. This form of self-trading can effectively signal demand at artificial prices and result in disproportionate liquidity removal from markets. I introduce a novel source of variation that generates systematic differences in information exposure to traders. This leverages an institutional feature of electronic limit order books where as-good-as random delays between when a trade happens and the market learns about it can be used to assign treatment. By comparing trades occurring almost at the same time facing an identical information set, except for the news about a reference trade, I implement an empirical approach that estimates dynamic responses robust to microstructure noise and confounders. My findings show that self-trading successfully moves prices in the direction that benefits the trader, both by making liquidity providers revise quotes and enticing others to trade. I then use these estimates to quantify the role of self-trading in flash events: brief moments of substantial price increases or declines. Using a causal attribution framework, I separate information shocks — price adjustments based on news — from manipulative price impact to be able to assess the role of each factor individually and in combination. I find that almost 10% of flash events in US futures markets are driven by attracting others to trade in the direction consistent with profitable self-trading.

SELECTED RESEARCH

“Financial Regulation and Automation Adoption: Evidence from Stock Trading Firms”

- **Brattle Group Ph.D. Candidate Award For Outstanding Research**, Western Finance Association (2022)

“In Good Times and in Bad: High-Frequency Market Making Design, Liquidity, and Asset Prices”

with Simon N. M. Schmickler

- **Ben Bernanke Prize in Financial and Monetary Economics**, Bendheim Center for Finance, Princeton University (2021)
- **BlackRock Applied Research Award Finalist**, BlackRock (2021)

“Spillover Effects of Payouts on Asset Prices”

with Simon N. M. Schmickler

“The Bias of Simple Bid-Ask Spread Estimators”

with Scott H. Irwin

“Manipulative Intent”

“Amnesty and Land Grabbing in the Amazon”

with José A. Scheinkman

“Unions, Strikes, and the Quality of Public Education Provision”

with Tatiana Mocanu & Oto Montagner

“The Impact of International Students on Housing Markets” *Canadian Journal of Economics*, 2023

with Tatiana Mocanu

TEACHING

[Advanced Financial Economics](#) (grad), Columbia University, Fall 2024

[Financial Economics](#) (grad), Columbia University, Spring 2023, 2024, 2025

[Commodity Futures and Options](#) (undergrad), UIUC, Spring 2019—2021

[Commodity Price Analysis](#) (undergrad), UIUC, Fall 2019

PRESENTATIONS

2024: Western Finance Association Meeting, HEC-McGill Winter Finance Conference, UC Davis-FMA Napa Finance Conference, Future of Financial Information Conference (discussant) (Stockholm Business School)

2023: Society of Labor Economists Conference, IAQF/Thalesians Seminar (Fordham University)

2022: Future of Financial Information Conference (Stockholm Business School), Commodity and Energy Markets Association Meeting, Western Finance Association Meeting, Yale SOM[†], Columbia Business School[†], Northwestern Kellogg[†], UC Berkeley Haas[†], INSEAD[†], Dartmouth Tuck[†], Emerging Markets Conference (XKDR Forum-Trustbridge-Vanderbilt Law School), Vanderbilt Owen[†], Cornerstone, Georgetown McDonough[†], Johns Hopkins Carey[†], Washington University Olin[†], University of Maryland Smith[†], University of Miami Herbert[†], Simon Fraser Beedie, University of Virginia Darden[†], Federal Reserve Board[†], PIMCO[†], BlackRock[†]

2021: AEA ASSA (poster), Australasian Meeting of the Econometric Society (University of Melbourne), North American Summer Meeting of the Econometric Society (Université du Québec à Montréal), European Summer Meeting of the Econometric Society (University of Copenhagen), Young Economists Symposium (Princeton University)^{*†}, Inter-Finance Ph.D. Seminar Series[†], B3 Exchange[†], Civitas Seminar (Princeton University)[†]

2020: AFA (Ph.D. Poster Session) and AREUEA[†] ASSA Conference (San Diego), EALE-SOLE-AASLE World Conference (Berlin), Junior Migration Seminar (CERDI-PSE-LISER-University of Luxembourg-Universidad Carlos III-CEPII-IC Migrations-World Bank), Young Economists Symposium (University of Pennsylvania), Empirics and Methods in Economics Conference (Northwestern University), 42th Meeting of the Brazilian Econometric Society

2019: Empirics and Methods in Economics Conference (University of Chicago)

2018: 13th Meeting of the Urban Economics Association (Columbia University)[†]

[†]Presented by coauthor

AWARDS AND GRANTS

Brazil's National Council for Scientific and Technological Development Grant, "Demand for Electoral Clientelism", 2023
Outstanding Dissertation Award, UIUC, 2023

NSE-NYU Stern Initiative on the Study of Indian Financial Markets Grant, 2022

The Brattle Group Ph.D. Candidate Awards For Outstanding Research, WFA, 2022

Teachers Ranked as Excellent, UIUC, 2020

REFEREEING

Journal of Finance, American Journal of Agricultural Economics, Journal of Commodity Markets, Energy Journal,
Economics Bulletin