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WILL FINTECH UPEND THE BANKING SECTOR? FROM CHINA'S EXPERIENCE

CONTEMPORARY CHINA:
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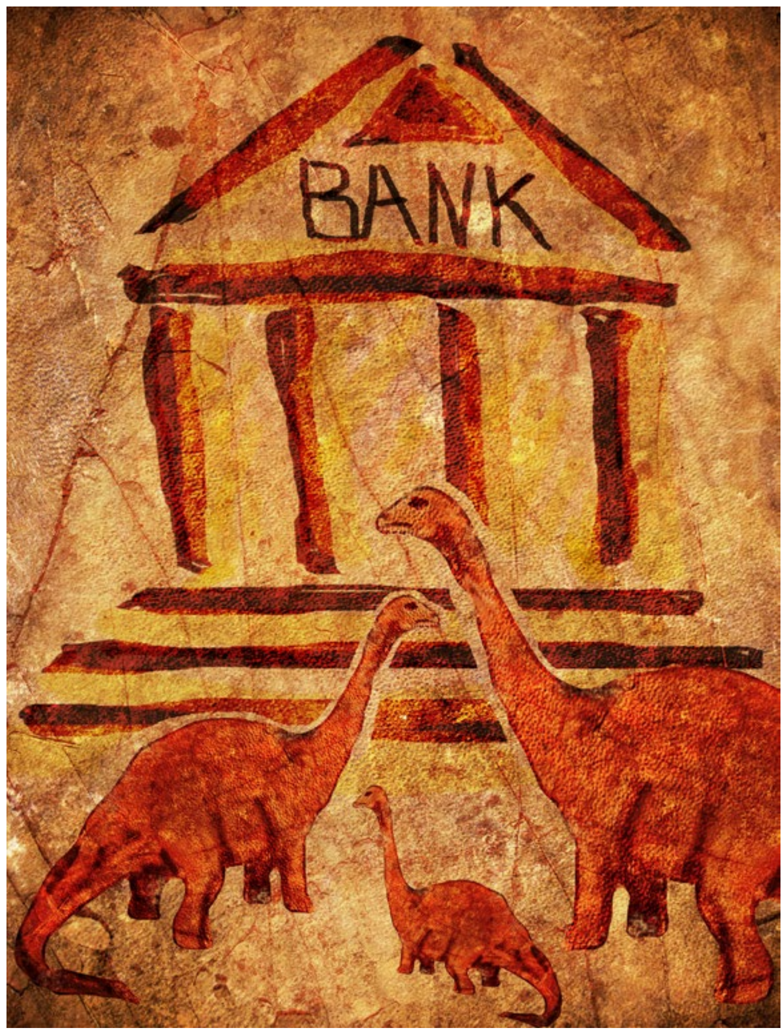
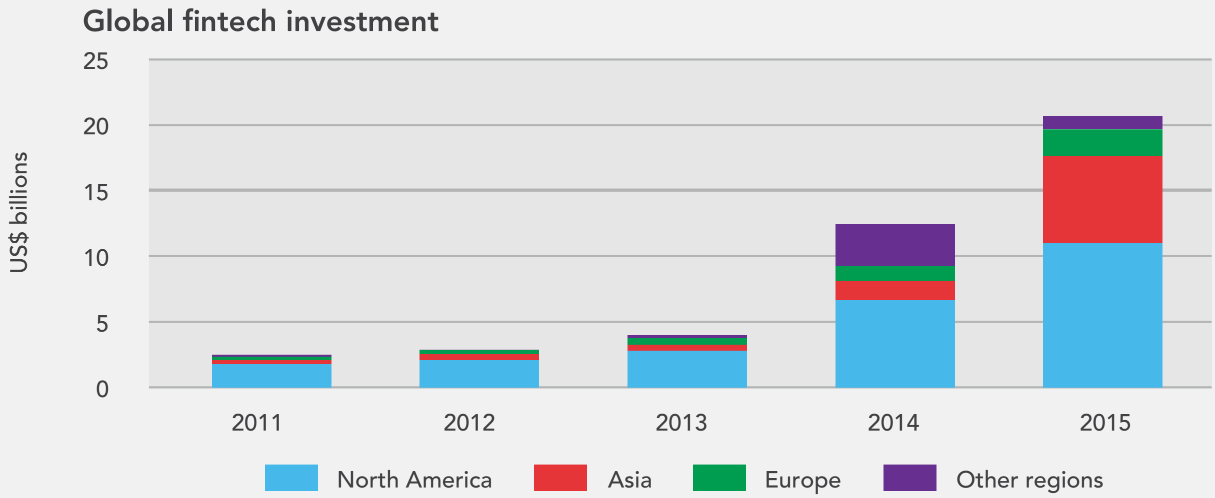
Two decades ago, Microsoft co-founder Bill Gates famously opined that banking is necessary, banks are not, and predicted bricks-and-mortar banks would be the "dinosaurs" that would be replaced by new software in the 21st century. Thanks to heavy regulation, banks have survived personal-finance software, early virtual banks, and the Internet Bubble, while some other traditional industries such as media, taxi services, publishing, and retailing were upended by innovative technology. However, technology innovation is racing to a turning point; indeed, the booming financial technology (fintech) seems to be changing the banking landscape and verifying Gates's prediction.[1]





Source: Money of the Future: Results of 2015 / Trends for 2016, by Life.SREDA VC

THE FINTECH WAVE IS RUSHING TO BANKS

As the financial intermediaries, the banks' key function is to solve information asymmetry between money surpluses and demands, and optimize resource allocation. With big-data analytics, cloud computing, blockchain, and smart devices becoming pervasive, the cutting-edge technologies are able to solve information asymmetry more efficiently and provide financial services in a smarter, cheaper, and faster way. Both startups and digital giants are targeting the last solid fortress, and some of Wall Street's former stars are devoting themselves to fintech, too.

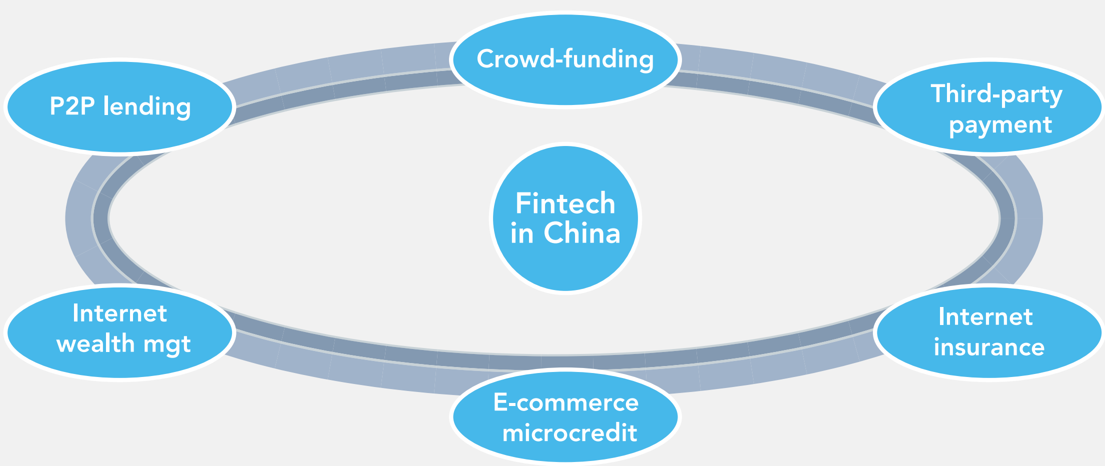
Now, there are more than 5,000 fintech startups and 46 fintech unicorns (a startup company valued at over US$1B) globally. Billions of venture capital dollars have been poured into fintech startups. In 2015, the total investment hit a record of US$20.3B, up by 65% from 2014's total of US$12.3B, which was up from US$2.5B in 2011. North America is the strongest dynamic area, attracting US$10.8B in 2015 – over half of all fintech investment. Asia is the real "waking giant" on the scene – the region saw fintech funding quadruple in 2015 to hit US$6.5B. In particular, China drove more than half of all fintech funding in Asia.

Payment and lending are the core sectors that fintech firms focus on, accounting for about 80% of all investment. Third-party payments, peer-to-peer (P2P) lending, and crowdfunding are their main business models. Many of these businesses are long past the experimental phase. Lending Club and OnDeck Capital, two P2P lenders, successfully went public in 2014; three payment giants – PayPal, Worldpay, and First Data – hit the stock market in 2015. Google and Apple are seeking a foothold in the mobile payment sector, too. Internet wealth management, insurance, investing, and credit-rating based on big-data analysis are the popular sectors fintech focuses on as well.

THE FINTECH EXPLOSION IN CHINA

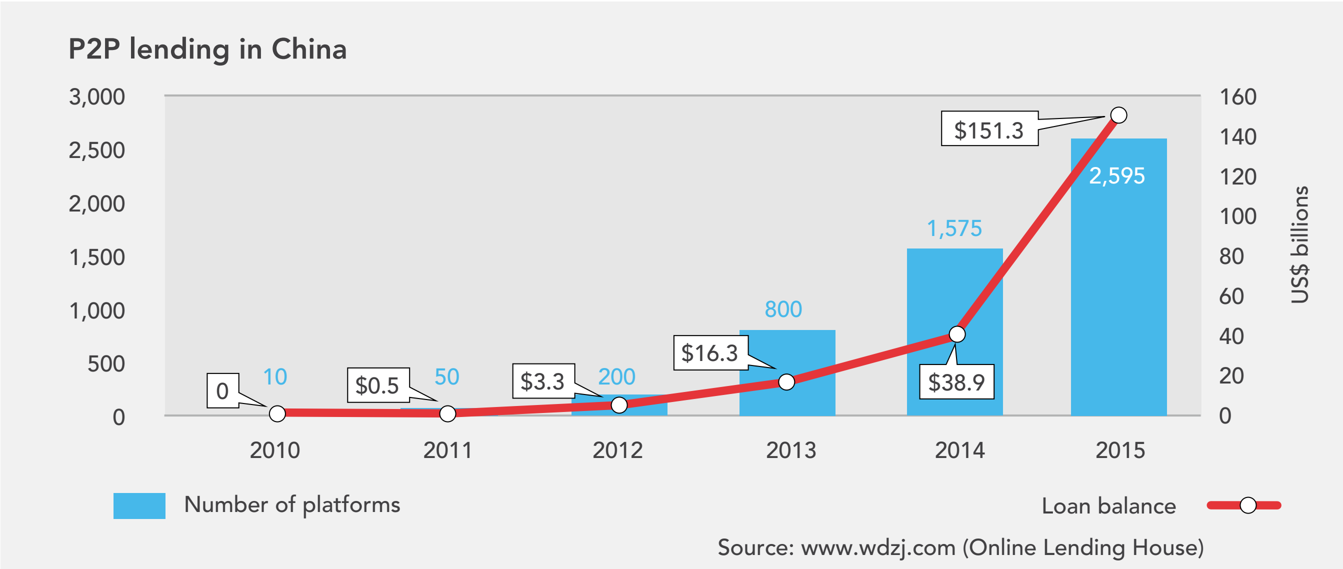
With more than 680 million Internet users and 574 million smartphone users, China has developed the largest fintech user base globally. Driven by the successful digital giants (such as Alibaba and Tencent)

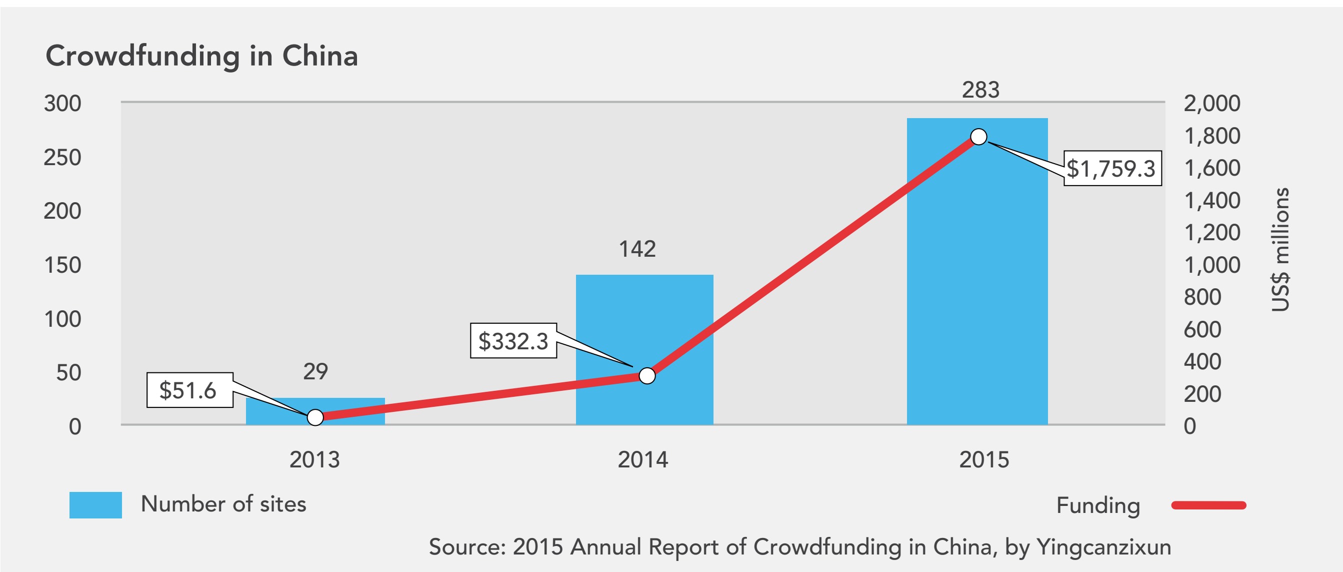
The main fintech business models in China



and ubiquitous e-commerce users, the fintech industry has exploded in China during the past five years. There, the main fintech business models are third-party payment, P2P lending, crowdfunding, Internet wealth management, e-commerce microcredit, and Internet insurance, the first four of which have attracted the most attention.

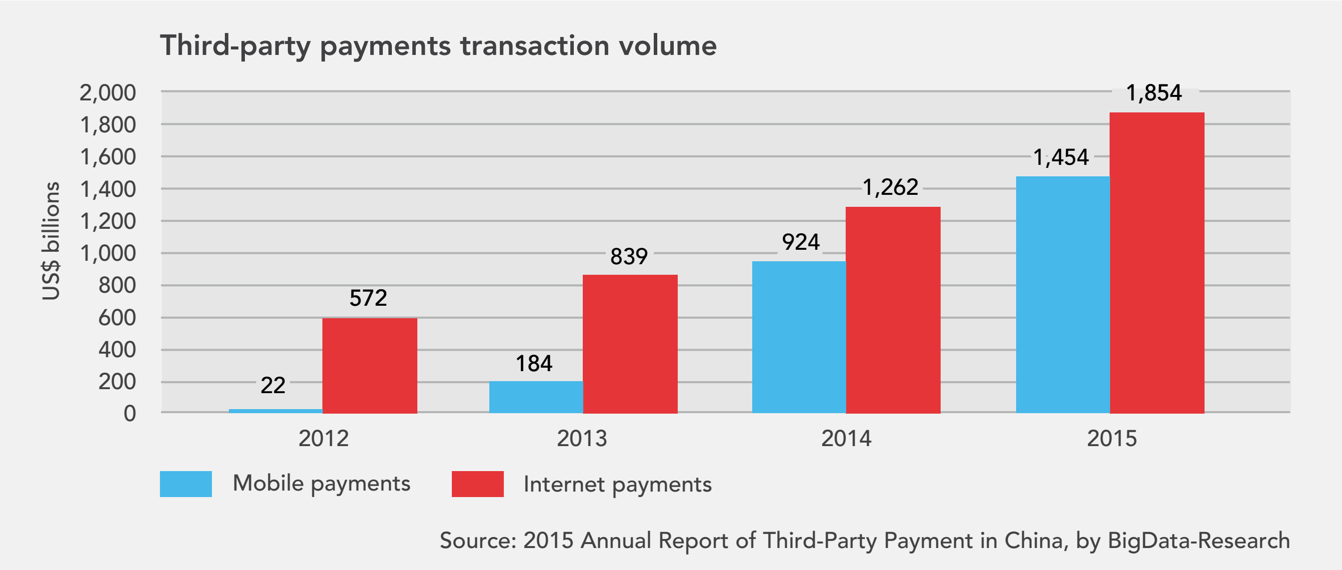
In 2013, fintech's advent in China was marked by the debut of Yu'e Bao, an Internet wealth-management service launched by Alipay. In March 2015, China announced a national "Internet Plus" policy that catalyzed the fintech sector. As of the end of 2015, there were 2,595 P2P platforms, 270 third-party payment providers, and 283 crowdfunding sites across the country. Outstanding P2P credit rose almost tenfold from





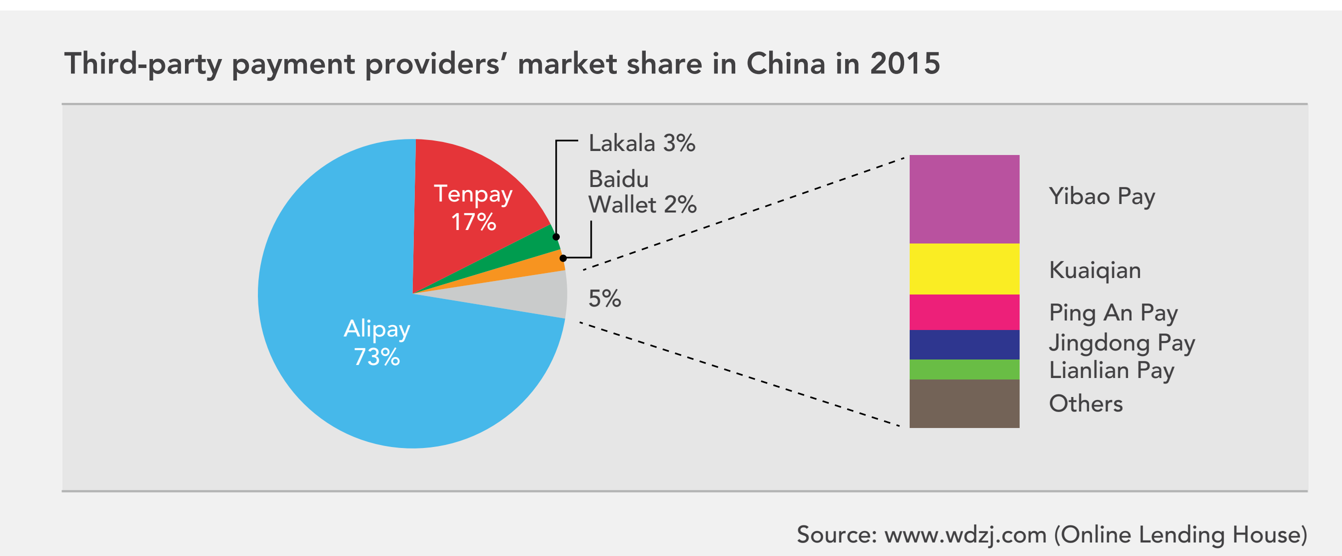
2013 to US$151B, and crowdfunding raised US$1.759B in 2015 versus US$52M in 2013. The total transaction volume of third-party Internet payments reached US$1.853B, double the volume in 2013. Mobile payment is becoming the dominant channel. In 2015, transactions totalling US$1,454B were processed through mobile facilities, accounting for 78% of all Internet transactions. As of the end of 2015, the balance of Internet wealth-management products skyrocketed to US$308B since their introduction in June 2013.

Based on 800 million Taobao accounts (over 400 million active users) and one billion WeChat accounts (about 700 million active users), Alipay and Tenpay (WeChat Pay) dominate the third-party payment market – their transactions accounted for 73% and 17% of the total, respectively, in 2015.[2] As a value-added product offered by Alipay and an Internet wealth-management pioneer, Yu'e Bao occupied nearly half of the market. P2P and crowdfunding industries are much more diversified; the biggest player in each market share has only about 11%.



China has seen a fast-growing but chaotic fintech industry with light regulation in past years. By the end of May 2016, one-third of all P2P lenders (1,305 of the total 4,080 P2P platforms) had run into trouble; some either shut down or couldn't repay the debt, and some lenders absconded with money. The payment and settlement sector became a fierce battlefield between the new payment providers and the banks. Internet wealth management attracted billions in deposits away from banking accounts.

In 2015, the Chinese government released the *Guiding Opinions on Promoting the Healthy Development of Internet Finance* and specific regulations on P2P platforms and non-banking online-payment service providers. These regulations require operators to get permission from regulators and establish a sound client identification system under "Know Your Clients" guidelines for the purposes of preventing fraud and money laundering.



HOW MUCH HAS FINTECH DISRUPTED BANK DINOSAURS?

Fintech is not only changing daily life, but also some people's fate. Thousands of millionaires have been created overnight and thousands of bankers lost their jobs. Last year, 11 global banks (including HSBC, Morgan Stanley, Standard Chartered, Royal Bank of Scotland, and Credit Suisse) cut almost 100,000 banking jobs – 10% of their combined staff – in what's being called banks' "Uber moment." In June 2016, Bank of America announced it was likely to cut up to 8,400 jobs as a result of fewer and fewer consumers visiting its physical branches. Since the end of 2010, this retail banking giant has closed nearly 1,200 of its offices. In March 2016, Citigroup analysts projected banks would cut as many two million jobs globally – up to 30% of their current employees – in the next 10 years, as fintech replaces humans with computer algorithms. Citigroup also forecasted that the number of employees at American banks would drop to 1.8 million by the year 2025 from the pre-financial-crisis peak of 2.9 million; European banks would see an even sharper drop of about 45%, or 1.44 million out of 3.26 million employees, in the same timeframe.

Chinese banks haven't cut jobs, but the traditional banks have been alert to fintech shock since 2013. On June 20, 2013, Chinese banks suffered an exceptional cash crunch with the Shanghai Interbank Offered Rate (Shibor, a market benchmark interest rate in China) hitting 30%, versus 2% to 3% normally. Meanwhile, Yu'e Bao, the newborn (June 13) online money-market fund boasting the convenience of a demand deposit but with a much higher yield, kept attracting savings deposits away from banks. Then Yu'e Bao redeposited the money into banks as an "agreement deposit" (a type of corporate deposit based on the agreement deposit contract signed by customers and the bank) with a higher interest rate, which threatened banks' liquidity and drove up their funding costs. Yu'e Bao attracted US$8.6B in the first quarter, and in less than nine months the fund's assets hit US$83.3B. In June 2016, Yu'e Bao celebrated its third birthday with an incredible achievement: 295 million users and over US$108B assets. China's banks, which remained subject to the deposit rate cap, struck back against the threat by launching more attractive wealth-management products and lobbying regulators to introduce restrictions on the online funds.

Beyond deposit outflow, Chinese banks are more worried about customers' consumption information blocked by third-party payment providers. Some big banks have spent considerable amounts of money to establish their IT systems and data centres. For example, Industrial and Commercial Bank of China (ICBC), the biggest bank in China, has invested about US$1B in technology each year since 1999 and engaged in big-data analysis to improve its financial services. However, the banks' access to customers' online consumption information through third-party payment providers has been blocked by the providers.

According to the Payment & Clearing Association of China, the total amount of online payments reached US$314T in 2015; commercial banks processed 36.37 billion transactions with a total value of US$311T; and third-party payment providers handled 33.4 billion transactions worth US$3.7T. The data shows that, although the value of transactions processed by third-party payment providers is only 1.2% of the value processed by banks, their transaction volumes are very close. Usually, the third-party payment providers shield transaction information from banks. In order to control all the information along the supply-consumption chain, some big banks in China have fought back by establishing their own online shopping malls, such as Rong-e-gou by ICBC and Shanrong Commerce by China Construction Bank.

The fintech firms are not about to put traditional banks out of business, but they do pose a real threat. The millennial generation is becoming the core consumer base now. Growing up with video games, the Internet, and technological innovation, millennials are more accustomed to working and living in the virtual world. According to the Millennial Consumer Trends 2015 survey (a survey of 1,300 millennials from EliteDaily.com's database of readers and contributors), one-third of millennials think they don't need a bank at all, and over two-thirds claim to be more excited about a new offering in financial services from a tech company such as Google or Apple than from their nationwide bank. Many banks have been preparing for the challenge of meeting millennials' needs. In fact, banks are not so conservative as they are often thought to be. They are always the pioneers in adopting innovative technology such as computer, Internet, and big-data analysis, since banks need to process billions of transactions every day. Facing digital disruption, some banks have changed their business model and issued digital strategies. For example, ICBC launched its Internet-based finance development strategy in March 2015. Currently, more than 80% of transactions in China are handled through e-banking.

HOW FAR WILL FINTECH GO IN THE FUTURE?

Compared with traditional banks, fintech does have some strengths, such as lower costs, lower thresholds, greater accessibility, and greater efficiency. Since big banks prefer big and high-end clients based on their financial strength, global network, and universal financial service ability, most new entrants to the sector are sensibly targeting grassroots-class and small and micro enterprises that are refused or neglected by the traditional banks. For example, Alibaba, the digital mega-company, named its fintech affiliation "Ant Financial Services Group," in reference to the company's aim to be like small ants, serving small and micro enterprises and low-end consumers. Alibaba's businesses include Alipay, Yu'e Bao, Ant Financial Cloud, Sesame Credit, and MYbank.

At Yu'e Bao, which means "leftover balance" in Mandarin, the average account balance is only about US$385, and the banks' wealth-management products threshold is usually US$7,700. As to the payment sector in China, the average Internet transaction value through a third-party payment system is only US$111.50, versus US$8,545 by a bank system in 2015. The average loan of each P2P borrower is only about US$23,000, while the big banks' average loan to a small or micro enterprise client is over US$700,000. Therefore, fintech is really a valuable business model to fill the market gap left by banks. In some undeveloped countries, such as Kenya and Bangladesh, mobile financial service offered by mobile operators or other non-bank companies is ubiquitous – especially among small businesses and low-income individuals without bank accounts.

Fintech's strengths, however, just come from innovative tools; the financial products or services offered by fintech are still similar to those of the incumbent institutions. The nature of finance hasn't changed at all. Since the fintech industry is still very small and most governments appreciate fintech's role in promoting inclusive financing, the regulation of fintech is much looser.[3] The banking industry is vital to national economic security and social wealth security, so banks have been heavily regulated since the Great Depression. Without requirements regarding capital adequacy ratios, leverage ratios, provision coverage ratios, compliance, etc., the operational cost of fintech is much lower than for banks, which is a key reason this lucrative sector attracts billions of dollars in investment. However, finance is finance, no matter what kind of technology is adopted. Regulators are keeping an eye on the fintech trend, and they are preparing to curb a new financial giant at any time. The Chinese government already implemented some regulations for fintech in 2015.

Despite their fierce competition with banks, most fintech companies are heavily dependent on banks. Third-party payment providers haven't created an independent circle yet – they still have to link to a banking system. No matter how successful they are, Paypal, Apple Pay, Google Wallet, Alipay, and Tenpay still require customers to link their accounts to credit cards or bank accounts. Alibaba is seeking to establish an ecosystem by itself, and Chinese digital giants (Alibaba, Tencent, and Baidu) are now pushing from online to offline payments and transactions, threatening to cut out the banks and China UnionPay as intermediaries. As a money-market fund, about 90% of Yu'e Bao's investments are in bank deposits. With China's central bank completing interest rate liberalization and several interest rate cuts in 2015, Yu'e Bao's yield decreased from a peak of 6.76% in January 2014 to about 2.45% in June 2016, causing its assets to shrink by US$15B in the second and third quarters of 2015. Lending Club, the biggest P2P lender, is dependent on banks too: 87% of its net revenue in 2013 came from banks that originate its loans.

Cyber security and risk management is another significant challenge for fintech firms. Unlike the centuries-old banks, the upstarts have yet to experience business cycles and have less experience in risk management. The biggest and most successful online lender, Lending Club, is facing such trouble now. Renaud Laplanche, Lending Club's CEO, was ousted in May 2016 because of faulty loans. Laplanche was once the face of the online-lending industry and argued that the Internet would upend finance by allowing borrowers to connect directly with investors. In China, such a problem is more serious than in the United States. According to Online Lending House, nearly one-third of P2P lending platforms ran into trouble each year, sometimes caused by loan defaults. Moreover, there are some loopholes in customers' information security and money laundering, which the regulators focus on.

A bank is fragile by nature. Many bank runs have occurred throughout history when too many nervous depositors demanded their cash. Faith is the cornerstone of the banking business, and this applies to online lenders as well. The Lending Club scandal may lead P2P lending into a downward spiral if investors lose faith in the future of P2P lending, because funding sources are as key to P2P platforms as they are to banks. In the United States, most of the money for P2P lending no longer comes from the general public but from institutional investors such as hedge funds. In China, liquidity risk is a major concern for P2P lenders as well, and some have had to shut down when investors withdraw a large quantity of money suddenly.

In conclusion, while fintech has some strengths to compete with the incumbent institutions, bank dinosaurs aren't facing extinction – although smaller ones may struggle to adapt. Banks' physical footprint is losing value, so branches and other brick-and-mortar financial-services locations will shrink or close in the next few years, to be replaced by virtual offerings. Millions of bankers will suffer the layoff pain. Meanwhile, fintech is facing many challenges relating to regulation, security, risk management, and trust. Customers will benefit from the improved efficiency of the existing global transaction system and inclusive financing driven by fintech. Innovative technology is emerging every day, and the banking landscape will be continually restructured. Due to their capital strength, risk management ability, adaptability, and brand reputation, bank dinosaurs may still dominate the market, with fintech complementing the market alongside other smaller players.

Dr. Annie Xiaoying Niu was an intern at the Asia Pacific Foundation of Canada from May to July 2016. She is a senior manager at Industrial and Commercial Bank of China, and has just completed that bank's International Leadership Development Program at the University of British Columbia.

ENDNOTES

1. In 2012, the sector was simply called "financial innovation," "financial online services," or "Internet finance," and only in 2013 was the word "fintech" used for the first time.
2. Alipay and Taobao are affiliate companies of Alibaba; Alipay's parent company is now Ant Financial Services Group; Tenpay and WeChat are run by Tencent.
3. Inclusive financing, or financial inclusion, is the delivery of financial services at affordable costs to disadvantaged and low-income segments of society, in contrast to financial exclusion where those services are not available or affordable.