

Chinese fintech companies and their “going out” strategies

Chinese fintech
companies

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Abstract

Purpose – This paper outlines the rapid rise of China’s fintech companies over the past decade with a focus on their globalization strategies as they enter their next phase of development.

Design/methodology/approach – The author examines China’s current and prospective influence on global financial digitization trends, and assesses both domestic and foreign opportunities and challenges confronted by China’s fintech firms as they look to expand abroad.

Findings – The Chinese government is experimenting with a radically new fintech system and a regulatory regime in response to it. Chinese ambitions to expand fintech influence through private companies and the state-led “digital RMB” (e-CNY) will likely provoke a wave of “digital protectionism” among developed nations to protect internal digital payments.

Originality/value – This paper is an original economic history research on China’s fintech industry.

Keywords Chinese fintech companies, Strategies, Globalization, Platforms, Regulations, Digital yuan, e-CNY, CBDCs

Paper type Research paper

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1. Introduction

1.1 Outline

In the late 1990s, Chinese President Jiang Zemin launched the strategy of Chinese companies’ “Going Out” into foreign markets as part of China’s Opening-up and Reform. These companies were largely state-owned enterprises (SOEs) and generally concentrated in the primary industry. Fast forward three decades and China is arguably undergoing a new form of “Going Out,” albeit of a different nature. This current phase is largely a bottom-up and private-led movement, driven by China’s most rapidly growing and innovative companies – its private technology companies.

The second section of the paper contextualizes and outlines the ascendance of China’s fintech companies, primarily Ant Group and Tencent, since their incipience in the early 2000s. This section draws on methodologies associated with business history and economics and refers to sources such as oral interviews with company executives and key personnel; secondary literature (e.g. case-studies and reports); Chinese media coverage; and key macro-economic and financial data. The unparalleled pace of China’s digital financialization over the last decade is captured in official and unofficial economic data provided by various Chinese government bureaus and agencies (e.g. National Bureau of Statistics, the People’s Bank of China, State Administration of Foreign Exchange, etc.) as well as other financial databases (e.g. Wind, CEIC, Bloomberg, etc.), and various economic papers and datasets.

Section three analyzes Chinese fintech companies’ motivations and strategies for globalization, relying predominantly on methodologies associated with international finance and political economy. This section broadly fleshes out China’s current and prospective influence on financial digitization across the globe. It examines how Chinese fintech



companies have tried to replicate or remodel their fintech products and services in overseas markets largely through strategic partnerships and foreign investments. Again, the thesis draws on interviews with firms' key decision-makers and Chinese media coverage, as well as company official statements and press releases.

Section four assesses opportunities and challenges confronted by China's fintech companies both domestically and abroad. More recently, Chinese fintech platforms are facing increasing regulatory pushback vis-à-vis their highly lucrative online micro-lending and credit services. Furthermore, they are undergoing potential competition in payments from the prospective roll-out of the People's Bank of China (PBoC) central bank digital currency (CBDC), e-CNY, as part of the "Digital Currency Electronic Payment" (DCEP) plan. This section will also take into account the opportunities and challenges in Chinese fintech companies' global expansion efforts in different regions within the context of greater global skepticism toward China's technological expansion. This last section outlines regional differences and regulatory headwind risks that Chinese fintech companies will confront as they struggle to iterate homegrown successes in foreign markets. This section incorporates methodologies used in international relations and political economy, and outlines regulatory and geopolitical headwind risks that China's fintech companies face as they attempt to "go out."

1.2 Literature review

Research on fintech companies is a comparatively new area of academic inquiry given the relative nascence of the industry. Nonetheless, this paper contributes to a budding area of interest to academics and policymakers alike, as it considers the technological, macro-economic, financial (Fatás, 2019; Frost *et al.*, 2019; Hassan *et al.*, 2019; Gambacarto *et al.*, 2019; Hong *et al.*, 2020; Zhang and Chen, 2019; Casey *et al.*, 2018; Boot *et al.*, 2020), monetary (Tucker, 2017; Petralia *et al.*, 2019; Eichengreen, 2019; Kahn, 2016; Auer and Böhme, 2020; Armelius *et al.*, 2021; Chaum *et al.*, 2021), social (Saka *et al.*, 2021; Chiou, 2020; Philippon, 2020) and even geopolitical effects of financial digitization (Ferguson, 2008, 2018, 2019; Chorzempa, 2021). This paper focuses on Chinese fintech companies' contributions to global financial digitization. It also connects the dots between Chinese fintech research and other more fertile well-researched areas in China studies, such as China's model of "digital authoritarianism" (Fanusie and Jin, 2021; Polyakova and Meserole, 2019; MacKinnon, 2011) and the Chinese government's Belt and Road Initiative (BRI) (Yamada and Palma, 2018; Hong *et al.*, 2020; Hillman *et al.*, 2021). Furthermore, the paper contributes to a fast-growing field of research on CBDs (Bordo and Levin, 2017; Mancini-Griffoli *et al.*, 2018; Andolfatto, 2020; Auer *et al.*, 2020; Niepelt, 2020; Rosa and Tentori, 2021; Qian, 2019) through an analysis of China's digital yuan, known as e-CNY (Chorzempa, 2021; Qian, 2019), and the latter's likely interactions with existing Chinese fintech platforms (Shenglin, 2020).

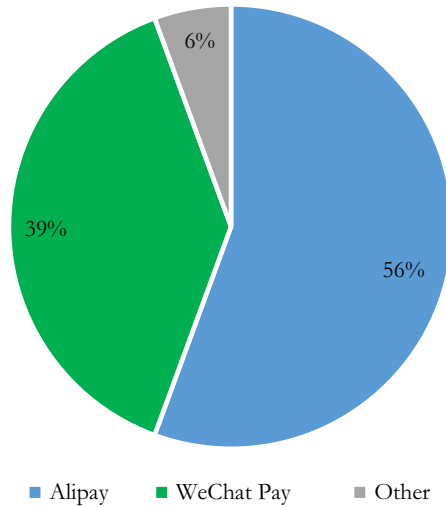
The paper also considers the economic literature on global reserve currency status (Eichengreen, 2011; Ferguson, 2008). Eichengreen's (2011) three criteria for global reserve currency status is helpful in understanding the roadblocks to RMB internationalization though it understates the potential for disruptive financial innovation and network effects to undermine previously embraced monetary models. As such, Ferguson's (2008) contributions shed useful historical light on the importance of financial innovation to both monetary and geopolitical power. In particular, Ferguson credits new financial instruments such as government bonds and stocks to the rise of the Dutch Republic in the 17th century and the British Empire in subsequent centuries.

2. China's fintech rise

Alibaba's Ant Group and Tencent dominate China's colossal digital finance market. Together their two platforms – Ant Group's Alipay and Tencent's WeChat Pay – account for well over 90% of the third-party mobile payment market, which in 2019 was worth well over RMB

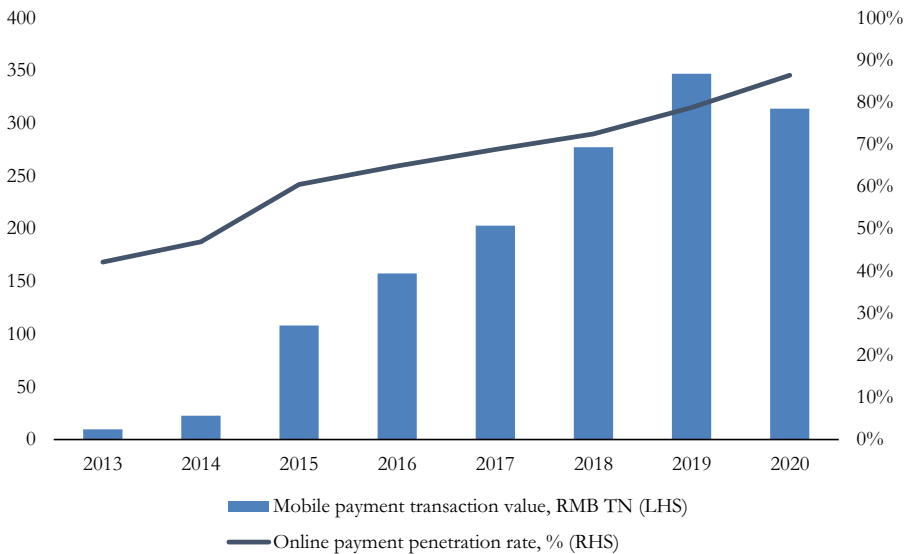
340 tn (over US\$50 tn). Their dramatic ascendance is a story of two private Chinese companies leapfrogging the traditional card-based banking system to service a new fast-growing market of small and micro businesses (SMBs) and consumers in search of more convenient payment methods and increased access to credit and wealth management. The phenomenal rise of mobile payments – both in terms of volume and penetration – is a direct result of these two firms’ world-leading innovations and considerable subsidies (Figures 1–3).

Chinese fintech companies



Source(s): iResearch

Figure 1. Share of China's mobile payments market (percentage, June 2020)



Source(s): Statista; PBoC; CNNIC

Figure 2. China's third-party mobile payments' transaction volume (RMB TN) and penetration rate, percentage

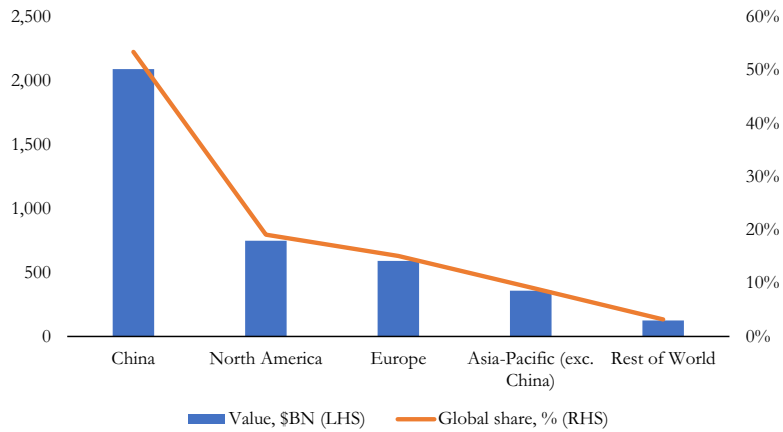


Figure 3.
Global e-commerce market breakdown by value, \$bn, and global share, percentage, 2020

Source(s): eMarketer

Alibaba’s fintech ascendance comes down to building and capturing growth in the country’s ballooning e-commerce market. Alibaba’s Alipay payment platform was initially launched in 2004–2005 and designed internally to facilitate and securitize payments on e-commerce giant Alibaba’s Taobao shopping platform. Alipay was created to help Taobao consumers and merchants transact (i.e. send/receive funds) with a greater degree of trust and security – both of which were sorely deficient in China’s online and offline commercial marketplaces. The key feature was that payments received were effectively kept in an escrow account with the escrow enabling the platform to promise full compensation or refund if goods were missing or compromised. Alipay’s slogan at the time was: “As long as you use Alipay, we will compensate you in the case of account theft.” As an online payment system, Alipay increased trust in Taobao, and the two systems helped each other grow in a positive feedback loop. By 2006, Alipay helped Taobao surpass foreign competitor eBay EachNet, with 67% of the market share to eBay EachNet’s 29%. By August 2007, Alipay had well over 50 million users, whereas credit card users only numbered 30 million at the time. By 2014, it has surpassed US online payments equivalent, Paypal, in payments transaction volume.

Alibaba quickly expanded the Alipay payment platform by adding a suite of new fintech services beyond payments, further broadening Alipay’s appeal and the stickiness of its growing financial ecosystem. In 2009, the Alipay mobile payment app was launched followed by the introduction of the quick payment with credit card service in 2010–2011, with the latter involving joint partnerships with China’s commercial banks. The QR code payment system, a contactless “Quick Response” payment method based on two dimensional barcodes, was initiated by Alipay in 2011. The system enabled Alipay to monetize the offline market with its online payment technologies and further increasing its stranglehold on online and offline operations (Figure 4).

Through real-time payment data and machine learning (ML) algorithms, Ant was able to generate its credit scoring system, Zhima Credit Score, and other credit risk assessment models to swiftly compute and approve loan amounts and terms. The company soon realized that its proprietary technology, called BASIC [blockchain, artificial intelligence (AI), security, Internet of Things (IoT) and computing], could help develop new businesses and clients and ultimately sell its proprietary technologies, including biometric verification, to other financial institutions – even traditional banks. In 2016, company executives began internally to describe and package Ant as a “TechFin” rather than a “FinTech” company.

China now has the largest e-commerce and mobile payments market. From 2008–2014, China’s mobile Internet users grew by over 400 million. Alipay leveraged and supported China’s mobile and Internet boom, becoming the leading Chinese and global third-party mobile payment platform. Its foray into a wider array of financial services over the past decade has pushed more and more Chinese consumers toward borrowing and investing. In 2020, Ant Group was reported to have \$173BN of assets under management, \$290BN in consumer loans, \$17TN in online payments processed via Alipay from June 2019–2020, and 107 million people signed up to its mutual aid health-care plan, Xianghubao. As of June 2020, Ant’s core businesses by revenue – before the well-publicized suspension of its initial public offering (IPO) in November – were more evenly distributed between payments (35% of revenue) and lending (40%), with the remaining revenue stemming from its investment (15%) and insurance (8%) arms.

By contrast, Tencent’s fintech entrée and rapid ascent from 2014 onwards depended on the substantial network effects of its WeChat social messaging super app. After a failed effort to create a gaming digital coin, Q-coin or QQ coin, in 2002, Tencent turned its attention to its popular fast-growing WeChat app in a bid to design an alternative payment platform to Alipay. Three years after the launch of WeChat, Tencent marked the 2014 Lunar New Year celebrations by issuing digital “Red Envelopes”, leveraging a Chinese tradition of money-gifting to family and friends, through the WeChat app. This encouraged mass onboarding of Chinese consumers onto WeChat Pay and the connecting of their bank accounts to the WeChat Wallet. By 2016, well over 46 billion red envelopes were circulated among WeChat friends using the app – up from 16 million in 2014. From 2014 to 2016, WeChat Pay’s market share of third-party mobile payments rose from 10% to 32%, whereas Alipay’s dipped from 80% to 55%.

By 2017, WeChat Pay was beginning to surpass its precursor, Alipay, in many key growth metrics. WeChat Pay (800 million) had more mobile monthly active users (MAUs) than Alipay (520 million) in 2017, testifying to the power of its super app’s positive network externalities. In 2018, WeChat Pay registered 460 billion annual transactions and 1.2 billion average daily transactions compared with Alipay’s 197.5 billion annual transactions and 0.5 billion average daily transactions. According to Ipsos’ calculations, in Q4 of 2018, WeChat Pay had a higher penetration rate (86.4% of mobile payment users) than Alipay (70.9%).

Both WeChat Pay and Alipay now offer A–Z lifestyle services and applications well beyond payments, extending to lending, wealth management, mutual funds and big data analysis for banks. Neither company charges for person-to-person transactions, levying a minimum 0.1% fee for withdrawals over a certain threshold. Most of their profits therefore come not directly from payments, but from the wider financial ecosystem and services netted around them. Technological innovation aside, the mass subsidization of payments by both Ant and Tencent should not be overlooked. Some analysts estimate that Tencent’s merchant subsidy amounted to as much as \$1bn in 2018, while Ant’s was as high as \$2–\$4bn. Similarly, Ant and Tencent have tried to subsidize cross-border payments to encourage foreign adoption.

Big tech companies in China and elsewhere are increasingly viewed as modern-day monopolists or “robber barons” of the new data-driven age. Incumbent tech firms – whether they be GAF A (Google/Alphabet, Amazon, Facebook and Apple); FAANG (Facebook, Amazon, Apple, Netflix, Google/Alphabet); or China’s BAT (Baidu, Alibaba, Tencent) – all benefit from network effects and increasing economies of scale. These two principles alone have allowed these tech platforms to monetize and control the ecosystems they build around them more cost-efficiently than smaller rivals. They have also been adept at unlocking new demand and value through what Chris Anderson has elsewhere called the “long tail” of generating endless choice and unlimited demand in niche goods. The monopoly effects also

extend to the realms of investment and other anticompetitive tactics (e.g. copying, legal action, privileging of one's content and/or platform). These tech companies have been aggressive in their backing of would-be rivals (e.g. Tencent's backing of e-commerce platform Kuaishou) and frequently either privileged their own platforms or actively blocked users from accessing other companies' content or platforms (e.g. Alibaba vs. Tencent). There is concern that AI and ML technologies will further entrench monopoly effects by leveraging the power of algorithms and access to data to further enhance efficiency and usability. Brynjolfsson, McAfee and Spence write in a 2014 Foreign Affairs piece that "superstar-based technical elite" basically benefit from a winner-take-all model or Zipf's law (i.e. a pareto-like distribution) in which most of the profits and market share in the digital economy accrue to the few at the top.

The coronavirus disease 2019 (COVID-19) pandemic has increased the capabilities and powers accrued to China's tech firms and will reinforce China's uneven "K-shaped" recovery. The differences between China's tech-driven wealthy eastern cities (e.g. Beijing, Shanghai, Hangzhou, Shenzhen) and the rural interior are already starkly apparent. [Autor and Reynolds \(2020\)](#) find that the COVID-19 pandemic will increase the imbalances in favor of high-wage and high-skilled workers who can continue to add value and work "remotely" at the expense of low-wage and low-skilled workers. It is worth adding to this analysis that the rise of the "gig economy" and part-time contracting through "sharing platforms" such as food-delivery (e.g. Meituan and Eleme) and ride-hailing (e.g. DiDi and Caocao) will continue to reduce workers' bargaining power, adding to the propellants of inequality in the labor force and the economy and society more broadly. These are cause for deep-seated concerns for the Chinese Communist Party (CCP), which has long sought to be responsive to social pressures as part of what some political scientists have called its singular model of "authoritarian responsiveness" or "authoritarian resilience" ([Qiaoan, 2020](#)).

The Chinese government has cause to be concerned about rising regional and socioeconomic inequalities arising from its increasingly uneven economic structure. In the aftermath of the Global Financial Crisis 2008–2009, the income gap and gross domestic product (GDP) gap between China's southeast coastal provinces (i.e. Guangdong, Zhejiang and Jiangsu) and northeast "Rust Belt" provinces (i.e. Liaoning, Jilin and Heilongjiang) has risen significantly.

Moreover, the era of big data and ML has incontrovertibly reinforced the "moating" and monopoly effects of data-rich platform companies by increasing their speed, competitiveness and efficiency. In fintech especially, these efficiency gains are reflected in fintech companies' lending record. [Gambarcota et al. \(2019\)](#) find in their economic analysis of Ant's proprietary transaction data that the ML and big data-based approach employed by Ant was better able to predict credit losses and defaults than traditional banking models. Furthermore, according to one of the paper's authors, Peking University economics professor Huang Yiping, each of the three virtual banks, Tencent's WeBank, Ant's MYbank, and XWBank can now grant "around 10 million loans annually." Their nonperforming loans (NPLs) for small and medium-sized enterprises (SMEs) before COVID-19 were found to be much lower than those of commercial banks.

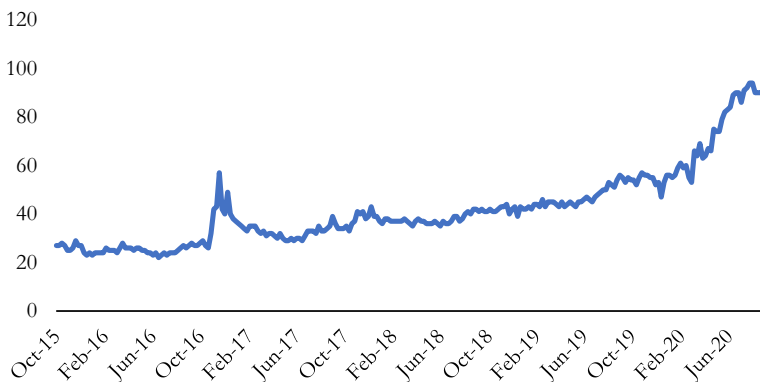
Nevertheless, new Chinese tech players are jumping on the fintech bandwagon, leveraging their own networks and platforms to compete with Ant and Tencent for market share. Traditionally, other tech platforms have had to rely on WeChat Pay and Alipay for online transactions. They realize that they can monetize the data and network they own through their platform, making payments a natural next step. For the first time since 2016, financial regulators have issued financial licenses for online third-party payments to Chinese tech platforms including social media ByteDance (Douyin), Bilibili, Pinduoduo, Kuaishou and Ctrip. These companies run the gamut of different tech sectors, ranging from e-commerce and social media to travel and video streaming. Bytedance has already launched Douyin Pay for

in-app purchases, alongside WeChat Pay and Alipay. These firms have yet to delve into lending, insurance, and wealth management products and services, but it is only a matter of time before they expand in these directions.

3. The globalization of China's fintech companies

While Chinese tech firms dominate the mainland market, they have yet to make significant headway in foreign markets. Ant and Tencent have made most of their global gains in generating foreign merchant uptake and securing minority stake investments in foreign tech start-ups or “unicorns”. Ant and Tencent’s primary motivations and strategies for fintech globalization center around two missions. The first is to create a global network of interoperability between Chinese and foreign digital payments or “e-wallets.” The second is to invest in and support current and future fintech leaders around the world.

Tencent and Ant’s partnerships with foreign banks and credit card companies are also a matter of improving foreign tourists’ spending experiences in China and attract them to their platforms (Klein, 2020). Before 2019, foreigners were unable to use foreign bank accounts with Chinese e-wallets as users previously needed a domestic Chinese bank to register for a WeChat Pay or Alipay account. Tencent and Ant both created international wallets in November 2019, allowing foreigners to connect their foreign cards to Alipay and WeChat Pay accounts. From a user experience standpoint, China’s mobile-enabled QR-based system is powerful and far more convenient than the traditional bank-based payment rails (e.g. Visa and Mastercard). The global rise and proliferation of QR codes, especially in emerging markets, is a testament to this fact (Figure 4).



Source(s): Google

Figure 4. Google trends search for “QR code”

From the outset, Alibaba and Tencent have had differing approaches to foreign investment. While both companies have poured investments into emerging markets (EMs), Alibaba’s focus has been on investing larger sums or controlling stakes in a relatively small select number of firms in the fintech, e-commerce and supply chain sectors (e.g. Singaporean e-commerce platform Lazada). Tencent, by contrast, has chosen to invest smaller individual stakes in a wider range of companies (e.g. US gaming firm Activision Blizzard) that specialize in Tencent’s core business strengths: online media, content creation and gaming. As a whole, Tencent has been the more active company in foreign mergers and acquisitions (M&A) activity, viewing and styling itself as the “Softbank of China” in terms of the ambitious scope

of its overseas investments – though it is also noted for its more hands-off approach to the companies it invests in. To date, Tencent has invested in 800 companies, including 160 unicorns and 70 listed companies. By contrast, Alibaba has invested in 312 companies, gone through 676 funding rounds, and made 50 exits.

The Chinese government’s BRI, launched in 2013, is a state-led infrastructure and investment plan designed to expand Beijing’s global influence and sway through trade, development and financing. Originally conceived of as a way to “win friends and influence people” around the world through massive loans and exports of China’s “excess capacity” in steel and construction, Beijing has begun to pivot from this capital-intensive infrastructure-heavy model.

Influenced more recently by President Xi Jinping’s “dual circulation” model of stoking domestic demand and upgrading technology, Chinese officials are moving away from infrastructure-heavy lending and development to focus on health (i.e. Health Silk Road), green technology (Green Silk Road), and consumer and digital services (Digital Silk Road), raising the profiles of these offshoots formed over the past few years.

Launched in 2016, the Digital Silk Road serves to leverage the innovations and capital of China’s private and state-owned tech firms. The tech focus reflects developments on the ground in the mainland. China now accounts for 23% of global cross-border data flows, almost double the US share. The digital turn also chimes with the government’s focus on data as a new input for production (joining land, labor and capital), as well as its concerted goal to become a global “cyber superpower.” Chinese tech firms such as Alibaba, Tencent and Huawei are already exporting “smart city technologies” and offering integrated city or “country-as-a-platform” solutions, which detractors have labeled as evidence of China’s “techno-authoritarian toolkit.”

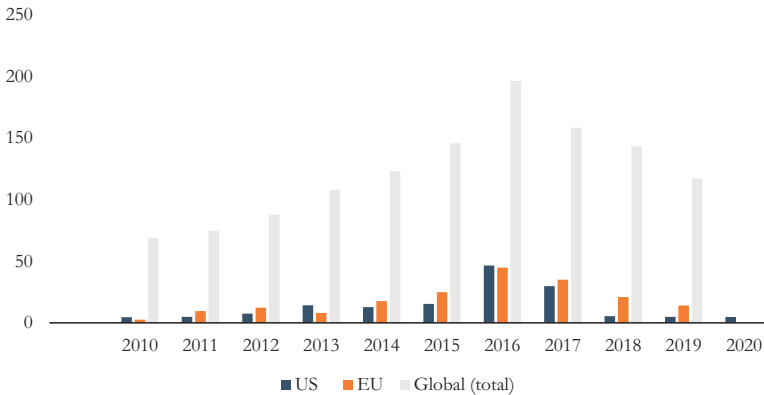
This new digital iteration of BRI could accelerate the reach of China’s private tech firms by offering them state imprimatur or support for their “going out”. From the vantage point of China’s private fintech companies, the Digital Silk Road offers distinct opportunities and challenges to their global expansion. Their role in building out the world’s digital and financial infrastructure or plumbing, especially in the developing world, cannot be overstated. China’s tech model is already serving as a blueprint for emerging market economies across Asia, Latin America and Africa – led by Chinese and foreign entrepreneurs alike. In many respects, China’s fintech miracle story, birthed and displayed in cities like Hangzhou and Shenzhen, is more relevant and applicable to meeting the needs of emerging market countries than Silicon Valley’s model. This fact is being reflected by the increasing number of foreign start-ups and venture capitalists flying into Hangzhou and Shenzhen to learn from the China tech model. As one Alibaba executive put it: “Silicon Valley creates world-class solutions for first-world problems. Alibaba creates world-class solutions for third-world problems.” According to seasoned venture capitalist Hans Tung, “it’s very difficult for an emerging market just to copy a model from the US and try to localize it because the stage of development is different for different countries. China spent the first 10 years copying models from the US, but they had to do so much more customization and innovation to make it work for emerging markets . . . [I] feel that Chinese consumers have trained Chinese founders and companies to be able to deal with other emerging markets better as well.”

The longer horizon pay-offs of helping to develop digital and financial infrastructure in developing markets may be even more significant for Chinese fintech firms. As the China fintech model shows, the creation of a financial lattice or ecosystem, powered by mobile payments, can have an outsized bearing on future market opportunities for local and foreign players: spurring a panoply of new services, products and business opportunities, thereby increasing the pie for all.

As Chinese tech firms face more regulation and competition at home, the top tech firms and China-based venture capital (VC) companies may increase their risk appetite for outbound

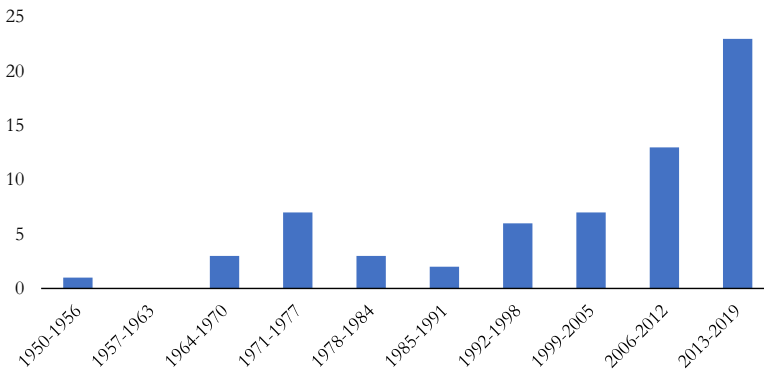
M&A in 2021 and beyond – but not without meeting increasing headwinds in the form of global regulation, competition, localization and skepticism toward China and the model it tries, at times, to export (Figures 5 and 6).

Chinese fintech companies



Source(s): US-China Investment Hub; Rhodium Group; Statista

Figure 5. China outbound foreign direct investment (FDI) in US, EU and the world, \$BN



Source(s): Rhodium Group

Figure 6. Changes to FDI screening regimes in 20 major economies, 1950–2019

4. Challenges and opportunities

4.1 Domestic regulations

In the early stage of China’s fintech development (c. 2004–2016), the Chinese government employed a broadly laissez-faire wait-and-see approach toward the nascent industry. As Chorzempa notes, the first regulations and licenses were only introduced in 2010 and 2011, sparked by financial scandals and illegal activity. From 2013 to 2016, under the guardianship of the more reform-minded former PBoC governor, Zhou Xiaochuan, the fintech industry was generally allowed to bloom with little constraint. Governor Zhou’s belief at the time was that Ant and Tencent’s financial innovations could help inject “competition” that would “improve the development of traditional industries, adapt them to new situations and stimulate them,

thereby helping them keep up with technology. Through this competition, the final result is that competition will bring about better products and better services. That is, the entire financial industry will bring better products and services to the real economy and to consumers.” Fintech companies seemed to offer solutions to some of the long-standing problems in China’s state-dominated financial system: financial repression, low levels of efficiency and innovation, and a lack of access to credit for SMBs and rural consumers. Governor Zhou’s view was also that regulators needed to “learn” and “update rules and regulations.” Regulators during this period were also reluctant to regulate an industry that they were still striving to understand and learn from. The Chinese government has historically demonstrated an understanding that private firms are indeed critical to driving much-needed productivity and innovation (e.g. the dual-track price system of the 1980s, the rise of the Internet in the 1990s and fintech and social media in the 2000s).

This regulatory gray zone approach ended around 2016 when the risk of financial bubbles created by online peer-to-peer (P2P) lending and untamed speculation forced the hand of regulators to try to contain the financial risks. The 2015–2016 stock market turbulence panicked regulators and drove them to take more decisive measures. From 2016 to 2020, regulators have tried to take back more control from the increasingly powerful fintech players – and also leverage their strengths to increase government oversight. In 2017, regulators announced that all of Tencent and Ant’s transactions would have to be cleared through the PBoC’s clearing house, giving the central bank access to their transaction data. In 2019, the PBoC announced a three-year plan to design a unified nation-wide QR code system that would enable interoperability across different e-wallets run by different institutions (i.e. banks and other fintech players). This would further erode the Tencent–Ant duopoly. More recently, regulators are pressuring Ant and Tencent to increase data-sharing – in both volume and frequency – with the PBoC Credit Reference Center. Ant and Tencent currently submit condensed records of their clients’ lending data to the PBoC’s credit information database on a monthly basis. The direction of travel will doubtless be to share more lending data and more frequently.

Since late 2020, Chinese regulators have further advanced to rein in Chinese tech companies, issuing new sweeping anti-monopoly laws and financial crackdowns.

The key issues cited by regulators are tech giants’ anticompetitive behavior (i.e. the “pick one from two” model and their M&A record), improper pricing, and the “inappropriate collection and control of data” by “leading Internet platforms that have abused their market monopoly.” This new approach reflects regulators’ concerns that the power of data – through largely closed-loop data ecosystems – have allowed Alibaba, Tencent and other tech platforms to become incalculably and dangerously rich and powerful. It also reflects the party’s view that data are “public goods” that should not be singularly owned by Tencent and Alibaba. The government is not alone in castigating these tech incumbents. The public backlash against China’s monopolistic tech firms over the past few years has also been noteworthy.

In the government’s most recent 14th Five Year Plan (2021–2025), Beijing has called for tighter regulations on Internet tech platforms, particularly in fintech, telemedicine, autonomous vehicles and smart logistics. Beijing also urged commercial banks to increase lending to SMEs by 30% year-over-year (y-o-y) to substitute for lending from China’s private fintech platforms such as Ant’s Alipay. New rules effective in January 2022 will seriously cut Alipay’s lending platforms, as it effectively mandates that Chinese commercial banks must limit their joint lending with fintech platforms to less than half of its total loans. Banks’ joint lending with a single fintech platform must be under 25% of its core capital. Beyond co-lending caps, regulators are also limiting so-called “loan facilitation,” which allows Internet credit platforms to sell borrowers’ risk profile assessment and management services to banks.

Thus far, the focus of regulatory fire has been squarely on Ant due to the latter's dominance and influence in the lending sector. Last November, Chinese regulators suspended Ant Group's much-anticipated IPO. On April 10, the State Administration for Market Regulation (SAMR), China's super-regulator for antitrust regulation and enforcement, issued a \$2.8BN fine on Alibaba – equivalent to 4% of Alibaba's 2019 revenue. Alibaba's "pick one of two" model of forcing merchants to exclusively use its platform was heavily criticized by SAMR regulators. On April 12, the PBoC, in coordination with the China Banking Regulatory Commission (CBRC), China Securities Regulatory Commission (CSRC) and the State Administration of Foreign Exchange (SAFE), announced five more requirements for Ant Group's future restructuring as a financial holding company.

Other tech companies have certainly not been spared regulatory ire. In April 2021, Chinese regulators ordered 34 Internet companies, including Tencent, Meituan, Bytedance, Baidu, and JD.com, to "heed Alibaba's example" and address their anticompetitive behavior within the next month. They also summoned Chinese tech companies to order them to restructure their financial spin-offs into separate financial holding companies and cut so-called "improper links" between their payment and financial services (e.g. loans). In contrast with the 2013–2016 period, in which regulators were remarkably laxer on fintech companies than traditional state-owned banks, they are now making a volte face, treating fintech companies more as traditional banks (with capital requirements and loan caps) and helping to level the playing field for state-owned commercial banks and new fintech entrants. The PBoC has recently acted out of growing concern about traditional banks' margins and the growing duopoly of the two incumbents (especially as they achieve dominance in big data and fintech analytics).

4.2 Digital currency

In the realm of financial technology itself, Chinese policy makers believe that the leadership in digital currency will confer a distinct geopolitical advantage.

Since 2014, WeChat Pay and Alipay have facilitated the astronomical rise of cashless online payments in China. That same year the PBoC began research into the creation of a digital yuan as a form of CBDC. In recent years, the PBoC has tried to wrest control of China's increasingly cashless digital financial system. Third-party payment providers, namely Ant and Tencent, were initially hesitant to hand over proprietary data on consumer transactions to regulators. Yet in recent years, PBoC officials have applied more pressure to centralize financial data in their own hands and reduce informational asymmetries between regulators and online payment companies. In June 2018, the PBoC forced online payment companies to channel all their transactions through the PBoC's new clearing house, China Net Union Clearing Corporation. The PBoC is currently rolling out plans to implement a unified QR system that both fintech giants would have to adopt.

China is now the front-runner in CBDC research and deployment. After six years of research, the PBoC has launched pilot programs of its e-CNY in four major cities in 2020 and is planning expansion into more regions—with a nationwide rollout slated for the Winter Olympics in February 2022. The Digital Currency Electronic Payment (DCEP) system, recently rebranded as e-CNY, is a token-based digital currency running on a two-tiered centralized and permissioned private network controlled by the PBoC. Chinese banks and third-party payment platforms act as intermediaries and settlement ultimately happens in RMB. The DCEP will initially be used across government institutions, then large Chinese companies, and then potentially as a settlement layer across the Belt and Road.

Tier one controls money supply and financial data (i.e. transactions between the PBoC and intermediaries such as banks, telecom operators and some third-party payment platform companies). Tier two controls distribution of e-CNY (i.e. transactions between intermediaries and retail market participants such as individual users or businesses). Intermediaries will include China's commercial banks (i.e. the "big four" banks), telecom operators, card

providers (e.g. UnionPay) and third-party payment companies (e.g. Alipay, Tencent, JD). E-CNY wallets will allow consumers to make payments through QR codes, prepaid cards, or near field communication (NFC) (wireless transfer) technology (like Apple Pay or Samsung Pay).

According to former PBoC chief Zhou Xiaochuan, the second-tier institutions (i.e. banks and fintech platforms) will “own the digital yuan. . . . In this sense, DCEP is different from the typical CBDC, which is owned and indebted by a central bank.” These second-tier institutions will need to bear Know Your Customer (KYC)/Anti-Money Laundering (AML) and user protection compliance responsibilities. The PBoC will ensure the stability of e-CNY’s value by “requiring banks to set aside money as reserves and then issuing them certificates of indebtedness or letters of comfort.” As legal tender, businesses will be obliged to install e-CNY on terminals and payment systems. Even without an Internet connection, users can transact between two offline devices through new NFC technology that enables mobile wallets to make contactless payments without needing to connect to the Internet. PBoC officials have not specified a nationwide launch date – but speculation is that it may be timed to coincide with the 2022 Winter Olympics in Beijing.

PBoC officials have made it clear in their reports and presentations that DCEP will enable “controllable anonymity” in China’s financial system. In practice, this means expanding the PBoC’s oversight over all aspects of citizens’ financial data while keeping the data anonymous and private to any third party. Using identification-based cryptography (IBC), the PBoC will be the sole authenticator of all financial transactions, and all commercial banks’ data as well as information from digital currency wallets will be jointly stored in the central bank’s database.

Aside from increasing control over the domestic financial system, Chinese policy makers believe that in the short-term DCEP will help China bypass the Society for Worldwide Interbank Financial Telecommunication (SWIFT) settlement system, which Beijing fears that the USA might use against it, as Washington has used it against Iran and other rivals.

On the cross-border payments side, Chinese officials have also called increasingly for an alternative to the USD-dominated SWIFT and Clearing House Interbank Payments (CHIPS) systems in which the RMB could be vulnerable to sanctions from Washington. Vice-Chairman of the China Center for International Economic Exchanges (CCIEE) stated at a conference in Shanghai on October 29 that the RMB is highly vulnerable to the USA on cross-border payments through SWIFT and complained that slow transaction speeds made SWIFT an “outdated, inefficient, and costly payment system.” China is trying to build an alternate payments system – for both domestic and cross-border transactions to wean itself off dollar dependence and avoid the threat of future US financial sanctions. In this new framework, DCEP will be combined with the existing Cross-Border Inter-Bank Payments System (CIPS) for clearing and settlement in cross-border RMB transactions. But CIPS is still small: it processes only a fraction of what SWIFT does (CIPS processes ~\$19BN/day, while SWIFT processes \$5-\$6TN/day). China’s best hope for fast-tracking independence from the US-dominated SWIFT system is by linking “federated e-wallets” via its fintech companies.

According to Mu Changchun, one of the lead architects of e-CNY, the main motivations are to create a system free of the USA; increase efficiency, security, and speed of retail and cross-border payments and settlements; improve record-keeping and verification of financial transactions; increase government oversight of all aspects of the economy, including international capital flows and real-time macro and financial indicators (e.g. inflation); facilitate RMB internationalization in tandem with the BRI and third-party payment platforms such as WeChat Pay and Alipay, and bypass the US-based SWIFT settlement system to avoid the threat of US sanctions.

Chinese policy makers are also aware of the opportunities that e-CNY can provide for RMB internationalization. Despite the slight reversal of RMB internationalization since 2015, PBoC

officials remain interested in furthering RMB internationalization in trade settlement, cross-border loans and central bank foreign exchange (FX) reserves. Thus far, PBoC's efforts to foster RMB internationalization have had very limited success. Even after RMB's addition to the International Monetary Fund's (IMF) special drawing rights (SDR) in October 2016 and the launch of the CIPS in 2015, RMB use has been lackluster, especially taking into account the size of China's trade volumes and the fact that it has replaced the USA as the largest goods trader. Nevertheless, the PBoC believes that DCEP could considerably increase the RMB turnover rate, and scale and lower costs of cross-border payments. Chinese government officials were initially vocal about the benefits of DCEP to RMB internationalization, especially in response to fears in the summer of 2019 about the launch of Facebook's stablecoin project Libra – now called Diem – as a potential rival to fiat currencies or, worse yet, an anchor for continued dollar hegemony. Chinese officials are now increasingly keen to soften the rhetoric and optics around e-CNY internationalization for fear of unsettling other countries.

There is a potential too for e-CNY internationalization to be further supported by the BRI. Chinese officials could incentivize participating BRI countries to settle trade in digital RMB or take on digital RMB-denominated loans. Go Yamada and Stefania Palma argue that China's BRI, extending from Beijing to South Asia, Africa and Western Europe, could conceivably give the digital RMB global distribution to continue de-dollarization of Chinese trade and achieve one of Barry Eichengreen's three requirements for currency reserve status. While the share of digital RMB-denominated trade and lending could be raised by e-CNY, China's lack of currency convertibility and closed capital account complicate efforts to raise the RMB, especially with respect to its share of global currency reserves. Moreover, RMB's lack of liquid funding and available hedging instruments will mean that USD continues to be cheaper and easier to borrow and trade in. All things considered, the RMB has a long way to go to achieve the attractiveness of the USD as the world reserve currency given China's continued structural limitations in the following areas: capital account liberalization, full currency convertibility, and stability and trust in China's financial markets and institutions.

WeChat Pay and Alipay could potentially give some credible ballast to e-CNY internationalization that would defy economists' models about reserve currency status. The global spread of their e-wallets could theoretically create a network of global users that would be more receptive to accepting e-CNY given the ease of transacting and network effects. The best-case scenario would be a blending of Ant and Tencent's "federated" global e-wallet network with central bank-led CBDC bridges.

4.3 Global competition: "local champions" and new entrants

Another major headwind risk for Chinese fintech companies' global expansion will be growing competition from other fintech players or "local champions" that are actively replicating the China fintech playbook. Indian Reliance's Jio Pay and Indonesian Gojek are both fashioning themselves after WeChat's super app example. Both are being funded by US tech companies seeking to enter the payments space in Asia. Facebook, in particular, looks set to embed its WhatsApp Pay digital wallet on the Jio Pay and Gojek platforms. Facebook's digital currency stablecoin project, renamed as Diem, also seeks to dominate global payments by leveraging its network of 2.8 billion users (a third of the world's population). Other US tech firms, Apple, Google and Paypal, have been actively learning from the Chinese fintech playbook and are also jumping into payments and increasing their fintech presence in Asia.

It should be noted that reluctance to adopt mobile wallet and QR-based technologies may also stymie or slow down the spread of China's payments system. Singapore, for instance, is said to have one of the lowest mobile wallet adoption rates due to the stickiness of their card-based system.

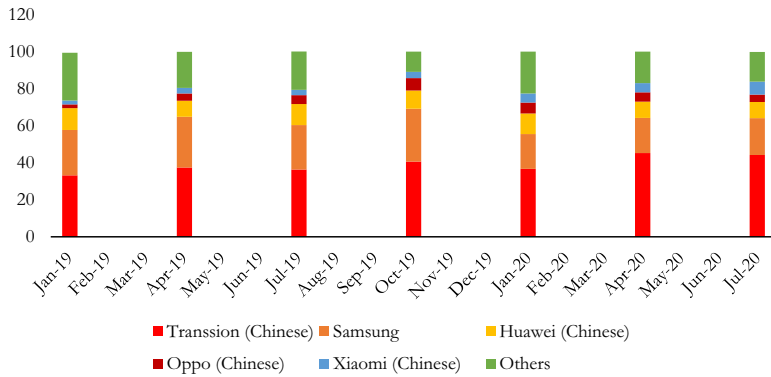


Figure 7. Africa smartphone market share by vendor share of shipments, percentage

Source(s): Statista

In Africa, especially, Chinese tech companies are quietly making inroads. Nigeria-based but Chinese-owned tech company Transsion Holdings continues to lead in market share in Africa (Figure 7). Its main product, Tecno, was one of the first to offer an Ethiopian Amharic keyboard and its Boomplay music-streaming app is now the largest music streaming service in Africa. This too could confer Transsion asymmetric network advantages for an expansion into payments, which it is already moving into with its recent funding of African fintech startup, PalmPay. Meanwhile, the highly successful Chinese-founded and -backed Nigerian fintech company OPay is looking to expand from payments into remittances and credit lending and eyeing further expansion across the African continent.

5. Conclusion

The Chinese government is experimenting with a radically new fintech system and a regulatory regime in response to it. Its approach has been to weave elements of the innovative market and the protectionist state to optimize on both competition and control. The success of this endeavor will rest on the government’s ability to make the most of both without hurting the very companies, Tencent and Alibaba, that made China’s fintech revolution possible in the first place. But updated anti-monopoly law, financial crackdowns, and the roll-out of e-CNY are all leading to a sustained erosion of the Alibaba (Ant)–Tencent duopoly. The DCEP e-CNY roll-out is unlikely to be an aid to Chinese fintech companies’ internationalization in the short run.

Chinese ambitions to expand fintech influence through private companies and the state-led “digital RMB” (e-CNY) will likely provoke a wave of “digital protectionism” among developed nations to protect internal digital payments. While China runs the risk of being increasingly boxed out of other countries’ digital payments, Chinese tourists and Chinese living abroad will continue to expand global acceptance of and interoperability with Chinese e-wallets. Through Beijing’s DCEP/e-CNY project, Chinese fintech companies may actually experience some added asymmetric advantages in global cross-border transactions, blending a “federated” global e-wallet network with central bank-led CBDC bridges.

Chinese fintech companies’ globalization strategies will have profound implications for the global development of payment platforms and financial services. China already accounts for 23% of global cross-border data flows, double the US share – mostly thanks to the use of popular Chinese apps and services in Japan and Southeast Asia provided by Tencent’s

WeChat and ByteDance's TikTok. This share could very well continue to expand. The story of Ant Group and Tencent's global expansion – whether by means of federated e-wallets, strategic partnerships or investments – will indelibly shape the global landscape of financial inclusiveness, innovation, stability and data privacy. China's fintech story is already inspiring similar proliferation around the world. The bullish scenario will be the creation of a Chinese-designed digital financial infrastructure that may yet surpass the influence of the BRI itself. The bearish outcome is increased regulatory clampdown both domestically and overseas that could dampen Chinese fintech companies' growth prospects.

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