Big Techs vs Banks

Leonardo Gambacorta
Bank for International Settlements

Fahad Khalil
University of Washington

Bruno M. Parigi
University of Padova

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Summary

In recent years large technology companies, also known as Big Techs (BTs), have started to provide financial services, competing with banks especially in the market for loans to small and medium sized enterprises (SMEs). We focus on loans to SMEs, where adverse selection and difficulty to enforce repayment cause frictions.

Big Techs present a distinctive business model with respect to bank lending due to the combination of two features: superior enforcement, and superior information.

First, BTs offering loans to firms that sell their products on their online platforms have an advantage over banks in enforcing loans repayments and avoid voluntary defaults. The threat of exclusion from e-commerce or from the payment system upon default provides BTs with an extra-legal but powerful contract enforcement tool.

Second, BTs gain additional information about the firms from the huge amount of data that they collect not only from payment history but also on the platform (sales, product quality,

reputation with clients), something that the banks cannot do. While a bank would learn imperfectly the firm's probability of being able to repay the loan also through the history of repayments, as is typical in relationship banking, a BT would learn this probability much faster and much more accurately and with no human intervention.

This is particularly important in an environment with limited enforcement of loan repayment. For example, it could be that collateral is not available, and/or the efficiency of the judicial system is low, and/or there are prohibitive costs to enforce repayments. This implies a scope for strategic defaults, i.e., a firm may choose to default even when it has enough cash flow to repay a loan, which, in turn limits the interest rate a lender can charge.

We obtain several findings. Better enforcement of repayment increases welfare by reducing strategic defaults by solvent firms. Superior BT's information leads to a tradeoff between data privacy and efficiency. When BTs have only a limited information advantage, they enter the credit market and they are both more efficient than banks in screening firms ex ante, and more effective in reducing strategic defaults by solvent firms. When, on the contrary, BTs have both superior enforcement and complete and private information of the firm type, no firm will borrow from them anticipating the extraction of the continuation value. BTs can enter banks' turf if they guarantee some privacy to firms by refraining from collecting some information and leaving some rents to them. We find therefore that some privacy is also in the interest of BTs. Finally, it matters how BTs may share information with banks: providing public information to banks (e.g., through a public (credit) register that includes all borrowers' data) may end up rationing solvent firms because it destroys cross-subsidies within the BT. On the contrary, if the BT shares information privately (e.g., by selling credit scoring to selected banks) it allows exploiting all gains from trade. These findings could be of interest in defining the future optimal data sharing arrangement between BTs and banks.