

Summary of Broadband Internet and the Stock Market Investments of Individual Investors

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1) What are the research questions ?

Study the effects of the rollout of high-speed broadband internet on the stock market participation and portfolio choices of individual investors.

2) Why are the research questions interesting?

Does Internet use spur a “democratization of finance” ?

-Prior studies : internet use (1) amplifies behavioral biases (Laibson and Metrick , 2002); (2) has amixed effects on the quality of financial decisions (Allen et al., 2022)

-This study:draws another conclusion utilizing (1) unique data, exogenous variation in internet use and subgroups of investors and broader population; (2)investigate the effect of Internet applications usage rather than Internet itself on individuals’ financial decisions.

3) What is the paper’s contribution?

-Literature on how internet use affects the portfolio choices of individual investors.

- Prior studies: Easier/more fun internet trading platforms have negative effect: excessive stock trading; herding and speculation(Barber et al., 2002; Barber et al., 2022;Allen et al., 2022).
- Extend: stock market participation improves portfolio efficiency of individual investors.

-Literature on household finance (factors that affect stock market participation).

- Prior studies: personal wealth; education attainment; computer ownership; financial literacy(Briggs et al., 2021; Fagereng et al., 2021; Cole et al., 2014; Bogan, 2008; Lusardi et al., 2017).
- Extend: participation increases with access to high-speed broadband internet.

-Literature on policy debates on funding of broadband infrastucture.

- Prior studies: internet effects on education and health; democratic participation;

economic growth(LaRose et al. ,2011; Bauerly et al., 2019; Campante et al., 2017; Czernich et al., 2011).

- Extend: internet use leads to democratization of finance.

4) What hypotheses are tested in the paper?

H1: broadband internet use leads to increased stock market participation(fund ownership).

H2: Existing investors obtain more diversified portfolios and higher Sharpe ratios.

The logic of hypotheses:

(1) faster internet reduces the cost of entering stock market.

(2) broadband provides eases access of information about portfolio allocation and improves individuals' financial skills.

5) Sample

Data from NCSD, where each transaction can be linked to register data.

6) Dependent and independent variables

Independent variable: (1)Broadband Internet Use(complete record); (2)broadband coverage rates(avoid double-counting).

7) Regression/prediction model specification

Instrument Z_{kt-1} is exogenous in equation(3).

8) What difficulties arise in drawing inferences from the empirical work?

Intuitively, higher broadband user rates also increases individual investors' trading in stocks, but this study shows this effect is insignificant in Table 2.

9) Describe at least one publishable and feasible extension of this research.

-Using other unique data(Chinese data?).

-Impact of Broadband Internet on Institutional Investors' investments.