## Is Financial Technology Making the Rich Richer? (Job Market Paper)

Roxana Mihet\*

Please click here for the latest version

October 11, 2019

## Abstract

Improvements in financial technology have led to a decrease in the costs of (1) entering the stock market, (2) finding a good asset manager, and (3) acquiring information about asset returns. Some experts believe this may lead to more financial inclusion, others to more unequal wealth distribution. To study this problem, I build a theoretical model of intermediated trading under imperfect information that contains these three types of costs. In the model, the simultaneous presence of these costs generates a trade-off between participation (i.e. risk-sharing) and efficiency (i.e. information), which can amplify inequality. The final outcome depends on which effect dominates, which can be backed out from the data. The key insight is that even if the costs of stock market participation fall, improvements in financial technology disproportionately benefit informed, big data players. This reduces the participation rate of low-wealth investors, improves price informativeness, enlarges (and consolidates) the active investment management industry and amplifies capital wealth inequality. Calibrating the model to US macro data, I find that the empirically observed improvement in financial technologies can explain more than 80% of the increase in top 20% capital wealth share and 67% of the consolidation of the hedge fund industry.

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

Keywords: Technological change; stock market; investment management; information; efficiency; participation; inequality.

<sup>\*</sup>Acknowledgements: I am endebted to my advisors, Laura Veldkamp, Venky Venkateswaran, and Thomas Philippon for their unwavering support and patient advice. I have learned immensely from them. I am grateful to Thomas Sargent, Jess Benhabib, Stijn Claessens, Jerome Dugast, Mark Gertler, Avi Goldfarb, Luc Laeven, Andrew Lo, Joseba Martinez, John Muellbauer, Cecilia Parlatore, Paul Goldsmith-Pinkham, Luigi Pistaferri, Claudia Sahm, Hyun Shin, Johannes Stroebel, and Ansgar Walther for their useful suggestions, as well as to participants at various conferences, including the 2019 Future of Financial Information, 2019 Young Economist Symposium, 2019 Macro-Finance Society, 2018 Chicago Booth Asset Pricing, 2018 Macro-Financial Modeling Workshop, BIS, IMF, NYU Stern and NYU GSAS. I thank Chase Coleman, Clara Dolfen, Emily Moschini, Adam Nahum, Bang Nguyen and Desi Volker for 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.

<sup>&</sup>lt;sup>†</sup>PhD candidate in Financial Economics, New York University, Stern School of Business. rm3253@nyu.edu (email), +1-347-784-8422 (cell), 44 W 4th Street, KMC 7-176G, New York, NY 10012, US.