Big tech and fintech credit: the global context

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BIS ¹⁹³⁰/₂₀₂₀ Promoting monetary and financial stability

*The views expressed here are those of the authors and not necessarily the Bank for International Settlements.

Big tech and fintech credit: some definitions

Fintech

Definition

Technology-enabled innovation in financial services that could result in new business models, applications, processes or products ... (FSB, 2017)

Fintech credit

Credit activity facilitated by electronic (online) platforms that are not operated by commercial banks, e.g. P2P / marketplace lending (Claessens et al., 2018)

Big tech

Large companies whose primary activity is digital services, rather than financial services (Frost et al., 2019; BIS, 2019)

Examples







Big tech credit is booming – reaching USD 572 bn in 2019

Big tech credit is overtaking fintech credit¹ These alternative forms of lending are becoming a significant portion of total credit in a few economies USD mn, logarithmic scale USD bn Per cent 100,000 750 10,000 600 1,000 450 100 300 10 150 0 US JP ID NL RU KE CN KR GB DE 2013 2014 2015 2016 2017 2018 2019 Lending volume (lhs):² Ratio to total stock of credit (rhs):³ Lending volume: Fintech Big tech Fintech Total alternative credit⁴ Big tech

Figures include estimates. CN = China, US = United States, JP = Japan, KR = Korea, GB = Great Britain, 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.

Fintech credit is growing fast in Europe and many other jurisdictions



CN = China, JP = Japan, KR = Korea, US = United States, KE = Kenya, ID = Indonesia.

¹ Data are based on five platforms for Australia and New Zealand, all platforms covered by WDZJ.com for China, 49 platforms for Europe, 34 for the United Kingdom and five for the United States. Volumes are reported in local currency. ² Figures include estimates.



Big tech regulation: major jurisdictions leaning toward an entity-based approach







- State Administration for Market Regulation (SAMR) draft guidelines on internet companies (Nov 2020)
- Draft Digital Services Act (DSA) and Digital Markets Act (DMA) (Dec 2020)
- House Subcommittee on Antitrust, Commercial, and Administrative Law report (Oct 2020)
- Many questions go beyond the mandate of central banks and financial regulators alone need structured cooperation with competition and data protection authorities

#questions?



Annex



Big tech firms are highly profitable, while fintech platforms have often struggled



¹ Average interest rate. ² Simple average of Black Knight Financial Services, Elevate, Enova International, Fellow Finance, Funding Circle, LendingClub, Lendingtree, Nelnet, OnDeck and Synchrony. ³ Simple average of Alibaba, Amazon, Apple, Baidu / Du Xiaoman, Facebook, Google, JD.com, Kakao, LINE, Microsoft, MTS bank, Orange, Rakuten, Samsung, Tencent, Uber, Vodacom, Vodafone and Yandex.

*See G Cornelli, J Frost, L Gambacorta, R Rau, R Wardrop and T Ziegler (2020), "Fintech and big tech credit: a new database", BIS working paper no 887.

Main findings from Cornelli et al (2020)*

- Fintech and big tech credit have grown fast to an estimated USD 223 and 572 bn in 2019
- Both are higher: (i) with higher GDP per capita, but at a declining rate; (ii) where banking mark-ups are higher and (iii) where banking regulation is less stringent
- Fintech credit is more prevalent where there are fewer bank branches per capita
- Total alternative credit is higher where ease of doing business is higher, with greater investor protection and judicial system quality, where bank capital, provisions and deposit funding are higher and where financial markets are more developed
- Overall, alternative forms of credit seems to complement more traditional credit markets, not to substitute for them

*See G Cornelli, J Frost, L Gambacorta, R Rau, R Wardrop and T Ziegler (2020), "Fintech and big tech credit: a new database", BIS working paper no 887.



Main drivers of fintech and big tech credit



Effect of a one standard deviation change in selected variables

The bars visualise the estimated change in total alternative credit per capita from a change in the respective variables, based on the estimated coefficients displayed in the first column of Table B4 in Cornelli et al (2020).¹ Nominal GDP in USD over total population. Given the non-linearity of the relationship, the change is calculated at the average GDP per capita level. ² One-standard deviation increase in the banking sector Lerner index (an indicator of bank mark-ups and hence market power). ³ Regulatory stringency is constructed as an index based on the World Bank's Bank Regulation and Supervision Survey. The index takes a value between 0 (least stringent) and 1 (most stringent) based on 18 questions about bank capital requirements, the legal powers of supervisory agencies, etc. ⁴ A dummy variable that takes a value of 1 if an explicit regulation of fintech credit ("crowdfunding debt models") was in place in a given country and year, and 0 elsewhere.

*See G Cornelli, J Frost, L Gambacorta, R Rau, R Wardrop and T Ziegler (2020), "Fintech and big tech credit: a new database", BIS working paper no 887.

Regulation of digital banks

Examples of digital banks licensed under existing (ie non-specific) banking regulations



Regulation of fintech platform financing

Crowdfunding platforms are typically subject to registration or authorisation requirements

