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FinTech in China's Capital Market

Introduction

China has been a world leader in FinTech. In some financial technology industries, such as digital payments, China is in the forefront of the world. In the area of financial products and services, FinTech is reducing costs, improving service quality, and promoting market liquidity and efficiency. Until recently, FinTech has been focused on payments, peer-to-peer (P2P) lending and equity crowdfunding. However, the evolution of FinTech in capital markets has accelerated; technological advances such as artificial intelligence (AI), robotic process automation, blockchain and cloud technology have appeared.

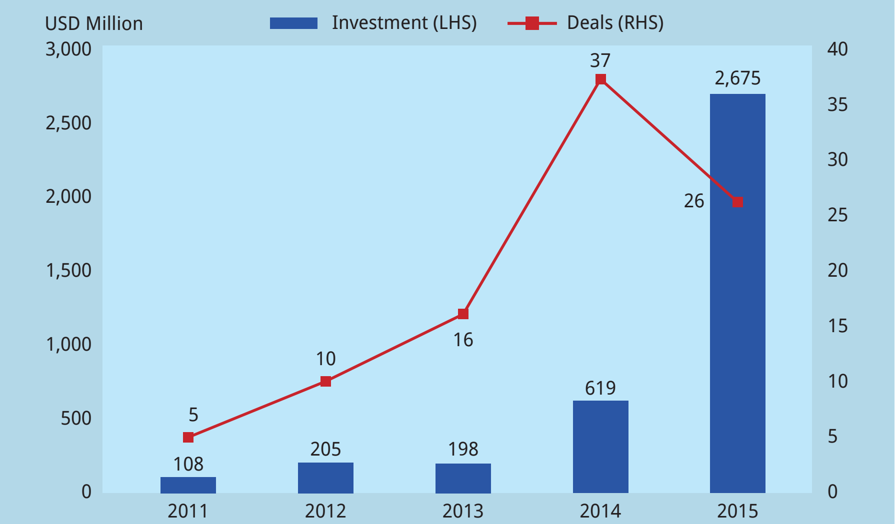
Why FinTech is so Hot in China

China's FinTech sector is fueled by several factors such as the rise of the BAT (Baidu, Alibaba and Tencent); hot investment; explosive growth in e-commerce and digital payment systems; soaring financial services demand; and regulatory pressure. Unlike in the U.S. or Europe, in China disruption by FinTech firms is not occurring at the periphery of the financial sector. It has gone past the infection point, with technological innovation reshaping the financial landscape.

The rise of the BAT

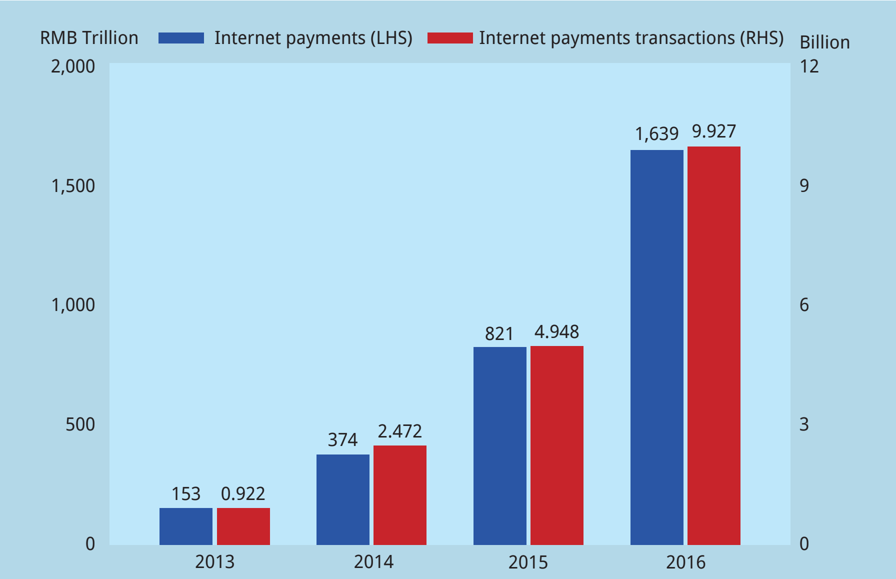
Baidu, Alibaba and Tencent rank as the top three internet-based companies in

Figure 1: China Fintech Investment Activity of Venture Capital-Backed Companies



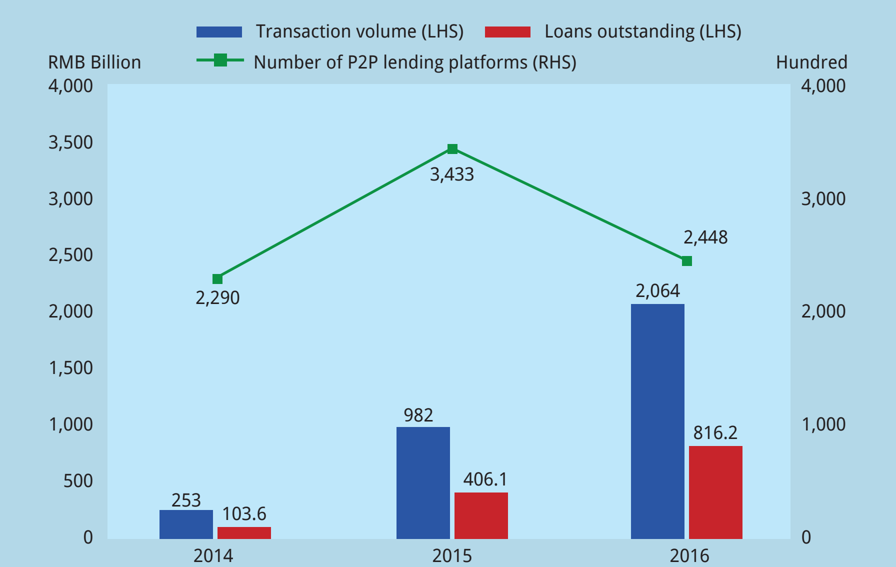
Source: KPMG, *The Pulse of Fintech, 2015 in Review* (2016)

Figure 2: Internet Payments (including mobile) in China



Source: Payment and Clearing Association of China

Figure 3: China P2P Lending



Source: Wind Database

China. They are all entering into FinTech to challenge the traditional financial services industry. Taking advantage of their large customer bases and competitive advantages, they provide FinTech solutions across a variety of subsectors. Alibaba started as the largest e-commerce platform in China, and it has now become a giant in digital payments with its AliPay app; moreover, through its financial arm, Ant Financial, it is actively tapping into the opportunity in China's fast-growing FinTech market. Actually, founder and chairman, Jack Ma, said Alibaba is not a retail company, but a data company which makes the most of big data from its e-commerce transactions. In addition, Tencent, through its social media app WeChat, also uses a "red envelope" function to train customers' digital payments habit and occupies a dominant position in FinTech. According to JPMorgan, what will drive a large part of the FinTech market in China is online payments, and Alibaba and Tencent combined could control 50% to 60% of the FinTech market. Baidu also started up its Baidu Brain project to consolidate its FinTech status.

Hot investment

From above, China has been quite active in FinTech solutions for the past few years. Meanwhile the investment boom in FinTech is on the way. According to KMPG, VC backed investments in China boomed in 2015 (Figure 1) and in 2016. Furthermore, Ernst and Young (EY) estimates that FinTech investment in China reached USD 8.4 billion among which 46% was raised by Ant Financial. The sources of funding include government-guided funds, private funds and IPOs. More than 750 government-guided funds have been launched, which stimulates the private funds to support startups. For late-stage FinTechs, Chinese FinTechs also benefit from an active IPO market, completing more IPOs in the past 10 years than the leading U.S. and UK exchanges. All provinces in China also have provincial industrial funds allocated to encourage technology investment, from which the FinTech sector naturally benefits.

Explosive growth in e-commerce and digital payments

Due to a large population and internet consumption habits, China has built the world's largest e-commerce market (accounting for 47% of global digital sales) and digital economy. Over 25% of the population, about 358 million Chinese customers, used mobile payments in 2015. In 2016, internet payments totaled about RMB 1,639 trillion (Figure 2), among which RMB 200 trillion were mobile payments, nearly 50 times the amount of mobile payments in the U.S. Additionally, Chinese SMEs have historically been underserved by the traditional banking system. This is one vital reason why P2P lending has prospered in the past few years (Figure 3), and now faces tightened supervision. Soaring demand for financial services creates a significant base of financial institutions to generate corporate demand for FinTech solutions.

Regulatory pressure

The People's Bank of China (PBOC) plays a central role in formulating guidelines and has adopted an open and tolerant stance while designing the regulatory framework for internet finance which will leave certain space for the continued development of internet finance while drawing the bottom line clearly. However, a large number of internet finance companies are turning into FinTech fields. There are at least two reasons for this phenomenon. For one thing, FinTech firms focus on technology and circumvent regulations on internet finance; for another, the regulators seek novel solutions like regulatory technology (RegTech) to better comply with regulations, which impose pressure on traditional financial institutions to taken more seriously on FinTech.

FinTech Development of Capital Market in China

According to KPMG's *China Leading FinTech 50 Report* for 2016, big data ranked top in the business models of the top 50 companies in the sector, while blockchain, internet securities, investment management, and crowdfunding ranked 9th, 11th, 12th, and 13th, respectively. Since data is at the heart of recent developments in the financial services sector, companies that seek to harness the power of big data enjoy a significant competitive advantage over their peers.

Blockchain

A new report from Goldman Sachs Investment Research projects that the implementation of blockchain technology could streamline the clearing and settlement of cash securities, saving capital markets USD 11-12 billion globally on an annual basis. The adoption of blockchain technology provides operational transparency for the asset, which greatly enhances the efficiency, safety and traceability of the product. Blockchain technology is not new to China – about 80% of bitcoin volume is now exchanged into and out of Chinese yuan – but when it comes to its app in the capital market, blockchain startups are mainly at the experimental stage. In 2016, China's Ministry of Industry and Information Technology published *China Blockchain Technology and Application Development White Paper* and organized a special government-industry working group to speed up promoting R&D and deployment of blockchain applications. Several consortiums that focus on the application of blockchain in finance, commerce, public service, and other industries, have been established in China. Some examples are China Ledger Alliance, Financial Blockchain Shenzhen Consortium, Qianhai International Blockchain Ecosphere Alliance, which focus on the application of blockchain in finance, commerce, public service, and other industries.

Representative cases: Baidu Finance announced the issuance of the first blockchain-based asset-backed security (ABS) product in China in May 2017, backed by RMB 424 million worth of personal car leases; Tencent has released the blockchain consortium platform, TrustSQL, and launched the Financial Blockchain Cooperation Alliance (Shenzhen), which carries out research on the application of blockchain in the financial services sector. Alibaba has adopted blockchain technology for its charity project with the Chinese Red Cross Foundation. JD Finance tested the first blockchain consortium with China Unionpay. Taiyiyun Technology is a blockchain-based enterprise that is listed on the National Equities Exchange and Quotations (NEEQ). It has recently begun collaborating with a number of public bodies on using blockchain technology in financial services and insurance. It is a member of Hyperledger, an open source project that seeks to promote the development of blockchain globally. Antshares, which was launched by Shanghai Haike Internet Financial Information and Services (Onchain) in June 2014, is one of the first blockchain services in China that provides enterprises with customized blockchain solutions including asset register transitions, enterprise internal risk control and voting and resolution.

These blockchain initiatives are baby steps into the finance services sector and maybe will prosper in the future. However, this trend is creating enormous challenges including difficulties in integrating with current ecosystems; lack of security protection for application data, logic and operating environment; and issues around trust and protection of individuals' and business' privacy.

Big data & AI

To meet demand from a growing generation of consumers for a richer landscape of investment vehicles, wealth management firms are launching smartphone apps to appeal to this younger, newly rich demographic.

Representative cases: WeBank has applied several innovative technologies such as face recognition, voice recognition and robotics in its mobile apps such as Credit Particles, WeCar Credit, etc. WeBank has also launched We Zhong Financial Management, a mobile app for rural banking, as well as another app for the interbank market. FUTUNN.COM provides services to support the front, middle and back office functions of securities companies. JFZ is an internet wealth management company that provides wealth management services for high net worth individuals. Wacai Money Manager is the company's personal wealth management platform and Wacai Bao is designed to provide its users with bespoke financial management services. Shenzhen Suishou Technology was established in July 2011 and is well-known in China for providing wealth management services.

Meanwhile, an even newer digital tool introduced in mid-2016 by digital wealth management firms provides simplified investment advice through sophisticated automated online platforms. These platforms, so-called robo-advisors, are modeled on U.S.-based automated investment advisers such as Wealthfront and Betterment. They incorporate big data and AI to eliminate or reduce the need for face-to-face interaction with substantially lower costs, yet provide customised online financial advisory services. Robo-advisory first-movers in the Chinese market include CreditEase which launched its robo-advisory product ToumiRA using trading algorithms to match investors risk preferences and objectives to their optimal portfolios. Another notable player is PINTEC with Xuanji, which automatically rebalances a global portfolio, including onshore RMB and offshore USD assets, for retail investors.*[1] Zipeiyi develops AI systems for securities and other financial services companies. Based on the concept of making asset allocation more straightforward and efficient, the company applies AI technology to the asset management industry. Tiger Brokers uses a variety of internet technologies, which are designed to improve efficiency in the financial services sector and to facilitate investment in global securities markets. Others offering machine-assisted investment advisory include Baidu Gupiao, PingAn One, MiCai and Clipper Advisor.

Robo-advisory could well reshape the future of China's wealth management business. Which players succeed will depend on their developing clever partnerships with global peers. They will also need broad and deep asset offerings, portfolio allocation, and technological superiority in big data analytics and machine learning.

FinTech's Influence on China's Capital Market

Serving more low-income groups at lower costs

Due to the costs, a large number of low-income customers (with annual net income less than RMB 100,000) cannot meet the threshold to invest in traditional financial products. Chinese SMEs also have the same problem. Despite this, about 358 million Chinese customers use mobile payments, which create a solid foundation for FinTech development. Actually, FinTechs focus on serving the vast majority of people, including the low-income group, and improving existing financial services. They help promote efficiency without raising costs through automation and simplification. They also enable disaggregation of the traditional value chain in the capital market as they become more embedded in business and consumption.

Boosting rural-inclusive financial system

The establishment of a leading digital finance sector is increasingly expanding beyond the cities into the rural areas. FinTechs such as online-only banks can reach unbanked individuals in line with the Chinese Government's policy to promote financial inclusion. 71% of the country's 234 million unbanked adults and 54% in the poorest two quintiles of households live in rural areas. There are few physical branches of banks in rural areas, but mobile phones are another story. With the help of financial apps, large banks like Postal Savings Bank of China (PSBC) and FinTech firms have expanded aggressively into rural China.

Promoting cooperation between financial institutions and FinTechs

In order to increase revenue and market share, more and more firms in the securities industry will seek to cooperate with FinTechs. The FinTechs know how to innovate products and services to deliver more value to underserved clients and market segments. FinTechs have data and technology; they have customer data, consumption patterns and intimate relationships with customers; they will take full advantage of structured and unstructured databases, or big data, on which sophisticated analytics will be processed easily and quickly to develop pricing and service strategies.

Delivering regulatory-driven change at acceptable cost

Farsighted regulators in China are seeking to establish mechanisms to reduce regulatory uncertainty and time cost in financial market. The PBOC, the country's central bank, announced on 15 May 2017 that it has set up a committee, namely People's Bank of China Financial Technology Committee, to enhance research, planning and coordination of work on financial technology. The central bank will also increase the use of RegTech to boost its capabilities in identifying, preventing and dissolving financial risks, including both cross-sector and cross-market risks, with technology such as big data, AI and cloud computing. FinTechs will likely benefit from the transparency of RegTech to lower the complexity and costs of maintaining regulatory compliance.

Gaining competitive advantage

Technological innovation will disrupt the competitive advantages of participants in global capital markets. Regulation may cause disruption and uncertainty. However, it is also creating opportunities for new players. In many ways technology is making it possible for new entrants to compete with or enhance existing players and value chains – examples include the use of AI to displace 'voice'-dominated markets and alternative research providers that leverage unstructured data to generate deeper insights into existing trends and market opportunities. In short, technology will touch and transform business models in a vast array of areas, such as data management, market surveillance, cyber security, regulatory reporting, funding and alpha capture.

The Future of Chinese FinTech

As China will continue its policy of opening up to the outside World, its FinTech firms face great opportunities. Chinese FinTech firms will expand out of China and foreign FinTech firms with competitive advantage will enter China. How can we seize the opportunity? Here are some points which relate to the future of Chinese FinTech.

Blockchain

In China, blockchain initiatives are still in the early stages of development, where major banks have only just started to commission proofs of concept and pilot projects for blockchain applications. FinTechs in Europe and America have more mature technology solutions and can leverage these innovations, capabilities and expertise to develop the Chinese blockchain market further.

RegTech and regulatory sandbox

FinTech firms abroad have developed solutions related to compliance, advanced data analytics and risk evaluation. These techniques and knowledge could all be leveraged to great effect in the Chinese marketplace as its FinTech sector and regulatory framework mature further. Besides, the regulatory sandboxes in the UK, Singapore and elsewhere are friendly and experienced with FinTech startups; their authorization processes and guidance are worth learning.

Foreign Exchange

China will gradually relax control over Qualified Domestic Institutional Investors (QDII) and Qualified Foreign Institutional Investors (QFII) to show its determination to speed up the yuan's convertibility under the capital account. Money transfer FinTechs and traditional financial institutions can supply FX services and ensure strict observance of laws in the Chinese market.

Chinese investment demand

With much investment flowing between China and overseas, there is likely a strong demand to meet the needs of FinTechs and investors in China. We may start to see more direct competition between, for example, Baidu and Google, Alibaba and Amazon, Tencent and Facebook. Whatever happens in China, there is no denying that incumbents and FinTech firms alike will need to transform to remain relevant in this new world order. The next few years will be an exciting time for the industry. Chinese FinTechs should look to partner with firms and financial institutions to develop cross-border partnership to serve this sizeable market.

Needless to say, China's FinTech sector will flourish in regulation, blockchain, trading, clearing, and settlement and create a safe and efficient capital market for the near future.

Notes

*1 Regulations regarding offshore investments in foreign currency by retail investors are not covered under the current legal framework. Therefore, investors using this service provided by PINTEC are not protected by law. (China Securities Regulatory Commission: http://www.csrc.gov.cn/pub/newsite/djffzqqhhdj/ffzqqhjs/201607/t20160726_301171.html)

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