Are New Information Technologies Making the Rich Richer? (Job Market Paper)

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Abstract

Technological innovations may increase rents in the stock market: to whom do they accrue? In this paper, I build a theoretical model to study the effects of three aspects of technological change: a decrease in the costs of (1) entering the stock market, (2) searching for informed investment managers, and (3) acquiring private information about asset returns. The key insight of the model is that even if the costs of stock market participation fall, the information revolution disproportionately benefits informed, big data players with the scale and resources to take advantage of it. 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 data, I find that the empirically observed decrease in participation, search and information costs can explain more than 80% of the increase in top 20% capital wealth share and 67% of the decrease in the number of hedge funds.

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

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

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