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Ant Group (A)

We strive to enable all consumers and small businesses to have equal access to financial and other services through technology.

— Ant Group Mission Statement[1]

On November 3, 2020, the Chinese government called off Ant Group's (Ant's) initial public offering (IPO), just two days before its highly anticipated listing on the Hong Kong and Shanghai stock exchanges. Ant, a pioneer in promoting inclusive finance (i.e., the provision of affordable financial services to the underprivileged population), provided financial services and products to one billion users. Its flagship product, Alipay, a ubiquitous Chinese mobile payments app, served as a substitute for cash and credit cards. Ant also offered consumer lending services, online banking, investment products, and insurance.

The postponement of Ant's IPO rocked the technology (tech) and financial worlds and generated a frenzy of news stories about its implications and impact. Some observers saw it as a sign that Beijing was serious about regulating China's tech sector and was using Ant to set an example for the rest of the industry. Others opined that it was an attempt to rein in Jack Ma, Ant's majority shareholder and the founder of Chinese e-commerce giant Alibaba. In 2014, Ma had shepherded Alibaba through a $25 billion IPO. Ant's IPO was expected to be even bigger, potentially raising $34 billion at a valuation of $310 billion.[2] China's tech boom had been called "the era of Ma Yun"—Yun being Ma's Chinese name.[3]

A month prior, Ma, a man known for belting out Broadway tunes at company events with thousands of employees, criticized the Chinese regulatory system in a speech to top Chinese regulators.[4] Some worried the canceled IPO was a consequence of his speech.[5] But Chinese officials had long considered regulating the country's booming tech industry, particularly financial technology (fintech) firms. Ant's consumer lending unit, which included Huabei, a virtual credit card, and Jiebei, a personal microloan lending service, posed concern. Ant provided partner banks the data to assess a potential borrower's credit risk, while the banks provided capital for the loans (just 2% of these loans was funded by Ant).[6] Regulators fretted that partner banks were bearing too much borrower default risk. The Chinese economy showed signs of rising consumer spending—especially among young

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people—leading to an increase in household debt potentially tied to the use of services like Huabei and Jiebei, another red flag for Chinese authorities.[7]

From Alipay to Ant Financial (1999-2014)

In 1999, Ma, a former English teacher, founded Alibaba, an e-commerce company providing business-to-business (B2B), business-to-customer (B2C), and customer-to-customer (C2C) services. Although purchasing goods online was convenient and Alibaba's shopping sites often offered a wider selection than many people could find in their local store, users were wary of sending payment to sellers they did not know. Furthermore, only 1% of Chinese citizens had credit cards at the time.[8] Instead of relying on payment methods such as cash on delivery, in 2004, Alibaba created an online payment service called Alipay to solve this pain point by facilitating transactions on its shopping sites, including Taobao and Tmall (see **Exhibit 1**). Alipay held the buyer's payment in escrow until the seller delivered the goods purchased, bridging the trust gap between buyers and sellers. Alipay transactions were subject to five layers of automated checks to prevent fraud.[9] Users did not pay a fee to use the app; instead, merchants paid a 0.55% fee per transaction.[10] By comparison, credit card companies in the U.S. charged small businesses an average of 2% per transaction.[11] When Alipay was launched, China had no established regulations on third-party payment systems, but Ma said, "If someone has to go to jail, I'll go."[12]

Although Alipay was first designed for use on Alibaba's shopping platform, it soon opened up to everyone, including offline merchants.[13] To scale the service, Alibaba partnered with Chinese banks and Sun Microsystems to build the digital infrastructure needed to bridge online payments with traditional banks.[14] Consumers swiftly adopted Alipay; by 2007, Alipay had over 50 million users.[15] In 2009, the company formally launched its mobile payment service, and in 2010, it rolled out a shipping return insurance option that covered a buyer's shipping costs if they chose to return an item.[16]

In June 2010, China's central bank, The People's Bank of China (PBOC), announced a requirement that any non-bank payment provider obtain a license to operate in China or cease operations by September 2011.[17] In early 2011, Alibaba spun off Alipay—which by then had 650 million users—into a separate entity in response to impending regulations.[18] That year, Alipay became the first company to receive "The Payment Business License" from the PBOC.[19] The spinoff of Alipay, which Ma initiated, caused a public dispute between Ma and two of Alibaba's major investors: Yahoo, which owned 43%, and Softbank Corp, which owned 30% of Alibaba at the time.[20] Yahoo and Softbank later negotiated an agreement that promised Alibaba a payout of between $2 billion and $6 billion if Alipay went public or was sold.[21]

Businesses began to accept Alipay in physical stores instead of cash or credit, in part because Alipay adopted quick response (QR) codes.[a,22] To purchase with Alipay, users linked Alipay to a bank account, scanned a merchant's QR code with a mobile device, and entered the amount to withdraw from their Alipay account to transfer funds. Soon, the functions of the app reached beyond payments. Alipay users could hail a taxi, pay a utility bill, or make a doctor's appointment (see **Exhibit 2**). In the background, Alipay collected data on each transaction.

In 2013, Alipay launched a money market fund called Yu'e Bao ("leftover treasure"). With just a couple of clicks, Alipay users could invest as little as one yuan (¥1), or 16 cents, from their account into

[a] A quick response (QR) code was a two-dimensional barcode that could store information, such as an Alipay user's identification, and was easily read by mobile devices.

Yu'e Bao.[23] In six months, the fund had 30 million users who invested a total of $16.3 billion.[24] The fund served as an introductory investment option for many Chinese who historically invested in property or put their money into savings accounts.[25] Users described being delighted to wake up in the morning and see incremental increases in their account balances.[26] One observer noted, "Yu'e Bao has created hundreds of millions of ultra-lightweight investors, for whom saving and investing is no more than playing a game, and like all games, this one is slightly addictive."[27] The fund was managed by China-based Tianhong Asset Management. Ant generated revenues from Yu'e Bao by charging Tianhong a fee that was a percentage of the assets under management. Yu'e Bao's meteoric growth caused one analyst to write, "The explosive rise of Yu'e Bao surprised everyone, including Alibaba, which is proving to be a potential disintermediator for the entire financial industry."[28]

In 2014, Alipay morphed into Ant Financial Services Group, with the vision to "bring small and beautiful changes to the world."[29] That year, Alipay had 190 million active users, and it dominated mobile payments in China, capturing 82% of the market.[30] The company saw an opportunity to address the needs of millions of Chinese individuals and small businesses who did not have ready access to a bank or the ability to build credit. From its early days, Ma described Ant as a technology firm first, calling it a "techfin" instead of the more widely-recognized "fintech" designation.[31] In September 2014, Ma took Alibaba public on the New York Stock Exchange, raising $25 billion.[32]

Financial Services in China: A Snapshot

Most domestic banks in China were state-controlled and a significant fraction of the capital naturally flowed directly to the large state-owned enterprises. Banking services tended to rely on networks of brick-and-mortar branches. As a result of the high overhead, these banks tended to only focus on market segments offering the highest margins. Middle- and lower-income households, small- and medium-sized enterprises (SMEs), and the rural population were thus often underserved with limited access to capital.[33] China's lack of a national credit rating system for lenders to assess and manage borrower risk exacerbated these issues.[34]

In the mid-2010s, about 72% of adults in China were considered financially illiterate, and traditional credit reporting systems did not cover 75% of the population.[35] Between 2011 and 2014, 180 million adults became new bank account holders in China, but only 9.6% of Chinese adults (less than 110 million people) accessed credit from a financial institution.[36] In 2014, about one-third of Chinese adults were borrowers;[37] loans to rural areas were about 23% of the country's total loan balance.[38] The PBOC issued licenses for consumer credit scoring; these typically went to state-run operations. Given the gap between consumer needs and institutional capabilities, Chinese consumers had long relied on informal lenders, including family and friends, peer-to-peer or online lending companies, or what one observer called "shadow banking" institutions.[39] Without a robust third-party credit rating system, many Chinese used cash as their primary payment method, even for large purchases, such as property.[40]

These institutional gaps, coupled with growing consumer demand and the government's desire to expand China's middle class, fueled explosive growth of fintechs in China. In 2014, a governor of China's central bank told journalists that regulators needed to adapt to financial business on the Internet.[41] By 2015, Internet access was also becoming more widespread in the country, with 649 million Chinese (48% of the population) online and about 83% of them accessing the Internet via their mobile devices.[42] At the time, social media and gaming giant Tencent's digital payment service, Tenpay (a precursor to Tencent's WeChat Pay) claimed a 20% share of the mobile payments market.[43]

By 2017, the environment was growing and changing rapidly, and Ant's competitors gained traction, including Tencent (which expanded quickly through its messaging service WeChat), online retailer JD.com, and search engine Baidu (see **Exhibit 3**). In 2017, China's fintech industry was valued at over ¥263 billion, or $42.1 billion (see **Exhibit 4**).[44]

Growing Ant's Ecosystem

Ant was built on a cloud-based technology platform that enabled it to process user transactions quickly and efficiently at pennies per transaction.[45] Doing so meant hardware costs stayed low, using less expensive PC server clusters while still maintaining 99.9% service uptime with multiple synchronized data replicas running on servers in several locations.[46] Cloud computing's elasticity enabled Ant to achieve efficiency, flexibility in adapting to spikes in demand, and optimal utilization. The company relied on scenario-based prototyping to develop new products based on potential ways a customer could use Alipay.[47] Ant also implemented a data security system to protect user privacy (with explicit consent sought from users for the use of personal data to protect consumers), to ensure regulatory compliance, and prevent and control risks.[48]

Ant's system was designed as an open architecture (see **Exhibit 5**). At an abstract level, the underlying layer consisted of a centralized data repository that hosted the vast amount of data Ant collected. The system then included an intermediate layer for pluggable computing engines (i.e., programs that perform essential functions). Different security control policies were implemented for each engine. The system then provided an application programming interface (API) at the top layer to support various business applications.[49]

Ant leveraged this infrastructure and its massive user base to power the rapid expansion of its product line beyond Alipay and Yu'e Bao.

Consumer and SME Lending

In 2014, Ant launched its microloan business Huabei ("just spend"). Individuals using Huabei could borrow money interest-free for 40 days, after which they could repay their loans via monthly installments. Many Alipay users set Huabei as their default payment option on Alipay instead of a bank account.[50] A year later, the company unveiled Jiebei ("just borrow"). Jiebei worked similarly to Huabei but offered larger individual loans. Ant provided the capital for the loans, which Alipay made available for immediate use.

Huabei and Jiebei allowed Ant to determine an applicant's creditworthiness in seconds based on their prior behavior on Alipay.[51] Ant applied proprietary algorithms to its data to conduct real-time fraud prevention, predict user behavior, and gauge creditworthiness.[52] Said an Alibaba executive:

> When faced with potential borrowers, lending institutions need to answer only three basic questions: Should we lend to them, how much should we lend, and at what interest rate? Once sellers on our platforms gave us authorization to analyze their data, we were well positioned to answer those questions. Our algorithms can look at transaction data to assess how well a business is doing, how competitive its offerings are in the market, whether its partners have high credit ratings, and so on.[53]

Ant categorized its users into risk categories, and because the system continually received new data, Ant could automatically adjust credit limits. The company noted, "For example, as consumers with a small initial Huabei credit line transact, repay and build credit histories, we assess their creditworthiness on an ongoing basis and dynamically adjust our credit approval process and limits."[54]

In 2015, Ant was one of a handful of private companies to be granted a banking license, part of a government effort to diversify China's financial system.[55] Ant became a 30% shareholder in MYBank, an online-only bank.[56] MYBank focused on China's often-neglected small- and medium-sized businesses. Capitalizing on Ant's data and algorithms, MYBank could approve an online loan application within 1 minute, 24 hours a day, seven days a week.[57] While each application was run through 3,000 risk control strategies, the entire process was digital with zero human intervention.[58] MYBank initially offered loans of up to ¥5 million, or $800,000 at the time.[59] In 2019, Ant had a delinquency rate of about 2% on its loans, compared with 6% for banks.[60]

Also in 2015, Ant was one of eight tech companies granted permission by the PBOC to develop a private credit rating system called Zhima Credit.[61] A user's Zhima credit score reflected factors that included transactions and payments on Alipay; online behavior, such as how often a user shopped and what they shopped for; personal information such as education and employment; the credit scores of a user's social connections on Alipay; public data (e.g., government databases including criminal records, citizen identification information, and academic profiles); and data from Ant's partners (e.g., car rental and hotel statistics from partnering companies).[62] A high Zhima score meant that users could borrow an umbrella for free, book a hotel room without a deposit, or get favorable terms on an apartment rental.[b,63]

In April 2016, Ant was valued at $60 billion,[64] twice the value of Snap, a messaging app that went public in March.[65] Ant continued to pursue aggressive but strategic growth, with a focus to expand overseas through acquisitions, investing in or acquiring several payment companies abroad, including India's Paytm, with over 170 million users, and South Korea's Kakao Pay (see **Exhibit 6**). The company made a failed attempt to acquire U.S.-based MoneyGram. In May 2017, the company raised another $3 billion in debt for foreign acquisitions.[66]

An Emerging Regulatory Landscape

Regulators in China walked a careful line between balancing risk and encouraging innovation in the tech sector. Ma had close ties with government leaders. It was reported that on one occasion in the past, Ma had been able to circumvent regulations the PBOC wanted to impose by successfully lobbying the central government.[67] Ma said, "We always step ahead of the regulators—we have to. Otherwise, we go nowhere."[68] He added, "[. . .] We are very careful. When we were young, it's okay. Now we're big. We probably regulate ourselves much more strictly—much more—than the regulators."[69]

Some of Ant's investors were subsidiaries of China's biggest state-owned enterprises, including China Development Bank Capital, the investment arm of China Development Bank; China Investment Corporation, a state-controlled sovereign wealth fund; China Life Insurance, a state-owned life insurance corporation; and National Social Security Fund, a state-run investment.[70] Together, these institutions owned a 5.3% stake in Ant Group (see **Exhibit 7**).[71]

In 2017, China introduced several regulations that impacted Ant. Regulators began limiting unused funds in user accounts that payment companies like Ant could invest for their own benefit, reducing the income Ant generated from interest.[72] Analysts noted that this made digital payments as a standalone business less profitable, although Alipay was valuable as the entry point through which consumers accessed Ant's growing product line.[73]

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[b] It was reported that Ant never used Zhima credit to inform its own lending decisions. Source: Yuan Yang, "Does China's bet on big data for credit scoring work?" *Financial Times*, December 19, 2018, https://www.ft.com/content/ba163b00-fd4d-11e8-ac00-57a2a826423e, accessed September 2021.

Regulators also became concerned about risks posed by the massive size of Yu'e Bao, which in 2017 became the world's largest money market fund, with 370 million account holders and $211 billion in assets.[74] In 2017, the interest rate on the fund topped 4%, much higher than the 1.5% interest rate on one-year Chinese bank deposits.[75] Yu'e Bao and imitator funds were required to mitigate risk by diversifying their assets and limiting exposure to any single financial institution.[76] These steps were designed to prioritize liquidity over higher yields.[77]

In 2017, investors expected Ant to go public, but the IPO was put on hold. One report noted, "[. . .] Ant's IPO has been pushed back to late 2018 or the first half of the following year because of the need to secure regulatory approval and to focus on building the business."[78]

In early 2018, Alibaba purchased a 33% stake in Ant Financial, which observers took as a sign that Ant was once again preparing to go public.[79] However, investors were disappointed a second time when IPO rumors proved untrue.[80]

Analysts began to worry that Ant exposed the Chinese banking system to too much risk. One academic commented: "Regulators have been a bit slow in reacting to Ant's meteoric rise, but the consensus now is that something must be done [. . .] Ant has become too big to fail. Any mishap could lead to market or even social disorder."[81] China's big banks were concerned too. As one observer wrote, "Big financial services companies are tired of this non-bank behaving a lot like a bank."[82] In early 2018, regulators imposed rules that prohibited independent parties from issuing credit ratings, effectively ending Zhima Credit's business.[83]

An Evolving Business Model and New Products

Increasingly, Ant shifted towards aggregating customers for other providers' services, and away from being a direct provider of financial services. Ant moved from underwriting Huabei and Jiebei microloans to partnering with banks,[84] although users continued to interact with Ant directly and many did not know that partner banks provided capital for the loans.[85] Ant provided the capability to assess an applicant's creditworthiness and helped partner banks determine how much money to loan an applicant over a given period.[86] Ant made money by charging partners what it called a "technology service fee"— which could be 30% to 40% of the interest income generated by the partner bank.[87] The annualized interest rate for most loans was 14.6% but could reach 18.25%.[88] In 2015, Ant launched Ant Fortune, a wealth management platform, with Yu'e Bao as one of the products on the platform. Ant Fortune offered thousands of investment products from more than 100 Chinese fund institutions. It used data analytics to recommend funds to users based on a range of information, such as their previous investments.[89]

In 2017, 44% of Ant's revenues came from technology service fees.[90] One analyst observed, "It's the western bankers' worst nightmare of what would happen under an open banking system. Essentially, the banks lose their direct relationship with the customer, and all of it is mediated by the platform."[91] Others noted that some of Ant's partners were weaker financial institutions at higher risk if borrowers defaulted.[92] One bank official admitted that neither the credit data provided by the PBOC—nor the bank's own customer data—was as strong as Ant's.[93] By the end of June 2020, more than $240 billion of consumer credit loans could be accredited to Ant.[94]

In 2018, Ant expanded into insurance. The company noted, "[A]ny activity with risk can be insured if sufficient data is available."[95] Ant's first insurance product was a pension annuity called Quanminbao, which targeted low-income individuals with premiums as low as ¥1, or 15 cents.[96] Policyholders were paid through Alipay once they reached retirement age.[97]

Quanminbao was followed by a mutual aid program called Xianghubao and health insurance called Haoyibao. Xianghubao ("mutual treasure") was built on a crowdfunded model with users contributing around $2 a month and maximum payouts of around $45,000 for critical illnesses or injuries.[98] Ant initially called the program "mutual insurance" but changed the name to sidestep government regulation of insurance products.[99] In June 2018, Ant's valuation ballooned to $150 billion after raising a $14 billion round of funding.[100]

By 2019, Xianghubao had 50 million participants; 47% were migrant workers, and 31% were rural residents.[101] Many Xianghubao users also purchased insurance through Haoyibao ("good doctor security").[102] Haoyibao offered two products, long-term coverage for nearly 100 critical illnesses and long-term cancer coverage.[103] Ant partnered with insurance companies in much the same way it partnered with banks, providing access to its platform and risk assessment capabilities. In return, it took a technology service fee—a percentage of insurance premiums received by partners. The online insurance industry in China was expected to grow to $145 billion by 2021.[104]

Ant Group in 2020

In June 2020, Ant changed its name from Ant Financial to Ant Group. Shortly after, its IPO filing papers said, "We are a technology company using the best technologies and resources to empower banks and financial institutions to serve every consumer and small business."[105] From January 2020 to June 2020, Ant reported ¥72.5 billion ($10.5 billion) in revenues, an increase of 38% over the same period in 2019 (see **Exhibit 8a** and **Exhibit 8b**). Net profits for the six months ending June 2020 were ¥21.2 billion ($3 billion), more than the ¥18 billion in profits reported for all of 2019.[106]

Ant's technology platform accounted for 63% of the company's total revenues; of that 63%, the majority came from technology service fees charged to partner financial institutions.[107] In 2020, Alipay had one billion users who used the app at least once a year and 729 million who used at least one of Ant's financial products over the year (see **Exhibit 9**).[108] Alipay facilitated ¥118 trillion ($17 trillion) in digital payments during the year ended June 2020 and was the leading online payment provider in China (see **Exhibit 10** and **Exhibit 11**).[109] Also in June 2020, Ant's customers held ¥1.73 trillion, ($263 billion) in debt, although Ant only funded 2% of that amount.[110] "Our approach is not to take credit risk ourselves," Ant said in its IPO prospectus.[111]

By 2020, Yu'e Bao had been the world's largest money market fund for three years. At its peak in early 2018, it held ¥1.6 trillion, or $260 billion, in assets[112] but began to show diminishing returns.[113] The fund's annualized yield fell below China's one-year bank deposit rate (1.5%) for the first time, well below the 6% rate at its height.[114]

Between January 2020 and June 2020, Ant's insurance and mutual aid products contributed a small but growing portion to company revenues, generating ¥6 billion (8.4% of total).[115] Between June 2019 and June 2020, over 570 million Alipay users purchased an insurance product.[116]

Continued Regulatory Changes

In the fall of 2020, the PBOC imposed new regulations that required companies with at least two financial businesses in the country, or companies whose financial assets comprised 85% or more of their total assets, to have paid-up capital of ¥5 billion, or $731 million.[117] A newspaper noted that the regulations, effective November 2021, were "aimed at large state-owned and private conglomerates, as well as Internet companies, that control financial businesses which could pose systemic risks."[118]

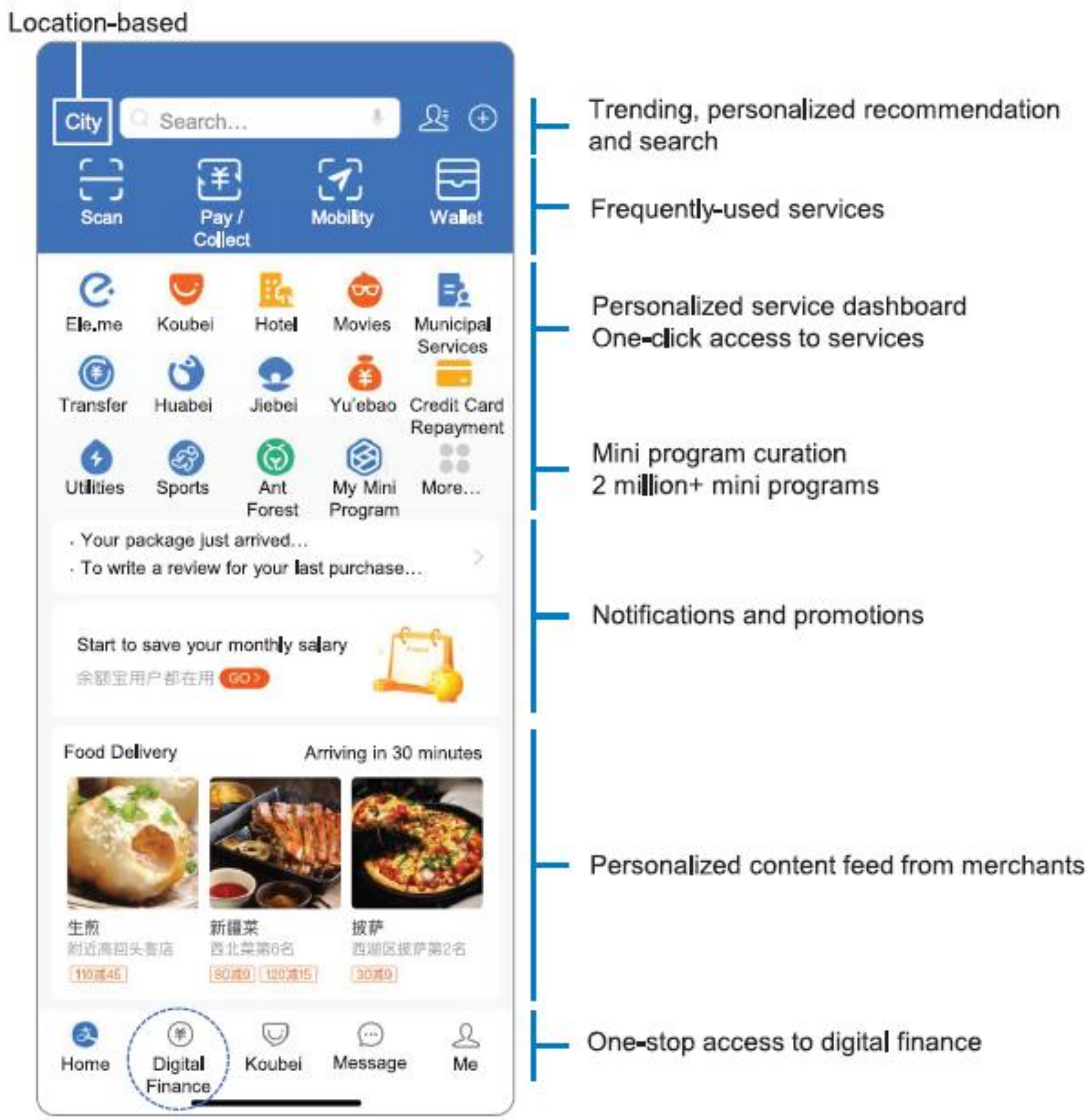
On October 21, 2020, regulators in China approved Ant's plans to be listed in both the Shanghai and Hong Kong stock exchanges.[119] On October 24, 2020, Ma gave his speech. "We cannot regulate the future with yesterday's means," he said. "There's no systemic financial risks in China because there's no financial system in China. The risks are a lack of systems."[120] Less than two weeks later, Ma was summoned to a meeting with four government regulatory agencies, and on the following day, November 3, Ant's IPO was shut down.[121] In the days following the canceled IPO, Ma slipped from public view. With Ma lying low, what would Ant Group face next?

Exhibit 1 Ant Group's Major Products and Services, 2020

Digital Payment	InvestmentTech	CreditTech	InsureTech
Alipay	Yu'e Bao Ant Fortune	Huabei Jiebei MyBank 芝麻信用 ZHIMA CREDIT	Xianghubao Haoyibao Quanminbao

Source: Casewriter adapted from "Company Profile," Ant Group, https://www.antgroup.com/en/about/introduction, and Ant Group Co, Ltd., October 27, 2020, H Share IPO (Hong Kong: Stock Exchange of Hong Kong, 2020), p. 182, https://www1.hkexnews.hk/listedco/listconews/sehk/2020/1026/2020102600165.pdf, both accessed October 2021.

Exhibit 2 AliPay App, 2020



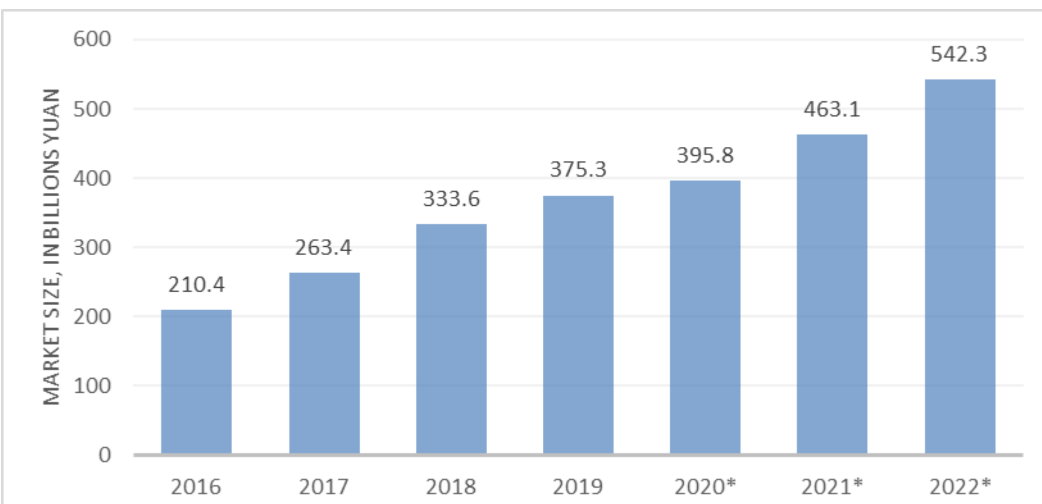
Source: Ant Group Co, Ltd., October 27, 2020, H Share IPO (Hong Kong: Stock Exchange of Hong Kong, 2020), p. 184, https://www1.hkexnews.hk/listedco/listconews/sehk/2020/1026/2020102600165.pdf, accessed October 2021.

Exhibit 3 Competitors and Market Capitalization, 2017-2020

Company	Country	Market Capitalization ($ billion)			
China Fintech Majors		**2017**	**2018**	**2019**	**2020**
Alibaba	China	441.62	355.31	570.71	649.31
Tencent	China	493.34	381.81	460.47	697.68
JD	China	49.42	25.62	43.74	118.16
Ping An	China	193.91	154.29	220.93	235.32
Baidu	China	64.23	43.99	34.70	58.96
		0.00	0.00	0.00	0.00
Payment		0.00	0.00	0.00	0.00
Visa	United States	206.47	231.85	321.65	370.90
Mastercard	United States	157.96	192.23	297.83	352.82
PayPal	United States	88.48	98.72	127.01	274.41
Global Fintech Leaders					
PayPal	United States	88.48	98.72	127.01	274.41
Square	United States	9.32	17.30	21.44	83.53
Lending Club	United States	1.71	1.12	1.11	0.83
Moneysupermarket	United Kingdom	2.58	1.88	2.35	1.91
Other Fintech Players					
Hithink RoyalFlush	China	4.13	2.99	8.42	10.19
Hundsun	China	4.40	4.68	8.96	16.75
East Money	China	8.53	9.11	15.20	40.83
Yiren Digital Ltd.	China	2.63	0.65	0.52	0.28

Source: Casewriter compiled from FactSet financial data and analytics, December 31, 2016, to December 31, 2020, accessed October 12, 2021.

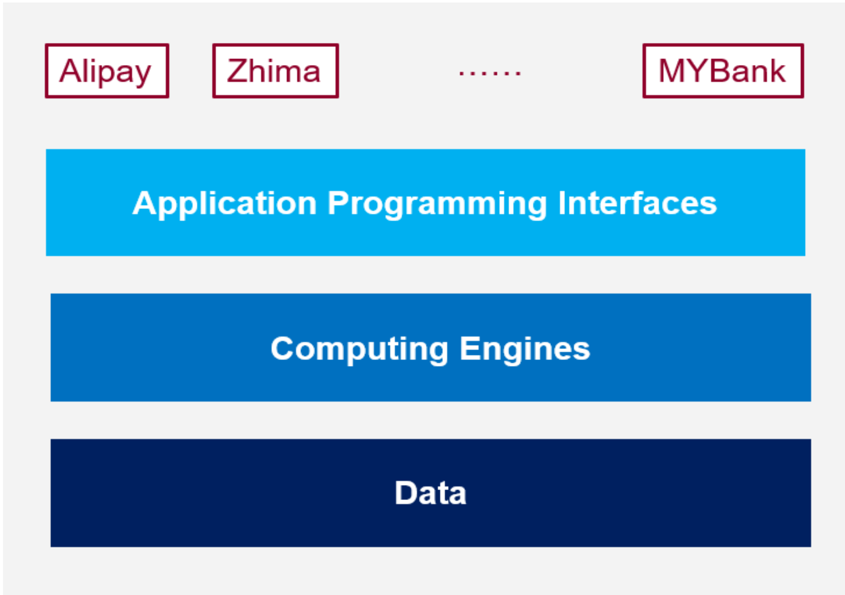
Exhibit 4 China's Fintech Market Valuation, 2016-2022 (forecast)



Source: "Value of the financial technology industry in China from 2016 to 2019 with a forecast until 2022," via Statista, accessed October 2021.

Note: Years 2020 through 2022 are forecast.

Exhibit 5 Ant's Architecture



Source: Casewriter adapted from "The now and future of financial data intelligence at Ant Financial," Alipay Technology, November 6, 2019, https://www.alibabacloud.com/blog/the-now-and-future-of-financial-data-intelligence-at-ant-financial_595520, accessed July 2022.

Exhibit 6 Ant Group Mobile Payment Investments, 2015-2020

Year/Company	Country	Amount	Stake Purchased
2015			
Paytm	India	$500 million	25%
2016			
Ascend	Thailand	Undisclosed	20% (option to buy additional 10%)
Lazada	Singapore	$1 billion	51%
2017			
Touch 'n Go	Malaysia	Undisclosed	Minority stake
Kakao Pay	South Korea	$200 million	43.9%
Mynto	Philippines	Undisclosed	45%
Emtek	Indonesia	Undisclosed	Partnership
helloPay	Singapore	via Lazada	Acquired
Napas	Vietnam	Non-cash agreement	Partnership
Pi pay	Cambodia	Non-cash agreement	Partnership
2018			
Telenor Bank Microfinance	Pakistan	$185 million	45%
Openpay	Mexico	Non-cash agreement	Partnership
bKash	Bangladesh	Undisclosed	20%
MoneyGram	United States	$880 million	Blocked by regulators
Lazada	Singapore	$1 billion	32% (83% total)
2019			
WorldFirst	United Kingdom	$650 million	Acquired
eMonkey	Vietnam	Undisclosed	Undisclosed
Wave Money	Myanmar	$73.5 million	Minority stake
2020			
Klarna	Sweden	Undisclosed	Minority stake

Source: Casewriters compiled from: Matthew Wong, "Ant Financial," CB Insights, August 21, 2018, https://bit.ly/3AAAXc3, p. 43; Fanny Potkin, "Exclusive: Ant Financial takes in Vietnam's eMonkey: sources," Reuters, December 19, 2019, https://reut.rs/2Y6ZvMs; Jon Russel, "Alibaba's Ant Financial extends global reach with first investment in the Philippines," Tech Crunch, February 20, 2017, https://tcrn.ch/30oIfmZ; Adam Aziz, "Touch 'n Go in mobile wallet venture with Ant Financial," The Edge Financial Daily, July 25, 2017, https://bit.ly/3iUVKkR; "Telenor Group and Ant Financial in strategic partnership to deliver inclusive financial services in Pakistan," Telenor Group, March 13, 2018, https://bit.ly/3oo6eMU; Reuters Staff, "China's Ant Financial extends mobile payments empire to Indonesia," Reuters, April 12, 2017, https://reut.rs/3AY2rcR; Reuters Staff, "Factbox: Ant Group's investments overseas," Reuters, October 28, 2020, https://reut.rs/3kX2r7d; Reuters Staff, "UPDATE 2-Ant Group-backed Kakao Pay applies for preliminary IPO approval," Reuters, April 26, 2021, https://reut.rs/3m7zDYU; Saheli Choudhury, "Ant Financial invests in Thailand's Ascend Money as part of global expansions play," CNBC, November 1, 2016, https://cnb.cx/3B2HgWX; Thompson Chau, "China's Ant Financial buys stake in fintech Wave Money," *Myanmar Times*, May 18, 2020, https://bit.ly/2YHKD7Y; Tas Bindi, "Alipay enters Vietnam through partnership with NAPAS," ZDNet, November 15, 2017, https://zd.net/3DxDjdJ; Xinhua, "China's Alipay signs partnership deal with Cambodia's Pi Pay," China Daily, November 21, 2017, https://bit.ly/2YJzvXQ; Natasha Lomas, "Alipay owner Ant Financial take minority stake in Klarna," Tech Crunch, March 4, 2020, https://tcrn.ch/3iXvjLb; and "bKash and Ant Financial in strategic partnership to promote financial inclusion for the unbanked in Bangladesh," bKash Website, April 26, 2018, https://bit.ly/3AC8D9q, all accessed September 2021.

Exhibit 7 Ant Group Investors (pre-IPO), 2020

Shareholder	Description	Ownership %
Controlling Stakeholders		
Alibaba Group	E-commerce company founded by Jack Ma which spun off Alipay	32.65%
Hangzhou Junhan	Hangzhou Yunbo is the executive partner and general partner of, and controls, Hangzhou Junhan and Hangzhou Junao.	29.86%
Hangzhou Junao	Jack Ma (Alibaba Founder) held a 34% equity interest in Hangzhou Yunbo and Eric Jing (Ant Group Chairman), Simon Hu (Ant Group CEO), and Fang Jiang (Ant Group Deputy Chief People Officer) held a 22% equity interest each in Hangzhou Yunbo.	20.66%
State-Owned or Affiliated Investors		
National Council for Social Security Fund	National Social Security Fund is a state-run investment fund established primarily to provide a fund reserve for China's social security system.	2.94%
China Life Insurance	China Life Insurance (Group) Company is a state-owned financial and insurance company in China.	1.05%
Beijing China Post Investment Center	Beijing China Post Investment Center (Limited Partnership), a subsidiary of China Post Group Corporation Limited (China Post Group Co., Ltd.), a state-owned enterprise.	0.69%
Beijing Innovative Growth Enterprises Management	Beijing Innovative Growth Enterprises Management Co., Ltd is a China-based corporate management company and wholly-owned by China Development Innovation Capital Investment Co., Ltd., which is controlled by China Development Bank, under the direct leadership of the State Council of China.	0.30%
Beijing Qianshun Investment	Beijing Qianshun Investment Co., Ltd. is a China-incorporated company engaged in investment activities and controlled by China Investment Corporation, a state-owned sovereign wealth fund.	0.18%
China International Television Corporation	The controlling shareholder and actual controller of China International Television Corporation is China Central Television, which is a public institution under the supervision of State Council of the PRC.	0.18%
Other Shareholders		11.49%
Total		**100%**

Source: Casewriter compiled from Ant Group Co, Ltd., October 27, 2020, H Share IPO ((Hong Kong: Stock Exchange of Hong Kong, 2020), p. 145-152, https://www1.hkexnews.hk/listedco/listconews/sehk/2020/1026/2020102600165.pdf; "About Us," China Post, http://english.chinapost.com.cn/html1/folder/1408/3920-1.htm; "About CDB," China Development Bank, http://www.cdb.com.cn/English/gykh_512/khjj/, all accessed October 2021.

Exhibit 8a Consolidated Profit and Loss Statements, 2017-2019 (in millions, except for percentages)

For the year ended December 31	2017		2018		2019	
	RMB	% of Revenues	RMB	% of Revenues	RMB	% of Revenues
Revenues						
Digital payment and merchant services	35,890	54.9%	44,361	51.8%	51,905	43.0%
Digital finance technology platform						
CreditTech	16,187	24.8%	22,421	26.2%	41,885	34.7%
InvestmentTech	10,490	16.0%	13,882	16.2%	16,952	14.1%
InsureTech	2,315	3.5%	4,313	5.0%	8,947	7.4%
Subtotal:	**28,993**	**44.3%**	**40,616**	**47.4%**	**67,784**	**56.2%**
Innovation initiatives and others	514	0.8%	745	0.9%	930	0.8%
Total Revenue	**65,396**	**100.0%**	**85,722**	**100%**	**120,618**	**100.0%**
Operating profit	13,182	20.2%	4,502	5.3%	24,071	20.0%
Profit for the year/period	8,205	12.5%	2,156	2.5%	18,072	15.0%

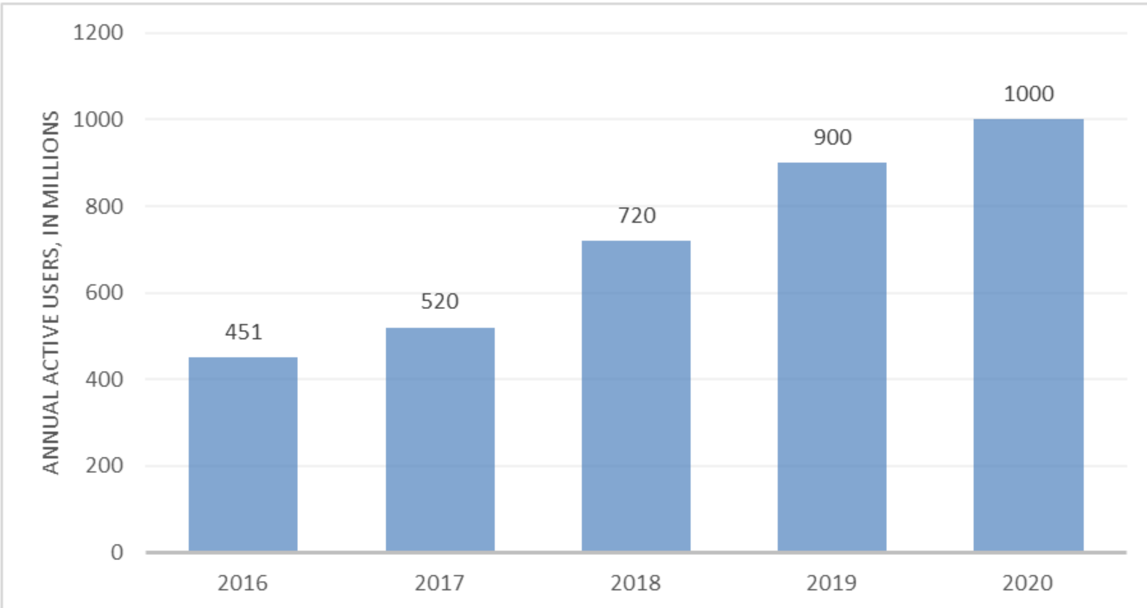
Source: Casewriter compiled from Ant Group Co, Ltd., October 27, 2020, H Share IPO (Hong Kong: Stock Exchange of Hong Kong, 2020), p. 13, https://www1.hkexnews.hk/listedco/listconews/sehk/2020/1026/2020102600165.pdf, accessed August 2021.

Exhibit 8b Mid-Year Consolidated Profit and Loss Statements, 2019-2020 (in millions, except for percentages)

For Six Months Ended June 30	2019		2020	
	RMB	% of Revenues	RMB	% of Revenues
Revenues				
Digital payment and merchant services	22,994	43.7%	26,011	35.9%
Digital finance technology platform				
CreditTech	17,925	34.1%	28,586	29.4%
InvestmentTech	7,221	13.7%	11,283	15.6%
InsureTech	4,145	7.9%	6,104	8.4%
Subtotal:	29,291	55.7%	45,972	63.4%
Innovation initiatives and others	256	0.5%	544	0.8%
Total Revenue	52,540	100.0%	72,528	100.0%
Operating profit	4,273	8.1%	24,903	34.3%
Profit for the year/period	1,892	3.6%	21,923	30.2%

Source: Casewriter compiled from Ant Group Co, Ltd., October 27, 2020, H Share IPO (Hong Kong: Stock Exchange of Hong Kong, 2020), p. 13, https://www1.hkexnews.hk/listedco/listconews/sehk/2020/1026/2020102600165.pdf, accessed August 2021.

Exhibit 9 Annual Active Alipay Users, 2016-2020 (in millions)



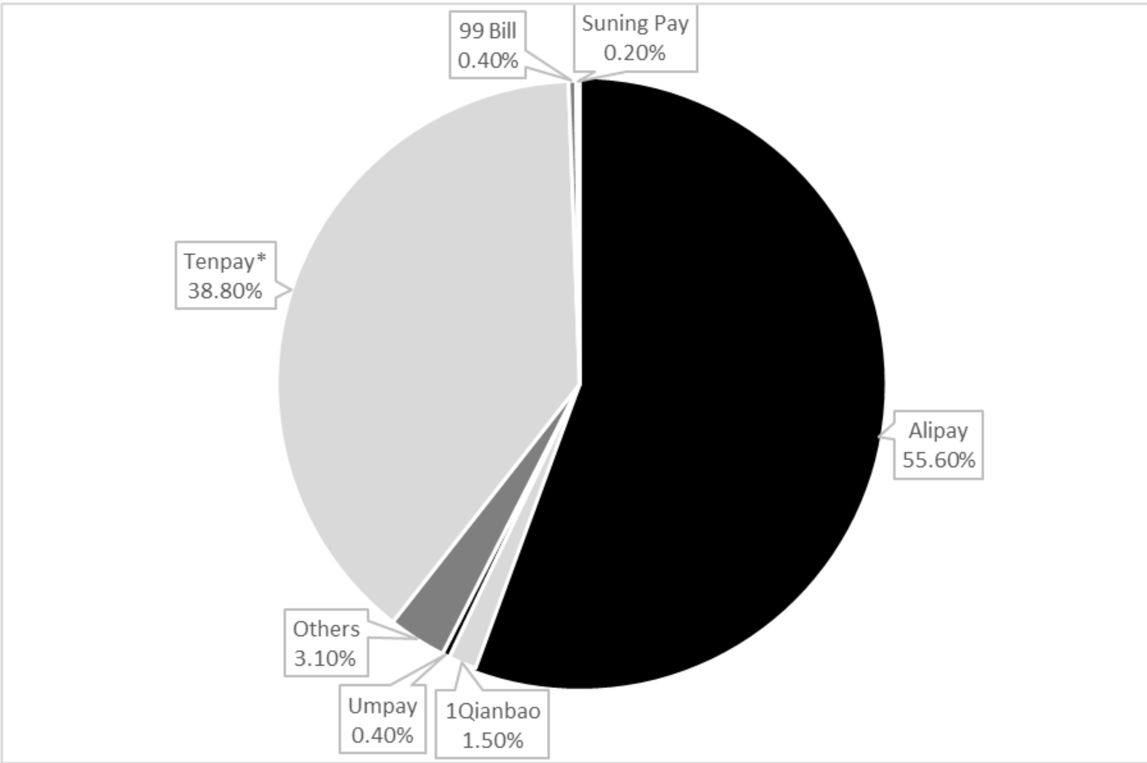
Source: Casewriter compiled from "Annual active users of third-party payment tool Alipay in China from 2016 to 2019," via Statista, and Ant Group Co, Ltd., October 27, 2020, H Share IPO (Hong Kong: Stock Exchange of Hong Kong, 2020), p. 9, https://www1.hkexnews.hk/listedco/listconews/sehk/2020/1026/2020102600165.pdf, accessed September 2021.

Exhibit 10 Transactions on Ant Group's Products, 2017-2020

	As of or for the year ended December 31			**As of or for the 12 months ended June 30**
	2017	**2018**	**2019**	**2020**
(In Millions)				
Alipay app Annual Active users (AAUs)	652	833	925	987
Alipay app digital finance AAUs	457	634	713	729
(In RMB Billions)				
Total Payment Volume	68,518	90,762	111,057	117,964

Source: Casewriter compiled from Ant Group Co, Ltd., October 27, 2020, H Share IPO (Hong Kong: Stock Exchange of Hong Kong, 2020), p. 19, https://www1.hkexnews.hk/listedco/listconews/sehk/2020/1026/2020102600165.pdf, accessed August 2021.

Exhibit 11 Market Share for Leading Online Payment Providers in China, Q2 2020



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