Are New Information Technologies Making the Rich Richer?

Roxana Mihet*
New York University,
Stern School of Business

November 19, 2018

Abstract

Over the last thirty years, American stock-markets have seen significant changes in who, what, and how investors trade. Today, the most active professionals - half of them hedge funds - do 50% of all NYSE listed stock trading, and the smallest of these 50 giants spends more than $100 million annually acquiring information services from the global securities industry. Yet, the recent information technology revolution has made information acquisition cheaper than ever before and has promised to completely restructure capital markets. The internet of things, machine learning, AI algorithms trained on big data sets, and so on, have started a revolution in global access to knowledge. Information is now instantaneous, worldwide, cheap, and accessible 24/7. In this paper, I think carefully about how these technological developments affect the gap between the rich and the poor. In particular, I build a noisy rational expectations model of the stock-market in order to understand how the introduction of new information technologies can change who, what, and how investors trade. Ultimately the goal of the paper is to say something about whether the recent information technology revolution could render stock-markets more equitable by allowing poorer households an easier access to the equity premium, or not. I show that lower information costs do not automatically translate into more equal outcomes.

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

Keywords: New technologies, Portfolio Choice, Capital Income Inequality.