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

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Abstract

Progress in financial technology affects both efficiency and equity in the stock-market. The impact is non-trivial because several key technical changes have altered multiple dimensions of investors' opportunity sets at the same time. For example, better and faster computing has simultaneously 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 a more unequal wealth distribution. To answer this question, we need to care about which of these costs is altered most. In this paper, I build a theoretical model of intermediated trading under imperfect information that allows me to study each cost in isolation. In the model, improvements in these costs have opposing implications for participation (i.e. risk-sharing) and efficiency (i.e. information). The final outcome depends on which effect dominates, which can be deduced from the data. The key insight is that even if the costs of 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 active investment management industry.

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

Keywords: Financial technology; stock market; investment management; information; efficiency; participation; inequality.

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