Big Techs vs Banks

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Summary  
Focus  
Large technology firms ("big techs") have access to massive amounts of data about firms that operate on their online platforms or use their QR-code payment systems. While this information can be harnessed to improve the assessment of a firm's credit risk, it may also lead to "data dominance", when the big tech can extract rents from the firm and reduce its profits to the minimum. In the case of e-commerce platforms, data dominance is compounded by the fact that firms are somewhat captive in the big tech ecosystem. In fact, defaulting on a big tech loan could cause a firm not only to be excluded from future loans (as in the traditional case of bank lending) but also to be shut out from the e-commerce platform and its payment services.  
Contribution  
This paper studies the lending business model of big techs, comparing it with the traditional bank intermediation process based on collecting deposits at cheaper rates but making do with more limited information on clients. In particular, we develop a theoretical model to study an economy in which big techs compete with traditional banks by lending to firms that operate on their platforms. We focus on two advantages that big techs have with respect to banks: better information on their clients and better enforcement of credit repayment, since big techs can exclude a defaulting firm from their ecosystem. For their part, banks have more varied and cheaper forms of funding.  
Findings  
We find that, when banks and big techs compete for borrowers, this can lead to greater privacy for borrowers as big techs have an incentive to temper their drive to collect information about firm characteristics. In other words, to win the loyalty of client firms, big techs must exercise restraint on their capacity to extract rents. At the same time, greater privacy has a cost. If big techs limit their capacity to recognise a firm's type, this may increase the number of costly defaults and reduce investment in profitable opportunities. One way to mitigate these inefficiencies is for big techs and banks to focus on their comparative advantages: big techs can share processed information (rather than simply the raw data) with banks, while the latter can finance the loans using their cheaper and more ample sources of funding.  
  
Abstract  
We study an economy in which large technology companies, big techs, provide credit to firms operating on their platforms. We focus on two advantages that big techs have with respect to banks: better information on their clients and better enforcement of credit repayment since big techs can exclude a defaulting firm from their ecosystem. While big techs have both superior enforcement and complete and private information of the firm type big techs can encroach on banks' turf only if they guarantee some privacy to firms by tempering their drive to collect information about firm characteristics and leaving some rents to them. The way big techs share information i.e. by providing information publicly or in a private way entails different outcomes in terms of efficiency.  
JEL classification: E51, G23, O31.   
Keywords: big techs, credit markets, privacy, information sharing.