

FinTech and Consumer Well-Being in the Information Age

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- ▶ The empirical challenge is to find data on both access to information and economic outcomes, and to deal with endogeneity, reverse causality, and omitted variables
- ▶ Using data from a financial aggregation software, we show that better technology improves decision-making
 - ▶ Logging in one more time per month reduces high-interest unsecured consumer debt by 14 percent over a two-year period
 - ▶ Late fees and other financial penalties are reduced too

Data: From a financial aggregation app

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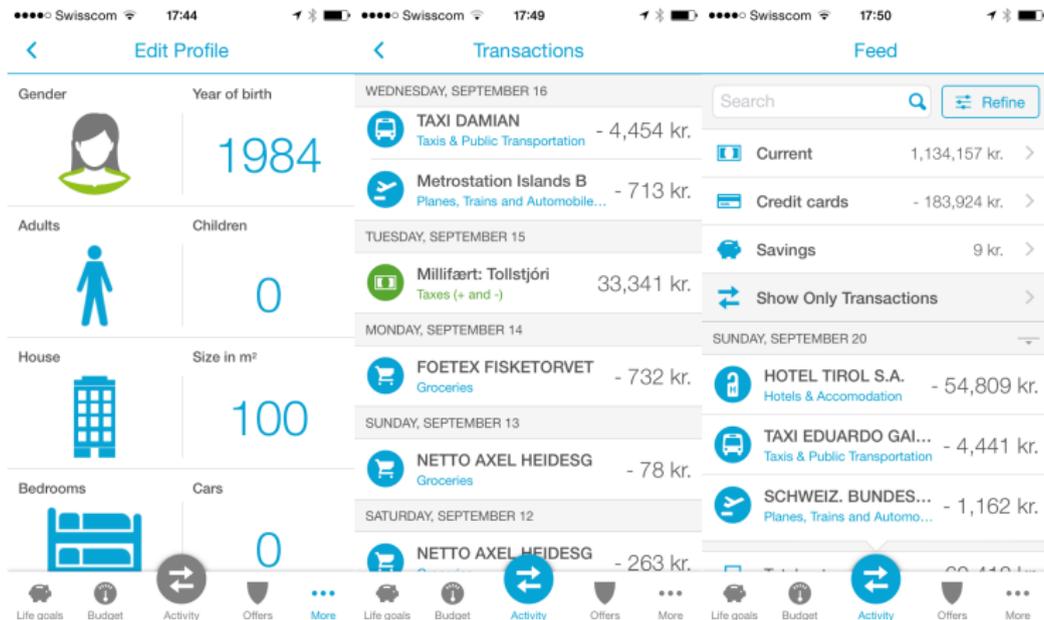
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 - ▶ Icelanders (almost) never use cash
 - ▶ App is marketed through banks and we have a fairly representative sample
 - ▶ Income and spending are pre-categorized
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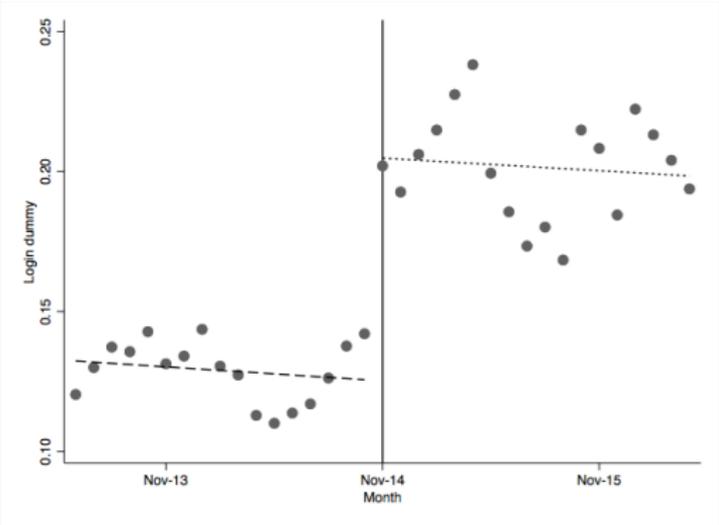
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- ▶ Before November 2014, access to this personal information only occurred via the internet on a desktop or laptop computer whereas after a smart phone app was introduced

The financial aggregation app: Screenshots

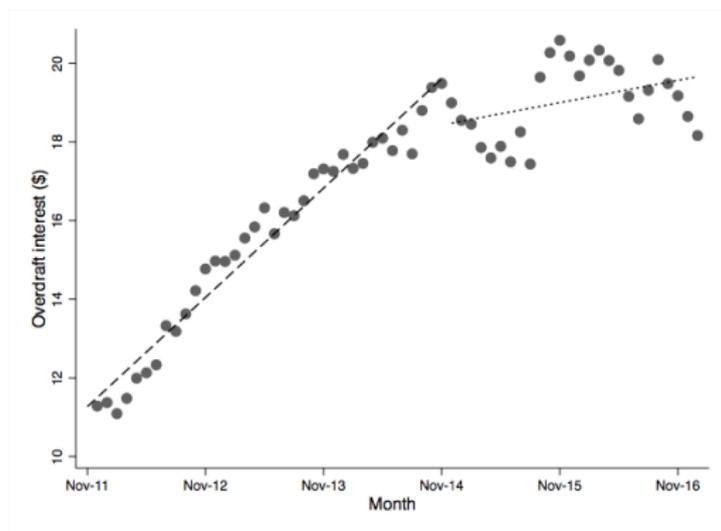


Raw data: Logins

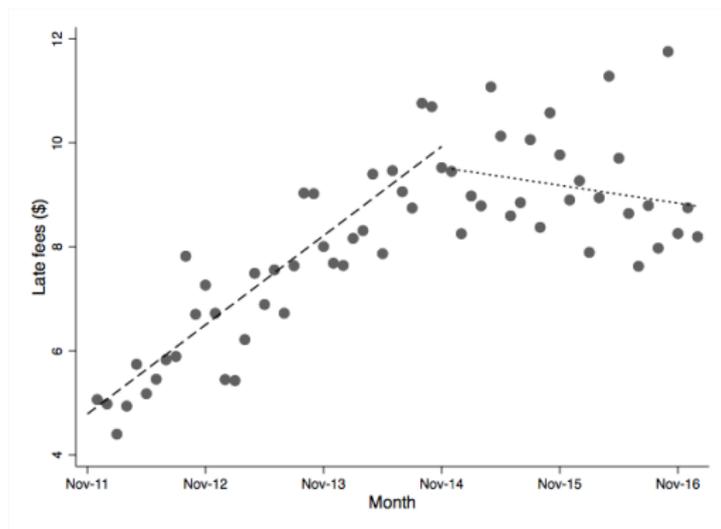
Based on the raw data, there is an obvious discontinuity in the propensity of individuals to log into their financial accounts around the introduction of the mobile app



Raw data: Overdraft interest fees



Raw data: Late fees



- ▶ Up until the introduction of the app, late fees increased but there was a trend change at the time of the app intro

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- ▶ Complement within-individual identification with a cross-sectional diff-in-diff (DiD) approach

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- ▶ Effects are mainly driven by the reduction in overdraft interest
 - ▶ 176.8 Krona per month for overdraft interest
 - ▶ Based on average \$1,356 overdraft debt and \$13 interest expense per month, this is a reduction of roughly 14%.
 - ▶ 53.2 Krona per month for late fees

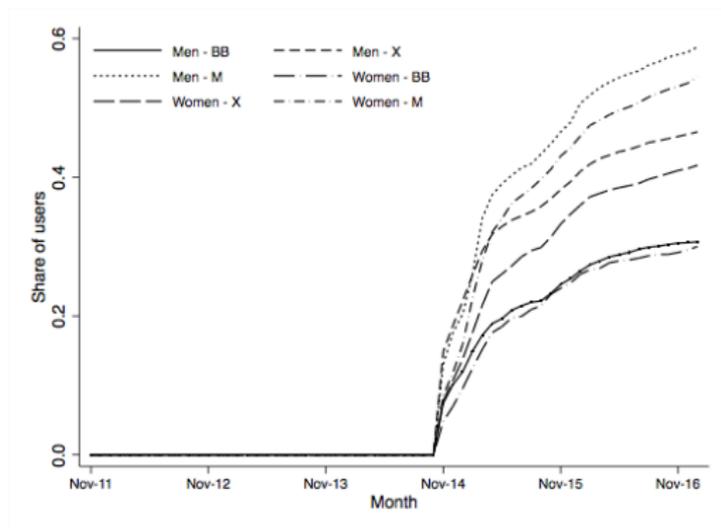
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- ▶ Increase in credit card use versus overdrafts same time
 - ▶ Each additional login associated with a 2.36% increase in fraction of expenditures purchased with credit card
 - ▶ Credit card offers 30-50 day float.

Generational Differences: App Logins

Millennials > Gen X'ers > Baby Boomers

By 2016, 52% of Millennials versus 27% of Baby Boomers



Generational Differences: Coholding Puzzle

- ▶ Baby Boomers and Gen Xers incur higher financial penalties than Millennials
 - ▶ Higher overdraft interest
 - ▶ More likely to incur late fees (28.6% and 33.1% versus 18.4%)
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- ▶ Baby Boomers and Gen Xers have more severe coholding behavior
 - ▶ Higher unnecessary overdrafts (\$150.9 and \$124.5 versus \$81.01)
 - ▶ Higher annual coholding costs (\$19.98 and \$16.49 versus \$10.73)

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- * Implications for people of different generations
 - ▶ Different adoption rates and patterns of use of financial instruments
 - ▶ May have policy implications that vary across the population