

Discussion of Big techs and the credit channel of monetary policy

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QCGBF Annual Conference
London
July 2, 2024

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 - Banks require collateral
 - Big-tech does not \Rightarrow the threat of platform exclusion enforces repayment
- Three findings from the model
 - Big tech's higher efficiency \Rightarrow more availability of credit and higher value for firms of operating on the platform
 - MP has larger effect on output (but less persistent)
 - Efficiency gains (due to better matching) limited by distortionary fees



Summary of the model

- Three main blocks
 - Search and matching along the production chain
 - Nominal rigidities (sticky wages)
 - Credit frictions

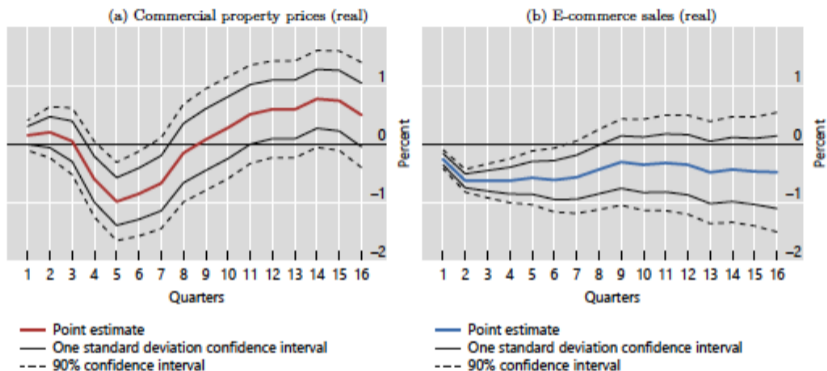


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 - Bank lending = $L_t^s \leq \nu E_t[\text{Value of Physical Capital}]$
 - Tech lending = $L_t^b \leq b E_t[\text{Value of Staying in the Platform}]$



Implications for the transmission of monetary policy



- MP has larger effect on commercial property values than on E-commerce sales
- MP transmits differently because it affects each borrowing constraint differently



General thoughts and outline

- Key topic with large macro and MP implications
 - Big tech is getting bigger, so is their lending
 - Their lending is different along a number of dimensions \Rightarrow crucial to understand its implications



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 - Their lending is different along a number of dimensions \Rightarrow crucial to understand its implications
- Outline of the discussion
 1. What is big-tech lending replacing?
 2. Enforceability of contracts
 3. Financial stability considerations



Comment 0: How's tech lending different?

- Borrowing constraint:
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Comment 0: How's tech lending different?

- Borrowing constraint:
 - Bank lending = $L_t^s \leq vE_t[\text{Value of Physical Capital}]$
 - Tech lending = $L_t^b \leq bE_t[\text{Value of Staying in the Platform}]$
- Existing literature on cash-flow based borrowing constraints
 - Similarity: lending constraint is a function of present value of future cash flows
 - Difference
 - Traditional view: legal environment affects ability to pledge/seize cash flows, losing trade partner
 - Big-tech: platform exclusion



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- In the paper: bank borrowing with (asset) collateral but...



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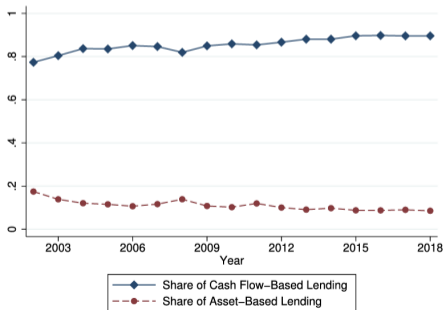
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- Lian and Ma (2020): “For U.S. nonfinancial firms, we show that 20% of debt by value is based on such assets (asset-based lending in creditor parlance), whereas 80% is based predominantly on cash flows from firms' operations (cash flow-based lending)”



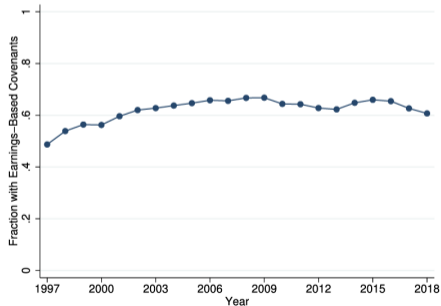
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(A) Median Share of Cash Flow-Based Lending



(B) Fraction of Firms with Earnings-Based Covenants



Comment 1 (cont'd): What's tech lending replacing?

- Lian and Ma (2020): "...Traditional specifications of borrowing constraints in macro-finance models, such as restricting a firm's total debt based on the liquidation value of physical assets ... or based on the capital stock may not be the most accurate description'



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- Not just a small modeling choice: the MP transmission effect of tech lending depends crucially on what the starting point is
 - If big-tech lending is mostly replacing other types of cash-flow based lending, is MP transmission unchanged?
 - Understanding who is switching to tech-borrowing is crucial



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- Add a discussion on which countries/contexts the model better applies to? Japan but not U.S.?



Comment 2: Default and Reputation Costs

- Borrowing limited to cost of default: $\leq bE_t[\text{Value of Staying in the Platform}]$
- b captures:
 1. Access is lost for a finite number of periods
 2. Firms can sell their products elsewhere so the cost of access to the platform is the difference in profits between selling there and elsewhere



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- Calibration: $b = 2\% \Rightarrow$ is this too low?
 - Why does the calibration need this parameter to be this low?
 - How does it compare to calibrations in similar models?
 - If you can only borrow 2% of the PV of future profits, is big-tech lending relevant/important?



Comment 2: Default and Reputation Costs (cont'd)

- How does **platform exclusion** relate/compare to other forms of punishment in models of default?
 - Trade credit: repayment happens to avoid losing trading partners (relationships are costly to build)
 - Sovereign default literature shows countries are allowed back into capital markets shortly after defaulting
 - \Rightarrow are there circumstances in which is not optimal to enforce platform exclusion?



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- Example: what happens in downturns with synchronized defaults?
 - Does the threat of exclusion become less effective?
 - Are reputation costs lower if you default when everyone else is defaulting?



Comment 3: Financial Stability Considerations

- Consequences of lending concentrated on Big-Tech firms that are also exposed to substantial aggregate risk?
- During a downturn:
 - Tech profits decrease (lower fee collection as sales go down)
 - Higher defaults
 - Does the story rely on Big-Tech always being profitable?



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U.S. Markets

Profit momentum of Big Six tech companies to 'collapse' over 2024, UBS says

By Roshan Abraham and Siddarth S

April 22, 2024 3:27 PM GMT+1 · Updated 2 months ago



Comment 3: Financial Stability Considerations (cont'd)

- Availability of tech credit increases total credit
 - Large literature documenting rapid credit expansions predict negative real outcomes
 - ⇒ rapid increases in credit due to big tech rapid growth potentially problematic?
 - Does the type of lender matter? Boyarchenko, Elias, and Mueller (2023) document that growth in bank and non-bank lending have different implications for real outcomes



Conclusion

- Paper focuses on an important, timely topic: rise of big tech lending
- Model has clear implications for the transmission of monetary policy
- Would benefit from more thorough discussion on:
 - Is (asset) collateral lending the “right” outside option for firms?
 - Can big tech actually enforce contracts as the model assumes?
 - Financial stability considerations
- Looking forward to seeing the next version of the paper and good luck!

