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OPEN BANKING AND CUSTOMER DATA SHARING: IMPLICATIONS FOR FINTECH BORROWERS

EUROPEAN CENTRAL BANK

EUROSYSTEM

Motivation

- Economic activities generate vast amounts of consumer data (*big data).*


The Economist | Menu | Weekly edition | The world in brief | Search

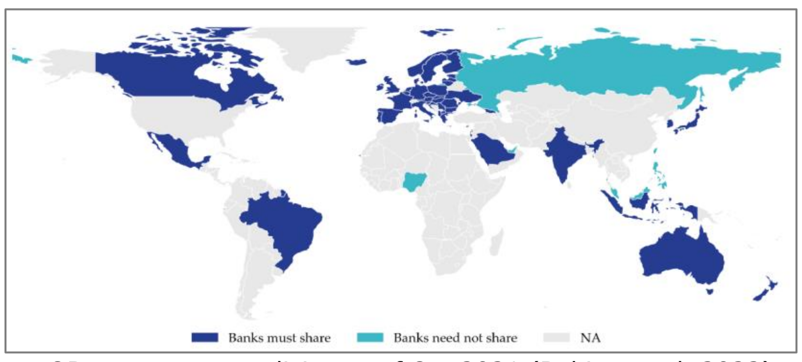
Leaders | Regulating the internet giants

The world's most valuable resource is no longer oil, but data

- Banks have long enjoyed data-monopoly
- Consumers have historically lacked rights to their own financial data and have not reaped the same benefits.

Open banking regulation

- Shifts data ownership from the bank to the customer.
- Consumers decide whom to share data with.
- Covers *transaction data* from bank accounts.
- Banks are obliged* to share, under consent, with third parties securely.



OB government policies as of Oct 2021 (Babina et al. 2022)

- The EU and the UK are at the forefront.
- In Europe, under the revised Payment Service Directives 2 (PSD2) Access to Account (XS2A), all institutions that offer payment accounts must offer access to account information when customers consent.

Research questions

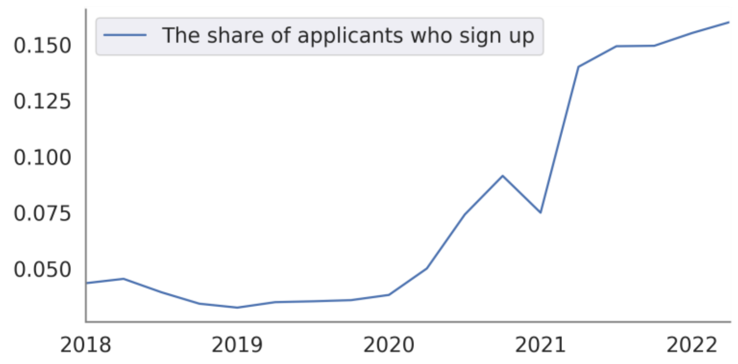
- What characterizes borrowers who share data?
- How does data sharing affect
  - the probability of loan approval?
  - the loan interest rate?
  - the use of standard variables in assessing credit risk

  → *Is OB data informative over and above? How much?*
- What are the channels?

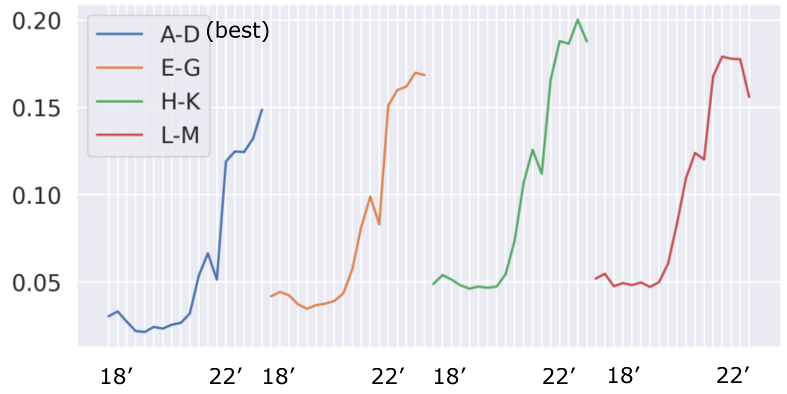
Data

- Granular loan application data from the largest German FinTech lender in consumer credit, *Auxmoney*
  - Information from credit bureaus
  - Detailed loan applicant information (approx. 2.3 mil) (i.e. income, expenses, assets, liabilities)
  - Loan characteristics
  - Loan approval decision
  - and platform-provided credit scores

Increasing data sharing over time

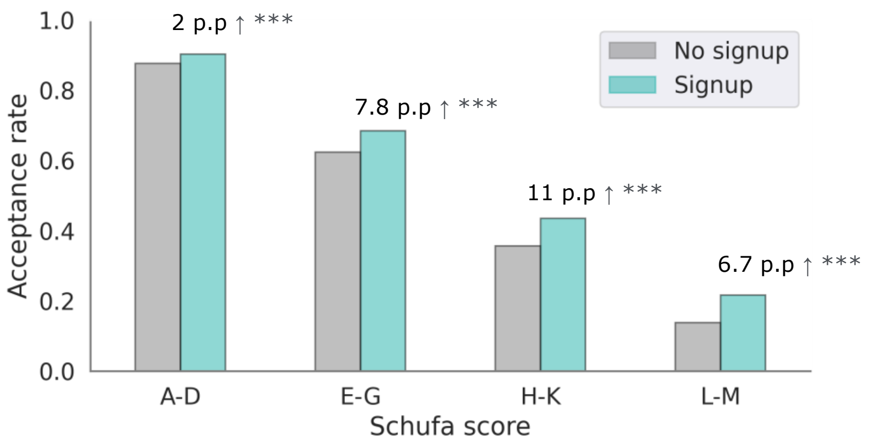


Low credit rating borrowers are more likely to share data

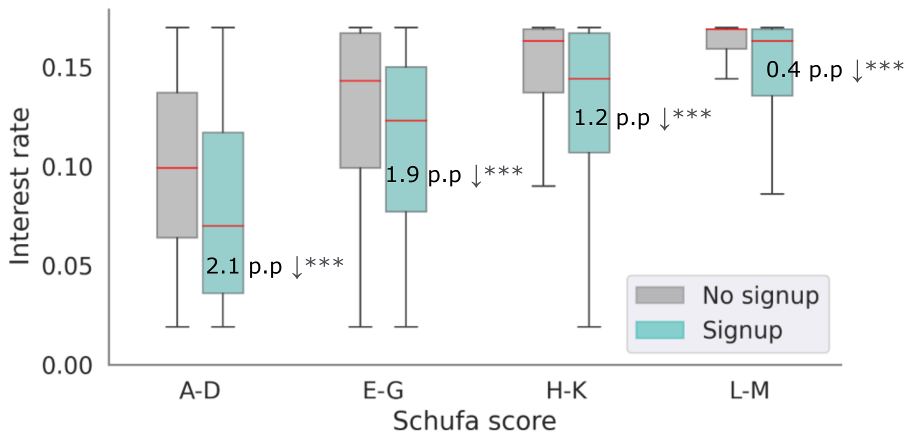


- Women and older individuals less likely to share
- Individuals with more outstanding/past loans are more likely to share

Data sharing improves loan approval rates



Data sharing reduces loan rates



Standard credit variables matter less with data sharing

- Loan approval: substantially less variation is explained by traditional credit variables
  - R2 comparison between data sharing and no data sharing

	Controls	Signup	No signup	Signup R2 - No signup R2
(1)	Credit score	0.1715	0.1971	-0.0256
(2)	+ loan amount, duration	0.1770	0.2291	-0.0521
(3)	+ age, income, main earner	0.2259	0.2733	-0.0474
(4)	All	0.2327	0.3022	-0.0695

Data sharing as *signaling*? Goodtypes indeed more likely to share, but..

- *Goodtype = 1* if the borrower always pays on time
- Inconclusive for borrowers with lower credit scores

	(best)	DV=1 if data shared		
Credit score group	(A-D)	(E-G)	(H-K)	(L-M)
Goodtype (=1 if always paid on time)	0.066***	0.054***	0.043**	0.034
	(0.011)	(0.010)	(0.018)	(0.052)
Controls	Y	Y	Y	Y
Cluster (Zipcode-Year)	Y	Y	Y	Y
N	22,214	19,738	4,884	401
Pseudo R2	0.0718	0.0811	0.0723	0.0865

Key takeaways

- Open banking and data sharing lead to positive loan application outcomes on the intensive/extensive margin
- Particularly beneficial for borrowers with thin credit files