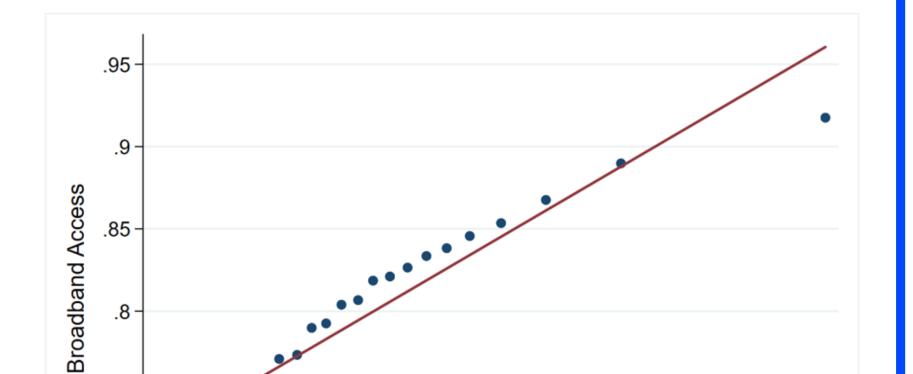
Is Internet Essential (and Sufficient) for Financial Inclusion? **Evidence from Internet Essentials**

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Can Access to Broadband Internet Improve Low-income Households' Financial Inclusion?

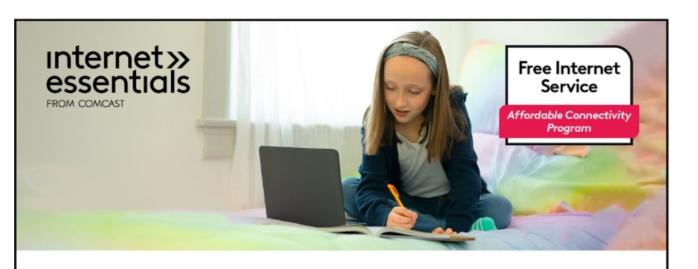
- Internet access is important for daily tasks but can be costly for low-income households
- Previous literature suggests that, for the average household, the availability of high-speed internet meaningfully improves financial inclusion outcomes (such as stock market participation).
- However, this conclusion may not apply to low-income households, who cannot afford high-speed



internet even if it is available.

• To precisely estimate the effect on low-income households, an ideal experiment needs to randomize within low-income households who do not previously have internet access, provide some of them with subsidized broadband, and compare their outcomes in financial inclusion.

The Internet Essentials (IE) "Experiment"



Get connected to FREE home Internet!		
The Affordable Connectivity Program could cover your costs.		
Internet Essentials: \$995 = \$0	After benefit applied, tax extra	Apply Now >>

Credit: IE Program

- Provides subsidized internet for qualifying low-income households with school-age kids
- Comcast pledged in 2010 as part of the merger deal with NBC Universal
- Piloted in 2011 (Chicago and DC)
- Available nationwide in 2012
- Internet Essentials reduced the digital divide by 30%

Cross-sectional Variations

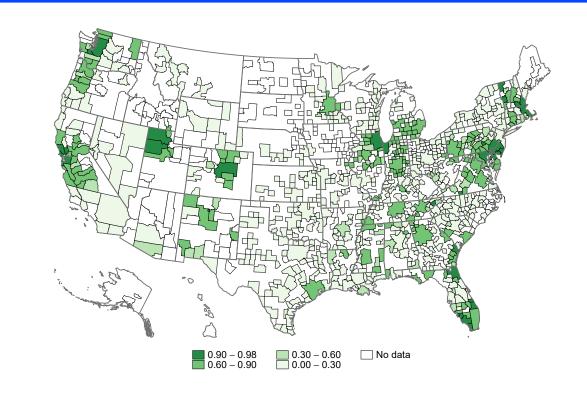
60,000

Median Household Income (\$)

40.000

80,000

100,000

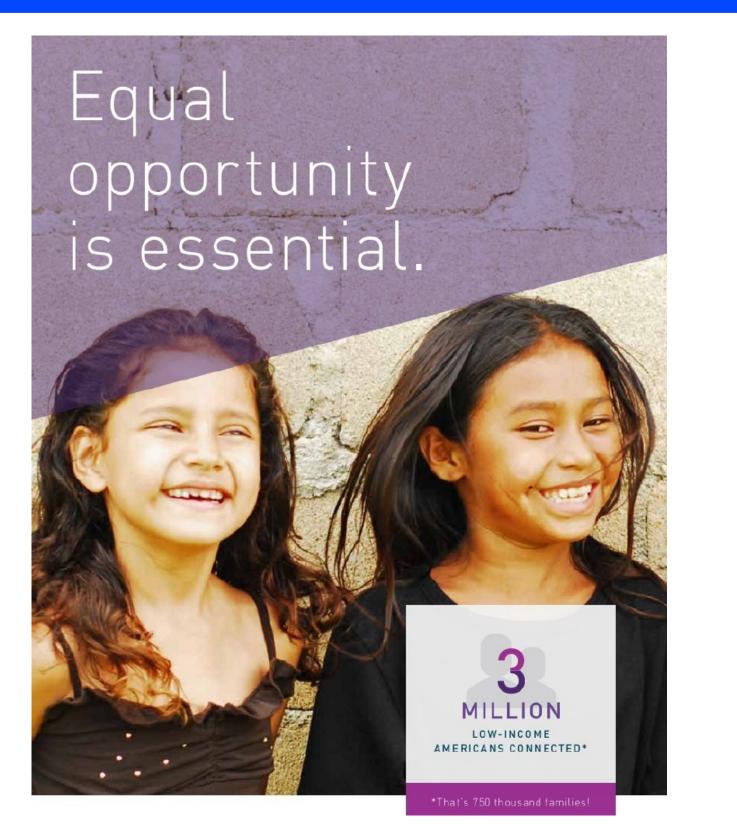


- Varying Comcast availability
- Varying household eligibility

Treatment Validation

Data and Empirical Specification

- Census Microdata
 - ACS: Labor outcomes, investment
 - CPS: Dividend, interest
- Estimation window: 2009-2015
- Sample: households at or below 200% FPL
- Triple differences estimation:
 - Post \times Comcast \times Eligible
 - Controls (household/individual characteristics)
 - Saturated fixed effects



Credit: IE Progress Report (2016)

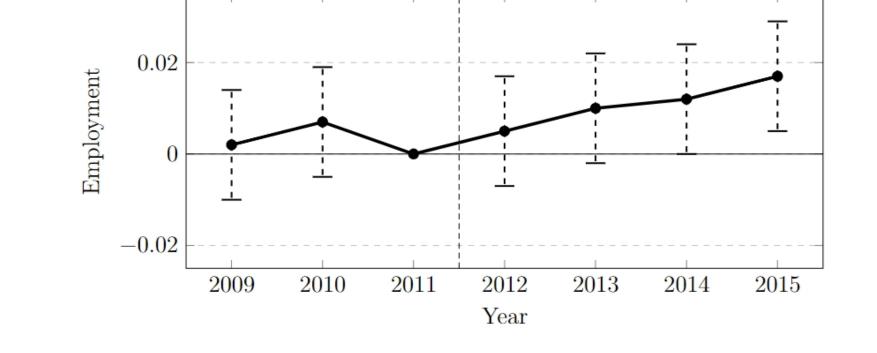
-0.01

-0.02

2009

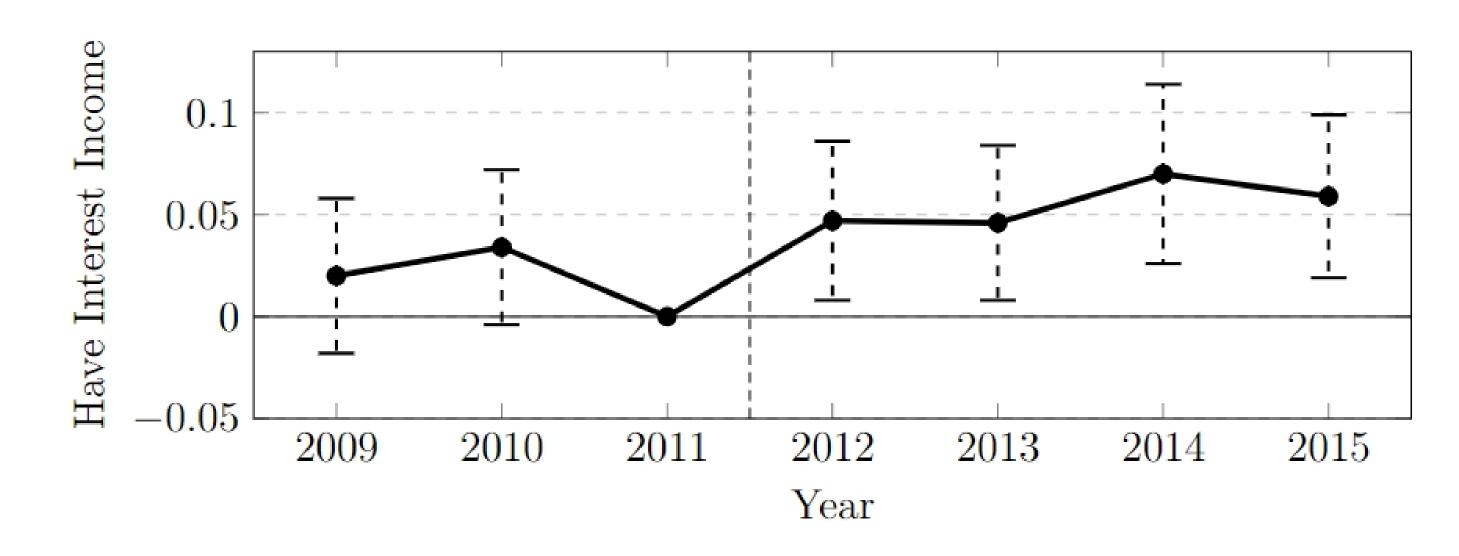
2010

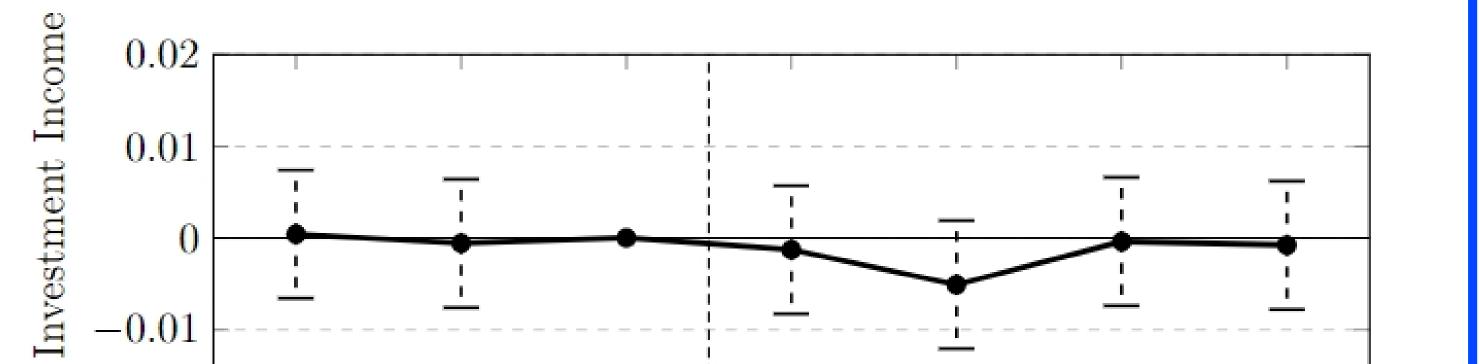
Have



- IE brings improvement in labor outcomes, as shown in prior literature (Zuo, 2021)
- Increased employment by 0.8 pps
- Increased annual labor income by \$142
- About 2% increase compared to the mean, significant at the 5% level

Meaningful Improvement in Savings, but not Stock Market Participation





Internet access leads to a 3.6 pps increase in the savings rate

Internet access has no impact on stock market participation

2012

Year

2013

2014

2015

2011

Takeaways and Next Steps

- Internet is essential for financial inclusion (such as savings)
- But may not be sufficient for stock market participation
- Also looking into consumer credit outcomes using credit bureau data
- Preliminary results suggest improvement in credit outcomes