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

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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.

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