

Research session
**Implications of
big tech in finance**

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#BISResearchConference
#RegulatingBigTech



“Big tech banking”

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“Platform-based business
models and financial inclusion”

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BIS Conference Regulating Big Tech

Big Tech Banking

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Effects on competition and financial stability



COMPETITIVE ADVANTAGES

- Big Tech platforms possess significant competitive advantages that can be successfully leveraged onto the retail banking market: large installed customer bases, powerful brands, considerable earnings, unfettered access to capital markets and, most importantly, superior information about consumer preferences, habits, and conduct.
- Big Tech platforms will benefit from a regulatory asymmetry when competing with established banks in Europe.
 - The European Union's PSD2 requires banks to allow authorized Third-Party Providers ("TPPs") access to their customers' account information and make payments from customers' accounts. Banks are obliged to provide access to customer data to all authorized competitors in digital form and free of charge.
 - In sharp contrast, under the General Data Protection Regulation ("GDPR"), TPPs, including Big Tech platforms, are obliged to facilitate data portability only where it is technically feasible.

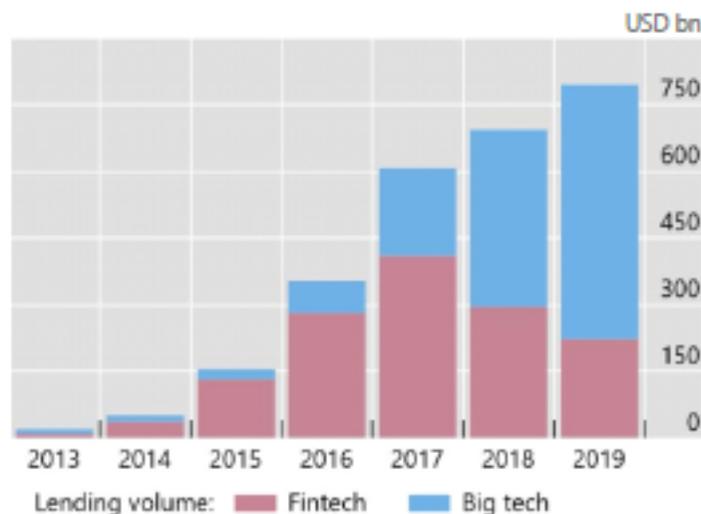


THE GROWTH OF BIG TECH BANKING

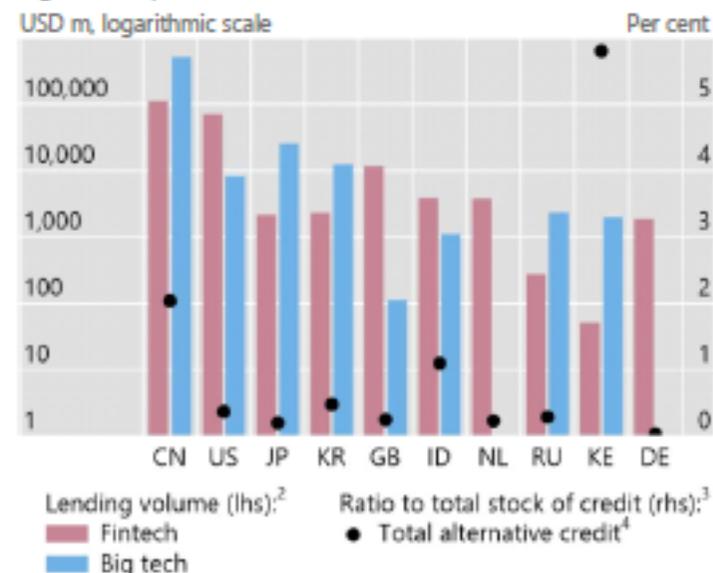
Global big tech credit is booming, overtaking fintech credit

Graph 1

Big tech credit is overtaking fintech credit¹



These alternative forms of lending are becoming a significant portion of total credit in a few economies



Figures include estimates. CN = China, US = United States, JP = Japan, KR = Korea, GB = United Kingdom, ID = Indonesia, NL = Netherlands, RU = Russia, KE = Kenya, DE = Germany.

¹ 2019 fintech lending volume figures are estimated on AU, CN, EU, GB, NZ and US. ² Data for 2019. ³ Domestic credit provided by the financial sector. Data for 2018. ⁴ Total alternative credit is defined as the sum of fintech and big tech credit. Data for 2019.

Sources: IMF World Economic Outlook; World Bank; Brismo.com; Cambridge Centre for Alternative Finance and research partners; WDJ.com; companies' reports; authors' calculations.

IMPACT ON COMPETITION (1)

- Their entry into retail banking, particularly in payment systems and consumer and SME lending **may** increase competition to the benefit of consumers, though the impact of their entry may depend on whether they enter on a stand-alone basis or through cooperation agreements with established banks.
- As regards lending, Big Tech platforms are unlikely to enter as “intermediaries”, in direct competition with incumbents, since that would entail a substantial regulatory burden. Therefore, they are likely to operate as “marketplaces”, offering their customers the ability to engage with many financial institutions (banks and non-banks) using a single distribution channel.
- Relative to the status quo, where each borrower is *de facto* locked into the bank with which it has a relationship, borrowers joining a marketplace where many banks operate will benefit from increased banking competition.



IMPACT ON COMPETITION (2)

- The improvement of the fintech's screening ability has two effects: a standard "information effect" that helps high credit quality borrowers but hurts low credit quality borrowers, and a "strategic effect" that affects the degree of lending competition. This "strategic effect" can go in either direction: lending competition will be intensified (softened) if the screening ability gap between the two lenders shrinks (expands). In particular, if open banking expands the screening ability gap sufficiently (i.e., if open banking "over-empowers" the fintech), it will hurt both types of borrowers but improve industry profit.
- When the fintech becomes sufficiently strong (stronger than the bank), then in the unique nontrivial equilibrium, high-type borrowers opt in while some low-type borrowers opt out, and all borrowers can get strictly worse off than before open banking.

Open Banking: Credit Market Competition When Borrowers Own the Data*

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Abstract

Open banking facilitates data sharing consented to by customers who generate the data, with a regulatory goal of promoting competition between traditional banks and challenger fintech entrants. We study lending market competition when sharing banks' customer transaction data enables either better borrower screening or targeting by fintech lenders. Open banking could make the entire financial industry better off yet leave all borrowers worse off, even if borrowers could choose whether to share their data. We highlight the importance of the equilibrium credit quality inference from borrowers' endogenous sign-up decisions.

Keywords: Open banking, Data sharing, Banking competition, Digital economy, Winner's curse, Privacy, Precision marketing

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MONOPOLIZATION RISKS

- The risk is that, within a few years, they succeed in monopolizing some segments of the retail banking industry, such as the origination and distribution of loans to consumers and SMEs. T
- Traditional banks may end up transforming into “narrow banks”, accepting deposits from the public and investing them in products originated and distributed by others, including the Big Techs.
- This will be particularly troublesome for established banks since these are their most profitable lines of business. Because most rents associated to lending are appropriated by those who originate and distribute, traditional banks could experience a significant decline in profit margins due to the commoditization of their businesses and might be forced to repurpose their distribution businesses to address the needs of special customer niches.
 - According to a McKinsey report, Big Techs could target the distribution business of banks, which represents 47% of their revenues but 65% of their profits and has an ROE of 20% (compared with an average ROE of 7-8%)



MONOPOLIZATION RISKS

- The experience from other industries – from online advertising to software; from travel distribution to retailing – shows that Big Tech firms scale up their businesses very quickly, tailoring their services around customers' needs, exploiting economies of scope and data advantages, and cross-subsidizing their services with the revenues obtained in their primary markets.
- Whether Big Tech entry ends up fostering competition in retail banking in the medium and long term will depend, among other things, on the ability of traditional banks to ring fence their loyal and highly profitable customer bases, exploit their informational advantages and reputation regarding data protection, and/or bundle products with the current accounts of their customers.

FINANCIAL STABILITY RISKS (1)

- Potential **moral hazard** problems
 - Platforms may have little or no stake in e.g. the loans they help to originate.
 - Vallee and Zeng (2018) explain that as the platform takes a more central role in screening loans, it has incentives to reduce the quality of the loan pool to maximize loan origination volume. This results in lower returns compared to scenarios where sophisticated investors are active in loan evaluation and funded only high-quality loans.
 - And traditional banks will have less of an incentive to engage in credit screening too due the reduction in their charter value and the disincentive effects caused by data sharing obligations.

FINANCIAL STABILITY RISKS (2)

- Potential **adverse selection** problems due to
 - *Incentives*: Digital platforms acting as lending platforms will make money charging fees on both lenders (including banks) and borrowers. Therefore, they will have the incentive to broker as many deals as possible, which is bound to result in adverse selection on both sides of the market.
 - *Cream skimming*: platforms may be able to screen out bad loans more effectively than FinTech start-ups and traditional banks. As a result, credit risk may be shifted to traditional banks, their investors and their depositors and lending may prove less efficient.
 - The *arm's length double-blind nature* of peer-to-peer lending makes online lending susceptible to adverse selection: Balyuk and Davidenko (2018) show that default rates on P2P loans are higher than on other credits to consumers with similar credit scores.

Regulating Big Tech



BANNING ENTRY

- Banning Big Techs from retail banking is not a solution. Many economists, policymakers and industry commentators remain seriously concerned about the poor state of competition in the banking industry.
- Cross-border entry has failed to make a difference, since large national incumbents have been able to leverage their large and partly captive customer base, proven experience and reputation, superior knowledge of existing regulations, and access to cheaper capital funding.
- Fintech companies do not seem capable of changing the *status quo*, given the absence of an installed, loyal customer base; limited access to soft information about potential customers, lack of reputation and brand recognition, and a relatively high cost of capital.
- Given that banning entry by Big Techs is not appropriate public policy, taking advantage of the benefits of Big Techs' entry, while limiting the risks to financial instability abovementioned, requires regulating the Big Tech.

ACTIVITY BASED V ENTITY BASED REGULATION

- **The Status Quo:** *Existing entity-based regulation*
- **What some banks demand:** *Same Activity Same Regulation*
- **FIS proposal:** *A mix of entity-based and activity-based regulation*
 - Activity based regulation: money laundering, consumer protection
 - Entity based regulation: financial stability
 - Mix: operational resilience and competition

CLOSING THE REGULATORY GAP

- If a Big Tech platform has discretion in selecting potential borrowers or portfolios of borrowers for their clients, then it should be regulated as a portfolio manager.
- If it develops a secondary market for its products, and issues tradable and non-tradable securities, it should be subject to security regulations.
- Big Tech platforms should also be required, e.g., to disclose whether their preselection of financial products is independent and neutral, and to act honestly, fairly, and professionally in accordance with the best interests of its clients.
- They should refrain from engaging in predatory lending and comply with the same fiduciary and investor protection obligations than traditional banks and other financial intermediaries

DATA SHARING (1)

- Addressing the data superiority of the Big Techs could be achieved by mandating data sharing.
- Any mandated data sharing scheme ought to respect the following principles.
 - Firstly, customers should be able to exercise control over the data about them and their transactions that is shared with third parties.
 - Secondly, the nature and scope of the data exchange should be transparent to customers.
 - Thirdly, the information exchange must happen through secure methods.
 - Fourthly, the data should be accessible through standardized APIs, so that the exchange takes place efficiently and without undue delay.
 - Finally, the sharing scheme must provide incentives so that the party in control of the data does share the data and the party which receives it builds value added propositions with such data.
- Privacy concerns

DATA SHARING (2)

- Article 6.1.h of the **EU Digital Markets Act proposal** requires gatekeepers to,

provide effective portability of data generated through the activity of a business user or end user and shall, in particular, provide tools for end users to facilitate the exercise of data portability, in line with Regulation EU 2016/679, including by the provision of continuous and real-time access.
- In turn, Article 6.1.i requires gatekeepers to,

provide business users, or third parties authorized by a business user, free of charge, with effective, high-quality, continuous and real-time access and use of aggregated or non-aggregated data, that is provided for or generated in the context of the use of the relevant core platform services by those business users and the end users engaging with the products or services provided by those business users; for personal data, provide access and use only where directly connected with the use effectuated by the end user in respect of the products or services offered by the relevant business user through the relevant core platform service, and when the end user opts in to such sharing with a consent in the sense of the Regulation (EU) 2016/679.

DATA UNBUNDLING (1)

- Limiting the ability of large tech platforms to gather and combine personal and transaction data.
- This would require explicit regulation. Self-regulation is bound to fail.
 - Firstly, while consumers do care about privacy, they seem to be resigned about having to surrender their personal data in order to be able to make use of the largest and most popular tech platforms. As a result, they spend little or no time checking the privacy policies of online platforms and, even when they do so, they seem unable to understand their implications.
 - Secondly, data on a user can be used not only to tailor the platform's products and services to satisfy the needs of that user, but also to adjust the service, including its price, to other users who are related. Hence, individual consent by a user may generate (positive or negative) externalities on other users. In other words, data have a social value. As noted by Choi et al. (2019), because this externality may be negative in many circumstances, "excessive loss of privacy emerges even with costless reading and perfect understanding of all privacy policies". That is, informed consent may prove insufficient.

DATA UNBUNDLING (2)

- Article 5a of the **EU Digital Markets Act proposal** limits the scope for bundling banking data with data stemming from, say, a search engine,

Gatekeepers shall refrain from combining personal data sourced from its core platform services with personal data from any other services offered by the gatekeeper or with personal data from third-party services [...] unless the user has been presented with the specific choice and provided consent.

- While it is not entirely clear what is meant by “specific choice” and “consent”, according to Recital 36,

The conduct of combining end user data from different sources or signing in users to different services of gatekeepers gives them potential advantages in terms of accumulation of data, thereby raising barriers to entry. To ensure that gatekeepers do not unfairly undermine the contestability of core platform services, they should enable their end users to freely choose to opt-in to such business practices by **offering a less personalized alternative** [...] and should be proactively presented to the end user in an explicit, clear and straightforward manner. (Emphasis added.)

TOO MUCH REGULATION?

- Big Tech companies may reconsider their plans to compete with traditional banks and decide, instead, to partner with them so that we are left, not just without the competition enhancing effect of their entry, but in a world in which banks and platforms share their data to protect and entrench their leading positions in their respective markets.



The architect of the Plex project, Caesar Sengupta, left Google in April. Bill Ready, a former [PayPal Holdings Inc.](#) executive who joined Google a little over a year earlier to head up its e-commerce operations, took over and set a new course, people familiar with the matter said. Mr. Ready was concerned that Plex could make other banks think that Google was out to compete with them since it played a lead role in building the product, one of the people said.

THANK YOU!



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