Who Benefits from Innovations in Financial Technology? (Job Market Paper)

Roxana Mihet*†
PhD Candidate in Financial Economics
New York University, Stern School of Business

Please click here for the latest version

October 23, 2019

Abstract

Financial technology affect both efficiency and equity in the stock-market. The impact is nontrivial because several key innovations have altered multiple dimensions of investors' opportunity sets at the same time. For example, better and faster computing has made it (1) cheaper for retail investors to participate, and (2) to find funds that meet their needs, but also (3) cheaper for sophisticated investors to learn about asset returns. Some experts believe this may increase financial inclusion, others worry about possible anti-competitive effects that can lead to a more unequal wealth distribution. To settle this debate, I build a theoretical model of intermediated trading under asymmetric information that allows me to study each innovation in isolation. In the model, these changes have opposing implications for financial inclusion, competition, and inequality. The final outcome depends on which one dominates. Interpreting the data through the lens of my model suggests that the gains from financial technology were accruing to low-wealth investors before the 2000s, but they are now accruing to high-wealth investors. The reason this is happening is that even if investors have access to the equity premium through cheap funds, improvements in financial technology disproportionately benefit informed, big data players. This reduces the participation rate of low-wealth investors, improves price informativeness, enlarges (but consolidates) the active investment management industry and amplifies capital income inequality.

JEL codes: E21, G11, G14, L1, L15

[†]First draft: October 2017. Current draft: October 2019.

 $\label{eq:Keywords: Financial technology; stock market; asset management; information; participation; inequality.$

^{*}Contact: rmihet@stern.nyu.edu. Acknowledgements: I am indebted to my advisors, Laura Veldkamp, Thomas Philippon, Venky Venkateswaran, and Thomas Sargent for their unwavering support and patient advice. I have learned immensely from them. I am grateful to Jess Benhabib, Stijn Claessens, Jerome Dugast, Mark Gertler, Avi Goldfarb, Lars Hansen, Paymon Khorrami, Luc Laeven, Andrew Lo, Joseba Martinez, Emily Moschini, John Muellbauer, Cecilia Parlatore, Luigi Pistaferri, Claudia Sahm, Hyun Shin, Johannes Stroebel, and Ansgar Walther for their useful suggestions, as well as to conference participants at the 2019 Future of Financial Information, 2019 Young Economist Symposium, 2019 Macro-Finance Society, 2018 Chicago Booth Asset Pricing, 2018 Macro Financial Modeling Conferences, 2018 Wharton Women in Business, and seminar participants at the BIS, IMF, NYU Stern and NYU. I thank Chase Coleman, Clara Dolfen, Adam Nahum, Bang Nguyen, and Desi Volker for their helpful encouragement. Financial support by NYU Stern and the Becker Friedman Institute through the Macro-Financial Modeling Dissertation Grant is gratefully acknowledged. Part of this work was done during a PhD Fellowship at the BIS. All errors are my own.