

Does Open Banking Expand Credit Access

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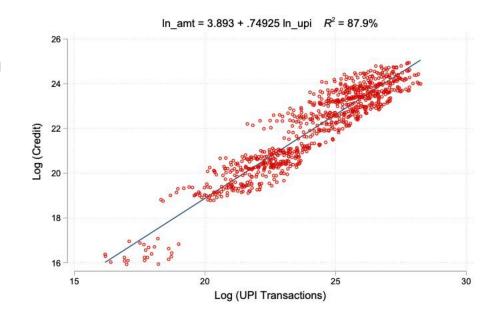
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Summary

- Key contribution: First large-scale study on the impact of digital payment infrastructure on credit markets
- Findings: Credit market access increases based on data from a fintech lender, particularly in subprime and new-to-credit customers (relatively)
- Huge data effort!
- Relevant literature:
 - Financial inclusion (e.g., Agarwal et al. 2017, Cole et al. 2011)
 - FinTech and credit access (e.g., Buchak et al. 2018, Fuster et al. 2019)
 - Open banking (e.g., Parlour et al. 2022, Babina et al. 2024)
 - Digital financial infrastructure (e.g., Berg et al. 2020, Crouzet et al. 2023)
 - Additional relevant literature not identified: Impact of government interventions on financial markets (e.g., Mian and Sufi 2009, Di Maggio et al. 2017)





Open Banking Framework

Open banking is a financial services model that enables third-party developers to access consumer banking data through the use of application programming interfaces (APIs).

(He et al 2023 JFE)

- Lower Switching Cost: Can move data around, so banks face more competition.
- Relationship Banking: More open banking, less incentive to start new relationships since less relationship rents
- Here: Results focusing only on the fintech lenders for whom theory unambiguously predicts will be better off.
- Bigger picture: overall welfare can come down if fintech becomes too empowered (they become monopoly), industry profits up. (Allowing voluntary sign ups does not necessarily make this effect go away.)
- Also worth thinking about privacy.

Digital Financial Infrastructure



Is it worth thinking about open-banking without digital IDs?

GovTech

- Digital IDs (e.g., SingPass, Aadhaar) & document warehousing
- Public payment rails (e.g., UPI, Pix)

Industry

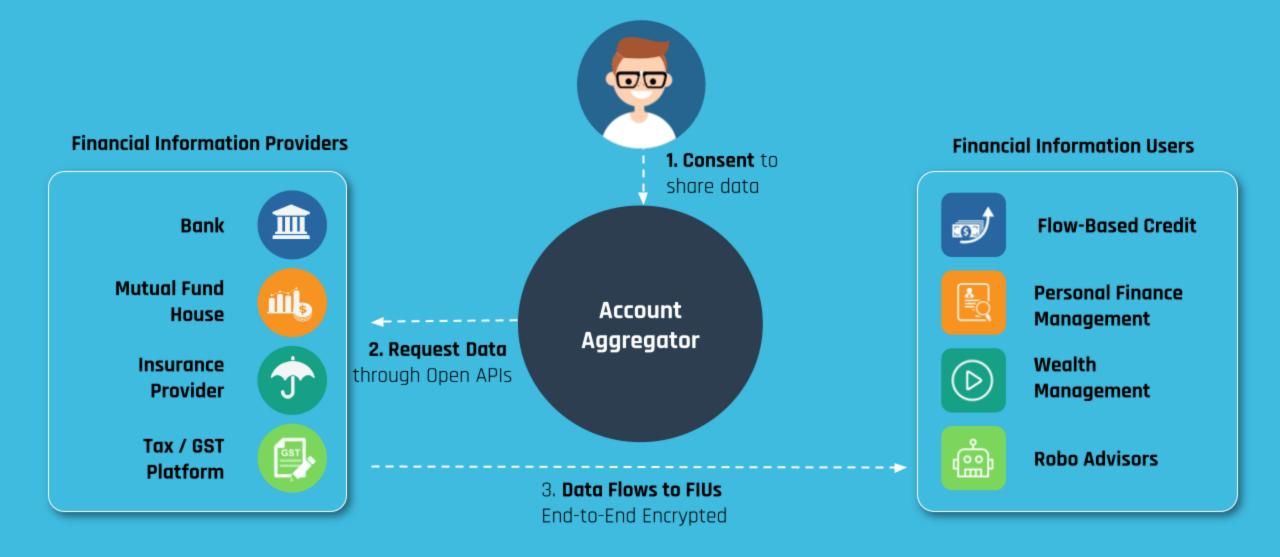
- Data portability (via APIs) aka Open Banking
- Payment networks (e.g., Visa)
- Unified QR system
- Data governance /contracting

Lender-Specific

- Mobile Apps
- Web portal
- Physical OTP devices

The Account Aggregator

will facilitate consented sharing of financial information in real-time





Comment #1. What is UPI?

- Part of the "India Stack", including Aadhaar digital ID system, but can be distinct, it seems.
 (p.4)
- Can we disentangle the shock to **digital payments** vs **digital IDs** vs **data portability**? Very hard to disentangle the three.
- If makes operating costs lower generally, will see more loans from all types of lenders (as is found here), driven by the extensive margin borrower.
 - What about intensive margin bank borrowers?
 - Worth a thought/discussion: is open banking possible without digital IDs
- Is it about digital payments & financial history? Hard to distinguish between this and Pulak's
 other paper on fintech lending & cashless payments.
 - (Conversely, for the other paper, if UPI shock enables data portability, hard to distinguish that with this!)
- External validity may be very limited → evaluation of the whole "bundle of shocks"



Comment #2. Welfare

- May want to be careful with statements like "a low entry barrier may result in excessive competition" without citation or justification.
- "We document an increase in credit access to marginal and unserved borrowers." → True, but also: Effects (Table 6):

Subprime < New-To-Credit << Prime

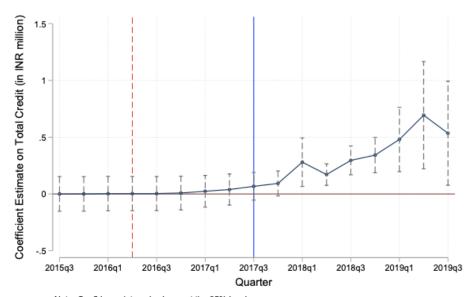
- From theoretical predictions: interesting action will be with the existing banks. Can check their profitability?
 - Are the new borrowers positive NPV? Back to theory: if too much cream skimming (Buchak et al 2018), may not be welfare enhancing
- Suggestion: Incorporate analysis of loan performance, default rates, and broader economic impacts over a longer time horizon
- Anything on financial literacy and heterogenous effects?
 - Connectivity through Jio → correlated with income? If so, repackaging Table 6 to 9.





Was it really a shock?

Figure 8
Treatment Dynamics: Impact on FinTech Credit



Note: Confidence intervals shown at the 95% level.

80 60 00 00 20 20 2015q3 2016q1 2016q3 2017q1 2017q3 2018q1 2018q3 2019q1 2019q1 2019q1 Quarter

Note: Confidence intervals shown at the 95% level

Panel B: Number of loans



Comment #3. Identification

- Text: "Our pincode-level measure of UPI exposure is the total local pre-UPI deposit share of banks that were early to implement UPI (early entrants)." → seems a bit by Gopal & Schnabl 2022 RFS, but with a bit more endogeneity.
 - Potential endogeneity in UPI exposure measure. Early adopter banks may have chosen to implement UPI based on unobservable characteristics of their customer base or local market conditions.
 - Maybe can argue decision at HQ is unrelated to branch-level, but seems iffy.
- Can take the network effect (Higgins 2024) more seriously and model it?
 - Potential concern: If UPI raises spending overall (as per literature), then becomes local economic condition improvement quarter to quarter, leading to more UPI, etc.
- Specification: Perhaps include a linear time trend on the log(value)?
 - Currently, District*Time FE on levels doesn't pull out natural growth rates within district across time.
 - Also, log will address my concern in Comment #2 about the distributional effects, allowing different relative base levels.



Conclusion

- A great study on the overall patterns around the introduction of the India Stack
- Teasing mechanisms may be a challenge → external validity.
- Expanding financial market access to 99% of Indian households is a HUGE feat
- Highly recommend to read for anyone interested in development or fintech.