RESEARCH STATEMENT: ABSTRACT

EMILIANO S. PAGNOTTA
IMPERIAL COLLEGE LONDON

We are in the midst of a historical period where advances in information technologies challenge virtually all aspects of business in traditional financial markets and create new markets altogether. While technology creates opportunities to dramatically reduce allocative frictions, to improve liquidity and informativeness, and to broaden people’s access to financial products, it also forces authorities and regulators to rethink the institutions and infrastructure over which markets are built. An integral mission of my research is understanding how technological advances and institutional developments interplay in asset markets, how they affect their performance, liquidity, and society’s welfare.

Motivated by this goal, my research program contributes to three distinct but related areas, as summarized in the included table. Methodologically, most of my research papers share a two-fold approach. First, developing general equilibrium models of frictional financial exchange where trading protocols, technologies, and institutional rules are explicitly modeled. Second, empirically identifying and quantifying the key frictions and their impact.

### Table 1
Summary of my papers by research area

<table>
<thead>
<tr>
<th>Research Area</th>
<th>Paper (short title)</th>
<th>Technological Developments</th>
<th>Institutional Developments</th>
<th>Approach</th>
<th>Status (Dec 2019)</th>
</tr>
</thead>
</table>
| The infrastructure and organizational structure of financial markets | Competing on Speed                      | *Ultra-high-speed networks  
* Algorithmic trading  
* Dark pools, smart routing systems | * Reg NMS, ATS (US)  
* MiFID I & II (Europe) | Theory, MQA  
| Speed, Fragmentation, and Asset Prices               |                                         |                             |                             | Published at Econometrica |
| Central Clearing and Price Volatility                 | Competing on Speed                      | *Ultra-high-speed networks  
* Algorithmic trading  
* Dark pools, smart routing systems | * Dodd-Frank, EMIR  
* G20 mandate  
|                                        |                                        |                             |                             | Reg & R at the Journal of Finance |
| Privately informed trading in modern asset markets: strategies, identification, regulation | Chasing Private Information            | *Big data  
* machine learning  
* FINRA’s SONAR                        | * Dodd-Frank  
* SEC’s CAT  
| Information and Liquidity Trading at Optimal Frequencies | Transition floor to CLOB trading  
* Sophisticated retail trading platforms | * SEC’s Whistleblower Reward Program  
* Newman’s ruling  
|                                        |                                        |                             |                             | Published at Review of Financial Studies |
| Decentralized payment systems, permissioned/less blockchains | Bitcoin as Decentralized Money          | * Decentralized consensus protocols  
* Bitcoin, Ethereum mining  
* Ripple, Libra  
* Lightning | * Bitcoin network  
* G20 coordination  
| Equilibrium Valuation of Bitcoin and Dn Assets       |                                        |                             |                             | R&R at the Review of Financial Studies |


*Date*: January 1, 2020.

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EMILIANO S. PAGNOTTA

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Finance Group
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South Kensington Campus
London SW7 2AZ

EMPLOYMENT

Assistant Professor of Finance, Fall 2014-
Imperial College Business School, Finance Department, London, UK.

Assistant Professor of Finance, Fall 2009- Summer 2014
New York University, Stern School of Business, Finance Department, New York, NY.

EDUCATION

Northwestern University, Evanston, Illinois.

Universidad de San Andres, Buenos Aires, Argentina

Universidad de Buenos Aires, Buenos Aires, Argentina
Licentiate in Economics (5-yr program), 2002.

RESEARCH

Competing on Speed. Econometrica (May 2018)
(with Thomas Philippon) Awarded with a Grant from the Smith Richardson Foundation.
Selected Presentations: Western Finance Association (WFA), Finance Theory Group, American Economic Association (AEA).

Chasing Private Information. The Review of Financial Studies (December 2019)
(with Marcin Kacperczyk).
Selected Presentations: Western Finance Association (WFA), NBER Asset Pricing, NBER Long-Term Asset Management, CEPR 2016, 2017 FIRS

Bitcoin as Decentralized Money: Prices, Mining, and Network Security.
Resubmitted to The Review of Financial Studies
Winner Best Crypto Economics Paper Award, 2nd Toronto Fintech Conference

(with Marcin Kacperczyk) R&R requested at The Journal of Finance

Speed, Fragmentation, and Asset Prices.
Rej. with invitation to resubmit at The Journal of Finance.
Selected Presentations: American Financial Association (AEA), Western Finance Association (WFA), SFS Cavalcade, Stern Microstructure Conference

An Equilibrium Valuation of Bitcoin and Decentralized Network Assets.
(with Andrea Buraschi). (under revision). #1 paper on SSRN rankings, April 2018
Selected Presentations: NBER Asset Pricing, Finance Theory Group, American Financial Association

Information and Liquidity Trading at Optimal Frequencies.
(under revision)
Selected presentations: MIT Sloan, NYU Stern, NYU, Columbia Business School, Econometric Society World Conference.

WORK IN PROGRESS

"The Optimal Detection of Insider Trading" (with Marcin Kacperczyk and Natasha Sarin)

“Bitcoin vs. Central Banks”

“Scaling Blockchains Through Lightning”

“Information Spillovers” (with Marcin Kacperczyk)

“Secondary Market Frictions and Primary Financing Costs”

OTHER PUBLISHED WORK

Speed, Competition, and Fragmentation in Financial Markets (Fall 2012), Center for the Study of Financial Regulation, University of Notre Dame.

Dilemas de la Política Comercial Externa Argentina (book with Roberto Bouzas) 2003, Siglo XXI.
INVITED PRESENTATIONS

Presentations 2019-2020 (scheduled)
- American Financial Association (AFA), San Diego
- American Economic Association (AEA), San Diego
- CFM-Imperial Workshop on Market Microstructure, London
- Tsinghua School of Business, Shanghai
- Frictions in Finance Imperial College London conference
- 4Nations Cup (Team GB) London School of Economics
- Durham U. Business School
- Sydney Microstructure Conference
- Duke-UNC Asset Pricing Conference

Discussions: American Financial Association (AFA, two times), Blockchain Economic Forum

Presentations 2018-2019
- American Economic Association (AEA), Atlanta
- American Financial Association (AFA), Atlanta
- Society of Financial Studies (SFS) Cavalcade, Pittsburgh
- European Finance Association (EFA), Portugal
- Financial Intermediation Research Society (FIRS) Conference, Savannah
- Bloomberg Crypto Summit, London
- Swiss Finance Institute and EPFL, Lausanne
- Central European University, Budapest
- 2nd Toronto Fintech Conference
- Central Bank Research Association (CEBRA) Conference, Columbia University
- Einaudi Institute Economics and Finance, Rome
- Paris-Dauphine Microstructure Conference, Paris
- Imperial College London Business School
- Bank of Canada Money and Banking Workshop, Ottawa


Presentations 2017-2018
- NBER Summer Institute, Asset Pricing
- NBER Summer Institute, Economics of Crime
- European Financial Association (EFA), Warsaw
- Finance Theory Group (FTG) Meeting, LBS London
- Review of Economic Dynamics-Philadelphia Fed Conference on Market Fragmentation
- Imperial College London Business School

Presentations 2016-2017
- NBER Summer Institute, Asset Pricing
- NBER Long-Term Asset Management, London

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This list does not include paper presentations by co-authors.
American Economic Association (AEA), Chicago
Financial Intermediation Research Society (FIRS) Conference, Hong Kong
FIRN Microstructure Meetings, Sydney
Santiago Finance Workshop, Santiago Chile
Econometric Society China Meetings, Wu-Han
Paul Woolley London School of Economics Conference, London
Erasmus Liquidity Conference, Rotterdam
The World Federation of Exchanges Conference, London
Discussions: FIRS conference, FIRN Sydney Microstructure Meetings

Presentations 2015-2016
Western Finance Association (WFA), Park City
Society of Economic Dynamics (SED), Toulouse
Econometric Society European Meetings, Geneva
CEPR conference, London
VU University, Amsterdam
Cass Business School, London
IESE, Barcelona
Discussions: American Financial Association (AFA), LSE Paul Woolley Conference

Presentations 2014-2015
Western Finance Association (WFA), Seattle
Chicago Quantitative Analysis/Society of Quantitative Analysis (CQA/SQA) Annual Conference, New York
Electronic Trading conference Toulouse School of Economics
Brevan Howard Centre Conference on High-Frequency Trading, London
Bank of England
The London School of Economics, Department of Finance
Discussions: Western Finance Association (WFA)

Presentations 2013-2014
American Financial Association (AFA), Philadelphia
SFS Cavalcade, Washington D.C.
Society of Economic Dynamics (SED), Toronto
Chicago Fed Workshop on Money, Banking, and Payments
University of Amsterdam, Department of Finance
Imperial College London, Department of Finance
New York Federal Reserve Bank, New York
CAFIN Conference, Santa Cruz California

Presentations 2012-2013
Stern Microstructure Conference, New York
UCLA Anderson School of Management
Toulouse School of Economics
London School of Economics Dept. of Finance
Swiss Finance Institute, Lugano
4th Annual Conference on Money, Banking and Asset Markets, Madison, WI
• Tepper-LAEF Advances in Macro Finance III, Santa Barbara, CA
• UTDT Business School, Buenos Aires
• Paris High-Frequency Trading Conference
• Paul Woolley London School of Economics Conference

Discussions: SFS Cavalcade

Presentations 2011-2012
• Western Finance Association (WFA), Las Vegas
• Finance Theory Group (FTG), Harvard Business School
• Econometric Society North America Meetings, Evanston
• University of Rochester, Department of Economics
• HEC Paris, Department of Finance
• 4th Hedge Fund Research Conference Euronext, Paris
• Napa Conference on Financial Markets, Napa
• Tinbergen Institute, Amsterdam
• Universidad de San Andres, Buenos Aires
• University of Illinois at Chicago, Chicago
• Cowles Foundation General Equilibrium Conference, Yale U.

Discussions: WFA, LSE Paul Woolley Conference, NYU Stern Microstructure Conference

Presentations 2010-2011
• Econometric Society World Conference, Shanghai
• Society of Economics Dynamics (SED), Ghent
• Stern’s NASDAQ OMX Derivatives Research, New York
• Universidad de San Andres, Buenos Aires

Discussions: WFA, NYU Five Star Conference

Presentations 2009-2010
• Massachusetts Institute of Technology (MIT) Sloan School, Dept. of Finance
• Columbia Business School, Dept. of Finance
• INSEAD, Finance Group
• Stern School of Business, Dept. of Finance
• New York University, Dept. of Economics
• University of Toronto, Strategy Group
• UBC Sauder, Dept. of Finance
• UW Madison, Department of Finance
• ESSEC Finance, Paris
• Financial Intermediation Society, Prague (paper accepted),
• Federal Reserve Board of Governors, Washington D.C.
• Econometric Society NASM (Pittsburgh)
• Econometric Society ESEM (Milan).

HONORS & AWARDS

Best Crypto Economics Paper Award at the 2nd Toronto Fintech Conference 2019
Quantitative Sciences Research Institute (QSRI) award to organize the conference “Frictions in Finance: Theory and Evidence,” with Johannes Muhle-Karbe (£7,500). 2019
The Smith Richardson Foundation Grant ($50,000) with Thomas Philippon 2010
Dissertation Year Fellowship, Northwestern University. 2008
Robert Eisner Memorial Fellowship, Northwestern University. 2007
(yearly awarded by the Department of Economics to one graduate student who has distinguished himself/herself in both research and teaching).
Distinguished Teaching Assistant Award, Northwestern University. 2007
Northwestern University PhD Fellowship. 2004-07
Universidad de San Andres, Graduate School of Economics Fellowship. 2003
U. of Buenos Aires School of Economics Gold Medal (highest GPA, 1 out of 278). 2002
Argentine National Chemistry Olympiad, 4th place in the country. 1996

COURSES TAUGHT

Corporate Finance (Imperial College Business School, graduate level)
Corporate Finance (Imperial College, undergraduate level)
Foundations of Financial Markets (NYU Stern, undergraduate level)
Foundations of Finance (NYU Stern, MBA core class)

PROFESSIONAL SERVICE

Refereeing

Conference Organization
Jointly organized with Johannes Muhle-Karbe (ICL Dept. of Mathematics)

Conference Program Selection.

PROFESSIONAL AFFILIATIONS


January 2020