
Big Tech Influence on China Financial Sector

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Abstract:

Purpose: The objective of the paper is to present Chinese Big Tech companies and present their increasing activity on domestic financial sector.

Design/Methodology/Approach: For the purpose of the paper, the following methods have been applied, critical analysis of literature and research papers as well as descriptive method and comparative analysis of presented data.

Findings: Based on the above-mentioned methodology methods, Big Tech can be determined that Chinese Big Tech companies have significant potential to impact not only Chinese domestic financial sector, but also the global financial sector. What is more, COVID-19 fastened several trends undergoing on the banking sector (such as digital transformation) that Chinese financial sector is relying upon.

Practical Implications: During COVID-19, Chinese Big Tech companies outperformed key players in Chinese domestic financial sector in key financial metrics such as market capitalization, revenue increase, net income.

Originality/value: Chinese Big Tech companies have stronger foothold on the domestic financial markets rather than their counterparts in USA (Amazon, Apple, Google).

Keywords: Big Tech, Chinese banking sector, digital.

JEL classification: E42, G21, O14.

Paper Type: Research study.

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1. Introduction

In Q3 2020, Ant Financial – large Chinese financial technology company – was expected to have the largest Initial Public Offering (IPO) up to date (Horowitz and Pham, 2020). In dual-listing share sale on both Hong Kong and Shanghai stock exchanges Ant Financial was on track to raise 34.5 billion USD, beating IPO of Saudi Aramco in 2019 (raised 29.4 billion USD) and Alibaba in 2014 (raised 25 billion USD) (Pham, 2020). What is more, retail demand for shares was at 3 trillion USD only in China. However, due to several regulatory issues in Mainland China, IPO was suspended and Alibaba company that owns one third stake of shares in Ant Financial, lost 60 billion USD in market capitalization (Wilhelm, 2020).

In spite of IPO suspension, it was a clear indication that financial technology companies and Big Tech companies such as Alibaba, are attracting significant attention not only in USA and Western European countries, but also in China – the second biggest economy worldwide in terms of GDP (London, 2018). Key players in Chinese economy are companies operating in financial sector (banking, insurance) and technology sector (PWC, 2020). Due to advanced digitization proces, rapidly changing customer expectations and cultural shift, banks with significant financial resources are often partnering with innovative Fin Tech companies to adress above-mentioned trends in the financial sector. Because Big Tech companies have both high degree of innovation and financial resources, they could impact the financial sector without partnering with other players.

2. Research Methodology and Hypothesis

The research paper aims to test the following hypothesis:

- Chinese Big Tech companies have potential to impact both domestic and global financial sector.

For the purpose of the paper, the following methods have been applied; critical analysis of literature and research papers as well as descriptive method and comparative analysis of presented data. Content analysis was aimed at presenting Chinese financial sector specifics, underlining the banking sector. Then Big Tech was defined and the largest Chinese Big Tech companies were presented. Furthermore, COVID-19 impact on both Chinese banking sector and Chinese Big Tech companies was analyzed. Lastly, conclusions regarding hypothesis were drawn.

3. Chinese Financial Sector Specifics

Chinese financial sector is significantly dependant on banking. Total Chinese financial sector assets at the end of 2019 were worth 45.1 trillion USD and 90% of them (41 trillion USD) are banking assets (China Banking News, 2020). Considering

top 100 largest banks worldwide, China is leading the ranking having four largest banks in the world (Industrial and Commercial Bank of China, China Construction Bank, Agricultural Bank of China and Bank of China respectively). China also has the most banks in the ranking (19 institutions in top 100 largest banks ranking) and the highest value of assets owned by banks ranked in top 100 largest banks ranking (over 25 trillion USD) (S&P Global Market Intelligence, 2020). Chinese banking sector, being the largest worldwide, is very important not only to Chinese economy but to the global financial sector (Cerutti and Zhou, 2018). What is more, Chinese banks in terms of asset value belong to largest companies worldwide. Top 10 global banks ranked by asset value are presented in Table 1.

Table 1. Top 10 banks globally rated by asset value (April 2020).

Position	Bank name	Country	Asset value (billion USD)
1	Industrial and Commercial Bank of China	China	4,324.27
2	China Construction Bank	China	3,653.11
3	Agricultural Bank of China	China	3,572.98
4	Bank of China	China	3,270.15
5	Mitsubishi UFJ Financial Group	Japan	2,892.97
6	HSBC Holdings	United Kingdom	2,715.15
7	JPMorgan Chase & Co	USA	2,687.38
8	Bank of America Corp.	USA	2,434.08
9	BNP Paribas SA	France	2,429.26
10	Credit Agricole Group	France	2,256.72

Source: *The world's 100 largest banks, 2020, S&P Global Market Intelligence, 2020.*

Large size of banks is not the only specific in Chinese financial sector. The other key specifics in the Chinese banking sector are as follows:

- 1) Assets concentration - asset value of top four banks constitute for 40% of total assets of the Chinese banking sector (Garcia-Herrero, 2016).
- 2) Destination of credits – primary destination of credits are large infrastructural projects, such as JingJinJi, which could cause boom on domestic real estate market (Myers, 2018; Chen and Woo, 2018).
- 3) Asset management companies (AMC) activity – AMC purchase non-performing loans (NPL) from leading banks in order to improve their financial situation (McMahon, 2018).

The key role of the banking sector is particularly important in China, since its capital market does not have 100 year history as in the USA and Western European countries. In spite of the significant size of both capital and bond markets (both are top 3 worldwide in total market capitalization) they have been developing only for 30-40 years (HSBC, 2017; Hu, Grace, Pan, and Wang, 2018). Banking sector in

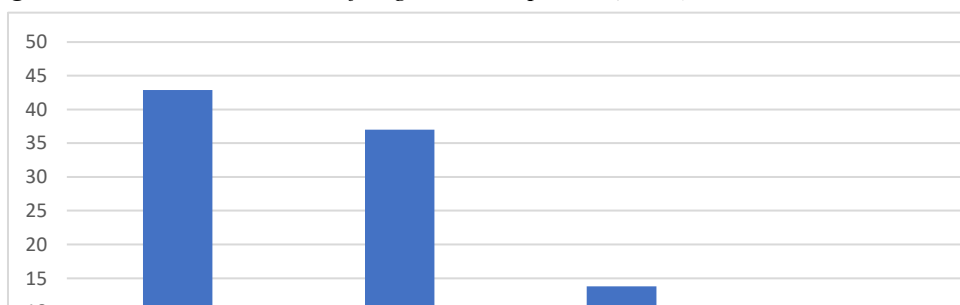
China has its own challenges, such as significance of shadow banking, size of non-performing loans, addressing private banking environment (Dziawgo, 2018). One of the key challenges is competition from large technology companies (Big Tech) (Bahree, 2020).

4. Big Tech Significance and Activity on Chinese Financial Market

Big Tech companies are tech giants dominating their markets due to several advantages, such as: wide access to customer data, deep market understanding and ability to deliver brand new products and services (Capgemini, 2020). Big Tech companies usually benefit from client data analysis, which is being used to get a foothold to other business lines, including financial services. Key difference between Big Tech and Fin Tech is that Fin Tech company specializes in financial services (Ślęzak, 2018). Big Tech company on the other hand focuses on other services, mainly information technology – because of that financial services is not the key area of focus for Big Tech. Among largest Big Tech companies, revenue from financial services accounts into 11% of overall revenues (BIS, 2019).

However, Big Tech companies are particularly interested in getting a foothold into financial services market due to several reasons such as: revenue diversification, access to additional customer data, complementing core services and increasing customer loyalty (BIS, 2019). In order to make significant presence in banking sector, Big Tech companies need to have large client base, significant digital exposure and high level of trust from customers. They seem to be the most attractive to younger customers, due to high preference of conducting basic operations online, such as payments and deposits (Burns and Toit, 2017). Offering of these companies differs based on economic development of the country and on domestic regulations. In advanced economies, Big Tech companies rather complement services offered by banks and financial market players, when in emerging markets offering is significantly wider (asset management, insurance, lending etc.) (Financial Stability Board, 2019). Although Big Tech companies operate on the global scale, their centers are located mainly in Asia-Pacific and North America regions (Figure 1).

Figure 1. Global distribution of Big Tech companies (2019).



Source: *Big Tech in finance: Opportunities and risks*, BIS, 2019.

Key global Big Tech companies are based in United States and are referred to as „GAFA” (Google, Amazon, Facebook, Apple), “FAANG” (Facebook, Amazon, Apple, Netflix, Google) or “GAFAM” (Google, Amazon, Facebook, Apple, Microsoft) (Wigglesworth, 2020). However, out of top 20 companies considered as “Worldwide Internet Leaders” ranked by market value, 11 are based in United States and 9 are based in China (Table 2), thus indicating significant importance of Big Tech Chinese companies globally (Kleiner Perkins, 2018).

Table 2. Largest Big Tech companies in China ranked by valuation (2015-2020).

Company name	Market value (Dec 2015)	Market value (Dec 2020)
Tencent	185B USD	666B USD
Alibaba	202B USD	638B USD
Ant Financial (affiliate company of Alibaba)	45B USD	313B USD
Meituan-Dianping	No data	211B USD
JD.com	38B USD	130B USD
Xiaomi	45B USD	100B USD
Baidu	56.5B USD	65.5B USD
Didi Chuxing	No data	~56B USD
Toutiao	~0.5B USD	~30B USD

Source: Kleiner Perkins, Macrotrends.com, Gizmochina, BBC News, Companiesmarketcap.com

The most impactful Big Tech players in the Chinese financial market are Alibaba and Tencent. In 2004, Alibaba launched online and mobile payment platform named Alipay, which currently is the biggest payment platform worldwide with 1.2 billion users (Xinhuanet, 2019; Capgemini, 2020). Moreover Ant Financial (affiliate company of Alibaba) has 600 billion USD in AUM (Assets Under Management) and its’ market fund Yu’e Bao became one of the largest money market fund globally with 170 billion USD in AUM. Due to the fact that Yu’e Bao provides an easy access to wide area of users with low investment threshold of 1 RMB (0.15 USD), it has 300 million users globally (Jing, 2017).

Tencent on the other hand launched WeChat Pay in 2013. Only 5 years later in 2018, it had been processing 1 billion transactions on a daily basis and had 40% share in Chinese mobile payment sector worth 40 trillion USD (Capgemini, 2020). In 2014, Tencent launched Licitong – online wealth management platform (Jing, 2014). In 2019 it was managing 130 billion USD of client assets (Liao, 2020). Both companies also have their own credit scoring systems. Due to the fact that millions of Chinese individual consumers and small businesses do not have credit history, Credit Reference Center of the People’s Bank of China is not able to fully set credit

measurements (Dollar and Wang, 2018). Alibaba introduced Sesame Credit scoring system in 2015 after analyzing payment history of 400 million clients. System considers five criteria: credit history, behaviour preferences, agreement honouring, personal information as well as social network. After that it gives score between 350 and 950 and assigns one of five categories (excellent, good, fair, poor and bad). Similarly to Alibaba, Tencent introduced its' own Tencent Credit Score with similar categories and score range (Horowitz, 2017). Details of both credit scoring systems are presented in Table 3.

Table 3. Credit Scoring systems introduced by Alibaba and Tencent (2018)

	Sesame Credit Score	Tencent Credit Score
Introduced by	Alibaba	Tencent
Criteria	Credit history (35%) Behavior preferences (25%) Honouring agreement (20%) Personal information (15%) Social network (5%)	Wealth Consumption behaviour Honouring agreement Security Social connections
Scoring range and categories	Excellent 700-950 Good 650-700 Fair 600-650 Poor 550-600 Bad 350-550	300-850 with unknown categories

Source: Dollar and Wang (2018), *What's happening with China's fintech industry?*

What is most notable however, is the fact that both Alibaba and Tencent have their own online banks. Among total 19 private banks in China, both MyBank (Alibaba-backed) and WeBank (Tencent-backed) are the largest private banks ones, accounting for 50% of total sector of Chinese private banks in terms of total assets owned Table X presents comparison between MyBank, WeBank and other 17 Chinese private banks combined. Only in 2019, WeBank served 200 million individual clients and MyBank served 21 million small and medium businesses.

Obtaining such client base is possible due to the fact that these banks operate only online and are targeting unbanked individuals and businesses with limited or no credit history. Considering favourable trends in banking industry (with special emphasis on digitization) and the fact that 40% of Chinese consumers don't have personal loan, it may be concluded that private banks in China are expected to grow even more. MyBank and WeBank have been dominating the market, therefore Tencent and Alibaba are expected to have significantly larger role in the Chinese financial sector as a whole (Lan, 2020).

Lastly, China has been increasing its focus on technology itself. According to the latest outlined five-year plan, China aspires to be self-sufficient global technology superpower by 2035. With Wang Zhigang stating that: „...(China) is placing the plans on science, technology and innovation before all other sectors...”, it can be

concluded that significance of Big Tech companies will increase even more (McGregor, 2020).

Table 4. Comparison between WeBank, MyBank and other 17 private banks combined (2019)

Bank	WeBank	MyBank	Other 17 private banks combined
Total assets owned	44 billion USD	21 billion USD	65 billion USD
Total revenue	2,25 billion USD	1 billion USD	Not available
Total net income	0,6 billion USD	0,2 billion USD	0,45 billion USD

Source: Lan Q., *WeBank and a Changing Chinese Banking Sector*, EqualOcean, 2020.

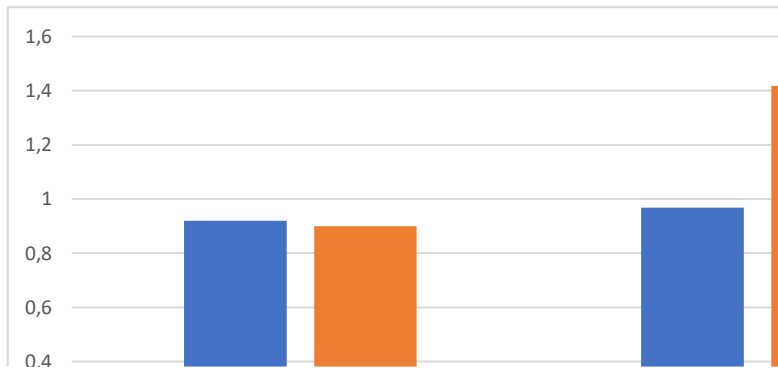
5. COVID-19 Impact on Chinese Financial Sector and Big Tech

After COVID-19 outbreak, the banking sector underwent considerable changes, such as decrease in cash usage (60% drop in cash ATM withdrawals), e-commerce adoption (25% of clients with first online purchase during pandemic), online banking increased importance (75% clients with regular online transactions), contactless usage and technology adoption (Kekevi, 2020).

However, these trends were undergoing prior COVID-19 as well. Non-cash transactions number and total value were on the rise of 10% CAGR between 2013-2017, online banking services usage varied between 40% and 60% and complex services such as robo-advisory were on the rise as well (Dziawgo, 2018; Capgemini, 2019; Deloitte, 2020). It may be concluded that COVID-19 fastened trends that have been already undergoing in banking industry. What is more, banks need to consider numerous domestic and global regulations, while performing operations (Kolešnik and Zaleska, 2018). Failing to comply to regulations could negatively impact reputation of a bank (Niedziółka, 2018).

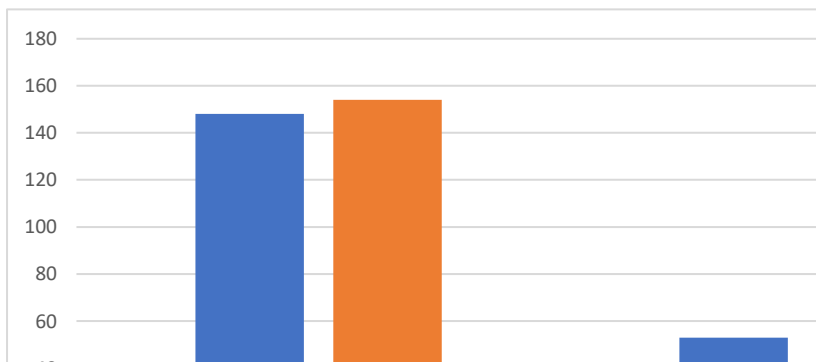
To further emphasize COVID-19 impact in both Chinese banking sector and Chinese Big Tech sector, the analysis of key players in both areas was conducted. Top 4 Chinese national banks and top 4 Chinese Big Tech companies by the ranks of market capitalization were considered, which are: Industrial and Commercial Bank of China, China Construction Bank, Agricultural Bank of China, and Bank of China, as well as: Alibaba, Tencent, Meituan-Dianping and JD.com. The analysis aims at showing performance of Big Tech and banking sector in market capitalization, revenue, and net income. The outcome of the analysis was shown in Figures 2-4. Top 4 banks' market capitalization decreased from 920 billion USD to 910 billion USD, which accounts for slight 2% drop. On the other hand, top 4 Big Tech companies' market capitalization increased by 45% from 970 billion USD to 1.5 trillion USD. Top 4 banks' revenue increased from 148 billion USD to 154 billion USD, which accounts for slight 4% rise. What is more, top 4 Big Tech companies' revenue increased by 30% from 53 billion USD to 68 billion USD.

Figure 2. Market capitalization comparison between banks and Big Tech companies in Q2 2019 and Q2 2020 (USD trillion)



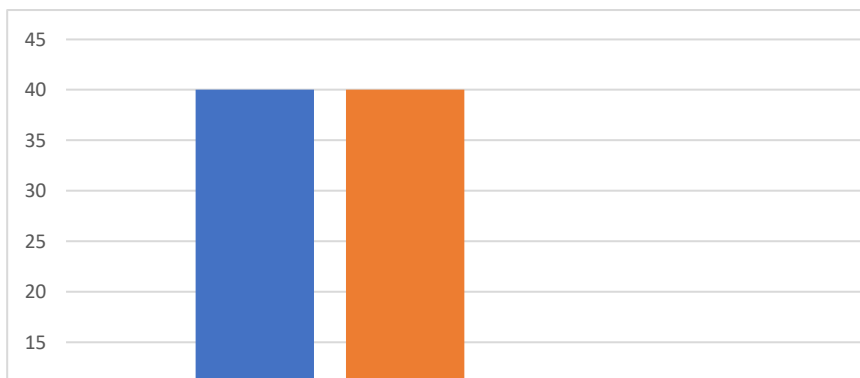
Source: Own elaboration based on Macrotrends, www.macrotrends.com.

Figure 3. Revenue comparison between banks and Big Tech companies in Q2 2019 and Q2 2020 (USD billion)



Source: Own elaboration based on Macrotrends, www.macrotrends.com.

Figure 4. Net income comparison between Chinese banks and Chinese Big Tech companies in Q2 2019 and Q2 2020 (USD billion).



Source: Own elaboration based on Macrotrends, www.macrotrends.com.

Top 4 banks' net income stayed the same at ~40 billion USD in both Q2 2019 and Q2 2020. Top 4 Big Tech companies net income increased by 65% from 11 billion USD to 18 billion USD.

6. Future Outcome and Conclusions

The research paper aims to test the following hypothesis:

- Chinese Big Tech companies have potential to impact both domestic and global financial sector.

After using the following methods critical analysis of literature and research papers, descriptive method and comparative analysis of presented data, the hypothesis can be proven positively. Largest Chinese Big Tech companies, with special emphasis on Alibaba and Tencent, have potential to impact not only Chinese, but also global financial sector. Similarly as GAFA, they have significant financial resources, high market valuation and great financial performance during COVID-19 period. Large client base depicts that Chinese Big Tech companies have considerable customer trust, which will be key when offering financial services. Payments and deposits seem to be primary financial services offering by any Big Tech company due to the fact that they can be conducted fully digitally. This provides opportunity for Big Tech companies to offer services at lower cost and at better convenience.

What is the most notable however is the proven track record on the Chinese banking sector by Chinese Big Tech companies. Establishment and dominant position of online private banks and own credit scoring systems depict that the largest Chinese Big Tech companies have higher exposure and experience in financial services than GAFA. Also, favourable trends in the banking industry could benefit Big Tech companies in the long term, such as: lower cash usage, increasing number of digital transactions or lesser withdrawals from ATM machines. What is more, although Chinese banks did relatively well during COVID-19 period, Chinese Big Tech companies outperformed them in market capitalization, revenue and net income (considering percentage increase). Considering all the above mentioned, it can be concluded that Chinese Big Tech companies have potential to impact both domestic and global financial sector.

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