

TECHNOLOGIES OF THE FINANCIAL SELF: DIGITAL FINANCE AND THE NEW
INVESTING PUBLIC IN CHINA

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ABSTRACT OF THE DISSERTATION

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In June 2013, Alibaba, the largest e-commerce company in China launched an online investment application, Yu'eobao which allows people to use their dormant cash in their e-purse, Alipay for financial investment. The app is extremely user-friendly and the Yu'eobao users can invest as little as one Chinese Yuan (about 15 cents). Alibaba doesn't charge any transaction fee, and the investors usually get higher return compared to their savings or investment deals with banks. In less than a year, Yu'eobao had attracted more than 100 million active users who enjoyed being lay investors without technical or financial constraints. College students, retirees, office workers, and lately rural populations have joined this investment group by easily connecting their bank accounts with their digital investment accounts. By January 2018, Yu'eobao and many other similar apps created by Chinese Internet companies had rendered more than 300 million digital investors who constitute the largest digital financial market in the world. In the past decade, the increasing applications of digital technologies in the Chinese finance contexts have been endorsed by the government, fulfilled by the Internet companies, and popularized among Chinese people from all social strata.

Taking digital finance in China as a set of money-related communicative practices, this dissertation examines who these communicators are and how they interact with the digital financial service providers and regulators with what social, cultural, and political consequences in the domestic and transnational contexts. This project is based on a variety of qualitative research including semi-structured interviews, participant observations, policy and regulation analyses, and media content analyses. The preliminary research started in winter 2012 and the fieldwork was conducted in summer 2016 and summer 2017 in Beijing, Shanghai, and Hangzhou China. Following the Introduction and Methods chapters, this dissertation uses four chapters to respectively study digital finance's users, makers, regulators, and the media representations of the interactions between these three groups of actors. I argue that the Chinese government and the Internet corporations have utilized digital technologies to integrate more people in the financial market. At the same time, these lay investors have made digital investment part of their everyday life in which they use the Internet, mobile phones, digital apps to manage their everyday money-related practices (payment, loans, investment, gift-exchange etc.), to govern their emotions, and to adapt to the contingency and volatility embedded in the contemporary financial economy. The emerging investing public is the product of two co-occurring processes in the past decade—digitization of the Chinese financial market and financialization of the Internet companies in China.

Communication scholars have studied the significance of digital technologies in a wide array of settings, such as information behavior and knowledge construction (e.g., Agosto & Hughes-Hassell, 2005), new media and political engagement (e.g., Campell & Kwak, 2011), digital journalism and news production (e.g., Anderson, 2013; Usher,

2014), and transformation of media and cultural industries (e.g., Winseck, 2010). This project is the first one of its kind to study the social and cultural dimensions of communication technologies in financial practices. In addition, this research links political economy of communication (e.g., Hong, 2011; Mosco, 2009; Schiller, D. 2007; Zhao, 2008) with the humanistic social studies of finance (e.g., Appadurai, 2011; Lipuma & Lee, 2004; Martin, 2002; Fridman, 2017). Political economists in the field of Communication draw attention to the economic and political factors underpinning the power relations in media and communication industries. Such relations orient the flow of information, technological resources, and financial capital in society at large; whereas humanistic approaches to finance look at social constructions of discourses surrounding financial theories, models, and practices. In this project, the connection between these two research areas enables a comprehensive view of the relations between information, communication, and finance in China's context. The latter provides a thick description of the emerging cultures of finance, whereas the former unravels political and economic conditions in which the cultural discourses are at play.

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Abbreviations

ABC	Agricultural Bank of China
CBRC	China Banking Regulatory Commission
CIRC	China Insurance Regulatory Commission
CPPCC	Chinese Political Consultative Conference
CSRC	China Securities Regulatory Commission
ICBC	Industrial and Commercial Bank of China
MIIT	Ministry of Industry and Information Technology
MOHURD	Ministry of Housing and Urban-Rural Development
NPC	National People's Congress
PBC	People's Bank of China
SAC	Securities Association of China
SAFE	State Administration of Foreign Exchange
SAIC	State Administration for Industry and Commerce

Introduction: Fin-techs as Communicative Practices

“Fin-techs”, the *portmanteau* of finance and digital technologies, refers to the emerging financial businesses using the Internet, big data, algorithms, and blockchain to provide payments, loans, and investment services to fin-tech users (Chishti & Barberis, 2016). For instance, consumers can use an e-wallet such as PayPal to pay for their purchases; your friends in your Venmo network can transfer your money on their smartphones; you can also get a mortgage from virtual lenders through peer-to-peer lending platforms. Everything takes place on computers or smartphones and bypasses our interactions with banks. It is because of fin-techs’ disruptive role that media stories and survey reports have perpetuated its influence only towards the finance and business domain, with a focus on how fin-techs have enabled another round of start-ups in Silicon Valley and impacted the bankers on the Wall Street.

The same frame has been applied when the mainstream news media wanted to draw attention to the rise of the Chinese fin-techs since year 2016. The typical story headlines are like this: “Alibaba's Earnings Jump as China's Online Shopping Boom Continues” (*New York Times*, Nov. 2017); and “Alibaba Affiliate Ant Financial Seeks Up to \$5 Billion in Funding” (*Wall Street Journal*, Feb. 2018). In addition to this business-centric and dollar-shined perspective, the social implications of Chinese fin-techs are framed as something un-generalizable thus socially less meaningful. The often used modes of titling include “The Cashless Society Has Arrived— Only It’s in China” (*Wall Street Journal*, Jan. 2018) or “Chinese Tech Companies' Dirty Secret” (*New York Times*, Apr. 2018). Academia has been influenced by the same set of logics. Chinese fin-techs

mostly draw attention from business schools, particularly researchers in financial studies (e.g., Kshetri, 2009, 2016; Xie, 2017).

Of all the aspects of Chinese fin-techs, the most important and yet least understood is the people who design, make, use, disseminate, and regulate digital financial technologies. Who are these people? How have they interacted with digital financial technologies? What are the social, cultural, economic, and political implications of these people's digital financial practices in China and global wide? Fin-techs are meaningful not only because they are a new business category that has re-allocated financial capital and made some business magnates, companies or a nation rich. The financial application of digital technologies and Internet-mediated communication has reconfigured how we interact with friends, families, market, and the government. A young friend of mine was very proud of her Sesame Credit scores given by Alibaba and published it on her WeChat Moments. The score rendered her a credit line of RMB 30-thousand yuan for shopping with Tianmao, Alibaba's e-commerce site, even though she was a graduate student with a monthly compensation of 600 yuan (about 90 US dollars). When her parents wired her some money for living expenses, instead of paying off her loans, she invested with Yu'eobao, an Alibaba-provided online money market fund with a four percent of return rate and no requirement of minimum deposit.

Chinese fin-tech stories are not only based in China. In December 2017, I saw a street food truck in front of the Stern Business School building at NYU with a handwritten sign of "Cash Only" on the right side of the window and a WeChat Pay QR code on the left. To get an order of Xi'an food from this vendor, you could pay dollars in cash or using your renminbi in your WeChat wallet. Three months later, my friend from



Figure 01 A street food truck in front of Stern Business School at NYU

Beijing visited me in New York. She took a yellow cab in downtown Manhattan and was able to scan a QR code provided by the driver and paid through Alipay. She excitedly told me “China is a super country and renminbi is now a world currency!”

That was before the construction of the National Credit System in China began to draw attention in the West, and I did not get a chance to ask her thoughts toward such a construction. But all those companies such as Ant Financial and Tencent Finance, which have brought my friends the sense of pride are actually also part of Baihang, the first private credit scoring company authorized by the central bank and sharing the credit data with the Chinese government to facilitate its social and political management.

In these cases, fin-techs are also a set of money-related communicative practices through which the communicators define their identities and affiliations or enhance surveillance and political control. This dissertation is about who these communicators are and how they communicate with their surroundings, and with what consequences in domestic and transnational contexts. My thesis is that Chinese fin-tech has developed into a social domain in which a broad spectrum of actors interact with each other through digital technologies and have rendered new relations between the state, market, and public. Such interactions are not unique to China. Situated in a global financial context, Chinese fin-tech practices reflect how people use digital technologies to communicate

with their surroundings in the ubiquitous milieu of contemporary financial capitalism. In this vein, fin-techs are an important vector of the new modalities of internet mediated-communication, communication power, and counterpower. At such a conjunction, communication scholars are well positioned to surface the ways in which the lens of communication can describe and theorize the social, political, technical, and cultural dimensions of digital financial technologies.

Conceptual Boundaries

The origins of fin-tech can be traced back to the 1970s in the U.S., though the term then only referred to a new way of *management* that combined bankers' expertise, modern management techniques, and computerized daily operations. The more developed meaning of fin-techs was coined by the Citi Group in the 1990s as a term for financial services technology consortium (Hochstein, 2015). During this time, fin-techs were developed to network the banks—the traditional financial intermediaries that humans had used for centuries in order to expedite transactions. It was not until 2012 that fin-techs were specified to refer to the financial implications of *digital technologies*, particularly big data and cloud computing. Although the traditional banks also adopted digital technologies for business development, fin-techs have been mostly used to refer to the *non-bank* companies running financial businesses through digital approaches (Chishti & Barberis, 2016).

In China, fin-techs were initiated in the form of “Internet finance” (*hulianwang jinrong*) in 2012 (Wang, 2016; Xie, et al. 2012). To rejuvenate the economy in the small-and-micro-enterprises (SME) sector, a group of economists and financial executives

(particularly the Chinese financial think-tank called China Finance Forum 40, or CF 40¹) proposed to utilize the Internet to mediate the two groups of non-banking actors: institutional or individual investors looking for investing opportunities, and the SMEs seeking start-up money or financial loans (Xie, Zou, & Liu, 2012). At its primitive stage, Internet finance was more like innovative informal arrangements promoted by the reforming elites in the government and among the fin-tech entrepreneurs (Xie, Zou, & Liu, 2016). In the 18th Central Committee meeting in November 2013, establishing an “inclusive financial system” (*puhui jinrong*) was inscribed in the Party’s resolution, which has been emblematic of the state’s tendency to include the non-traditional financial practices into the formal financial system. In March 2015, Premier Li Keqiang announced the “Internet Plus” initiative in the 12th Congress Meeting (Wang et. al., 2016). The instrumental role of the Internet and web economy had been aggressively promoted in various industries (Hong, 2017). The affirmative voice from the highest echelons of government was immediately adopted by the financial sector and formally coined the new business category, “Internet finance.” Many technology companies started to launch financial products and services including digital payment, online lending, crowdfunding etc. In addition to its economic impact, “Internet finance” has also developed as a socio-cultural discourse profoundly reshaping the public understandings of technology, wealth, and power. Since 2013, mainstream media reports have devoted increasing attention to Internet finance and portrayed it as the most successful model not only for financial businesses but also for innovative implications of information technologies (ITs). The societal enthusiasm toward Internet finance has led to the imagination of a liberalized

¹ More information about the think tank can be found here. <http://www.cf40.org.cn/plus/list.php?tid=317>

financial market and attracted bursting investment from stock players and institutional investors (Wang, 2017).

However, policy changes since July 2015 have dramatically reshaped the Internet finance industries. From 2014 to 2015, many companies were found to have made a fortune through ponzi schemes and loan shark businesses under the banner of “Internet finance” (Loubere, 2016). The central bank started to consider whether the rampant growth of fin-techs might trigger systematic financial risks if they continued running beyond the existing regulation schemes (Lee, 2015). Strengthening the party-led regulation became the central thesis for the governance of Internet finance. In July 2015, the central bank announced the *Guidance on Promoting the Healthy Development of Internet Finance* and urged that Internet finance companies should be regulated as *financial* companies as long as they provide financial services. In subsequent months, many Internet finance companies in their marketing packages re-defined themselves as technology companies (*keji gongsi*) stressing that they do not provide financial products but provide information and technology services that the customers could use for investment or loans. To remain attractive to venture capitalists, some Internet finance companies re-packaged themselves as financial technology companies (*jinrong keji gongsi*) in order to bypass the regulative risks. During this time, a societal debate on mainstream media was about whether “Internet finance” should be considered financial technologies (*jinrong keji*) or technological finance (*keji jinrong*) (Wang, 2016). Ultimately, “fin-tech” was chosen to represent the industries due to the term's ambiguity—it ends up with “tech,” thus could be considered as technology-centered. But the original meaning of the term is widely recognized as the digital forms of financial services. Based

on this very short history, this dissertation uses “Internet finance” to identify the digital finance companies in the pre-2015 stage and uses “fin-techs” for the beyond. In addition, “digital financial company” is used as an umbrella term for both Internet finance and fin-tech companies, whereas “digital finance” indicates the services provided by these companies.

In this dissertation, I call the lay people using various communication technologies for money-related practices in China the digital investing public. If the stock people who bought and sold stocks as individuals in the early 1990s (Hertz, 1998; Shao, 2008) relied on the newspapers and stock brokers for investment, and the wealth management people in the early 2000s (Chumley & Wang, 2013) arrange their assets through interpersonal communication with bank managers, the digital investing public's financial practices are heavily reliant on the Internet, smartphones, and big data algorithms. Moreover, compared to the prior two groups, the digital investing public is a much larger group cutting across all social strata and with much smaller individual deals in the financial market. To be sure, there are growing overlaps between the traditional and digital investors group due to the increasing penetration of digital technologies. Successfully or not, many traditional investors caught up with the digital trend and re-allocated their investment from the stock market to the fin-tech market. Thus, the digital investing public should also be understood through an historical perspective. On one hand, the investing public could be understood as a processual concept which meaning represents the continuity in the lay investors sector in China's financial market since the 1990s. On the other hand, it also mirrors the discontinuity of the structure of this group due to multiple reasons, such as the volatility of the stock market, reform of financial

policies, and more importantly, the different technological and communicative environment they have been situated in.

It is noteworthy that for the new investing public in China, the line between “I am indebted” and “I am an investor” is blurring. When I chatted with my colleagues who grew up in the U.S., they had trouble understanding why ordinary Chinese people would have money for investment. One of them, a doctoral student from a middle-class family said, “I am not broke but I do not seem to have any extra money for investment!” This kind of reactions reflect a long-lasting classification in which *investors* have to be middle-class or above, wealthy, and have extra money beyond their living expenses. Yet, in this dissertation, the digital borrowers of consumer loans also consider themselves as investors based on two rationales: 1) using dormant cash as leverage; 2) taking consumption as a form of investment. As one of my informants elaborated: “I applied for and use the digital loans to buy my new iWatch. It is not because I do not have enough money. I have put some cash in my investment account and I don’t want to withdraw them since the return is good. Also, I want to get the watch now than in the future. It enriches my life experiences and makes me want to work harder and make more money.” As such, this dissertation takes the borrowers of digital consumer loans also as part of the new investing public, although they may or may not invest in any return-driven financial products yet.

Financial Self and Governmentality in the Digital Age: An Analytical Approach

Taking fin-techs as a rising social domain, what are its main forms and dynamics? Existing work provides lots of useful insights along three dimensions: financial self-help, governmentality, and financialization. Rooted in these research areas, this dissertation

wants to draw attention to the fourth and also a much under-studied dimension— digital technologies—and analyses how it intervenes in the existing theoretical framework. Moreover, this dissertation maps out the actors and their interactions in this emerging social domain. This map provides a unique approach to understanding the state-corporate relations and cultures of finance in contemporary China.

Financial self-help can be taken as, in a Marxian term, a means of production (Marx, 1932 [1844]) in the capitalist economy but also a form of financial subjects (Weber, 2002) in post-industrial societies. In “The Ghost in the Financial Machine” (2011), Appadurai interprets the mechanisms of value-making in contemporary financial practices through three key concepts: *return*, *uncertainty*, and *calculation*, and the Weberian idea of “spirit” is the main thread running through these concepts. These foci take the individual investors’ *spiritual forces* as the vital component of modern financial systems. For Appadurai, “return” is more about a moral expectation rather than about the economic interests rewarded from certain labor or capital inputs. Consumer investors (as opposed to institutional investors) normally expect monetary returns from their investment, just as someone expects a positive feedback (material or not) from the practice of gift-sending to another. Marcel Mauss (1990 [1954]) noted this kind of moral force as a combination of contracting elements both voluntary and compulsory, disinterested but also self-serving. This complicated subjective feeling perfectly speaks to the investor’s mentality. Investing in the financial market is voluntary, but on a condition that the investments are expected to bring back economic interests, which, however, are not guaranteed in reality.

The paradoxical nature of “return” unavoidably leads to the problem of uncertainty. Consumer investors could control their participation in financial investment, but the expected return may not be realized. In Weber’s (2002, [1905]) account of the Calvinist ethos, this sort of uncertainty is arranged and can only be diminished by the God. For empirical economists, such as Adam Smith (1991, [1776]), such uncertainties have been controlled by an invisible hand, the market economy. In both explanations, uncertainty is radical and beyond the subjective control of the investors themselves.

If investors cannot stop investing, all they can do is to calculate the opportunities of getting a return or to speculate and minimize the risks of losing their investments. For Weber, such calculations are driven by irrational power that is related to religion or certain ethical beliefs. It is also irrational because the return and risk are unrecognizable by nature. Foucault (1989), however, rationalizes the “calculation” as a sort of self-examination. In his “Technologies of the Self,” a calculation is an indispensable procedure of individuals’ daily routines. “In the morning we must take account of our expenses, and in the evening, we must ask ourselves to render an account of our conduct of ourselves, to examine what is to our advantage and what is prejudicial against us.” (p.44) In this way, the calculation of investments, returns and losses is more meaningful for consumer investors’ moral practices and subjective feelings, rather than being objective and effective in getting more returns. Also, the financial self is a reflexive concept since how this group identifies themselves may be at odds with the social perception towards this group (Fridman, 2017). For most of them who are wage earners, investors only accounts a secondary identity in additional to their commitment to their

formal jobs. Yet, it is a more desirable identity compared to their occupational identity that can hardly make them feel financially secure.

These works stress the *moral* and *ethical* dynamics of the financial self. Yet, the investors' moral judgment has been rationalized and evaluated by multiple external factors. In other words, the dynamics of financial self mostly are socially constructed rather than being subjective. In retail investors' everyday financial activities, financial information is a decisive component of their financial literacy and underpins the process of their knowledge acquisition. In the studies of Everyday Life Information Seeking (ELIS), personal demographics are minor for information-seeking, the dominant factors are information users' personal perspectives and access to information sources (Agosto & Hughes-Hassell, 2005; Fallis, 2006). In this vein, the investors' attitudes toward financial institutions/professionals/regulations are all formulated through these people's everyday social or financial activities. Goede (2005) draws on the power structure underpinning the politics of value-making in contemporary financial practices. "[M]oney, capital, and finance are not unmediated economic realities that can be taken as a starting point to academic inquiry but have been made possible through contested historical articulations and practices of valuation" (p. 15). The definition and measurements of "value" rely on the investors' knowledge and experiences, which, however, are mostly constructed by the government, financial institutions, and lately, the metrics built in new forms of digital technologies, which facilitate investors' calculation and value-defining in their financial practices.

Another major dimension that largely informs the analysis of this dissertation is financialization *as* governmentality. If the individual-based financial practices is a way of

self-governing in everyday life, financialization is the ruling structure in which these individuals are situated. First put forward by Foucault, the idea of governmentality encapsulates the rationalities and techniques deployed in the activity of governing by the state, organizations, or individuals (Foucault, 2008). He examined 20th century neoliberalism as an interrogation into the art of government. In addition to clearly-defined policies or regulation doctrines, Foucault framed neoliberalism as a practical rationality according to which autonomous individuals should be responsible for themselves. The new modes of governmentality therefore are not a reduction of government but rather a re-articulation of governmental philosophy that puts more emphasis on individual self-governing. In this vein, although identified by socio-economic categories, the financial self is not a de-politicized concept, and the investing mass is an instance of *collective self-governing*. It is through their financial practices that the small lay investors struggle with the power manipulation by the state government and the global financial corporations. Yet, their struggles have also amassed them to the largest financial market in the world and made them an integrating part of the global financial capitalist system.

Since the 1980s, the global capitalist economy has shifted its center from the production and service sector to the finance sector, and consequently capital are increasingly accreted through financing (such as collecting money from investors in the stock market) rather than through production (Harvey, 2005; Sawyer, 2013). As reflected in the US Bureau of Economic Analysis (BEA) data, the financial services sector contributed 8.3 percent (of the GDP) to US at its peak in 2006, compared to 4.9 percent in 1980 and 2.8 percent in 1950. Further, the growth of financial services since 1980

accounted for more than a quarter of the growth of the services sector as a whole (Greenwood & Scharfstein, 2013).

While “financialization” (see detailed reviews in van der Zwan, 2014) depicts the changing paradigms of capital accumulation, it also draws our attention to the pitfalls embedded in the excessive dependence on finance. For instance, the total debt in the economy has skyrocketed; financial agents have acquired prominent positions in economic and decision-making processes in the welfare domain (e.g., decisions regarding the investment of pension funds) which then leads to the allocation of a larger share of pension funds to the financial market. Such a redirection of capital flow has ignited the debate between financial gurus and regulatory institutions on the issue of financial volatility (Schiller, 2012). Both parties agree that we should not put too much societal capital in financial markets that are inherently precarious, but there is often a heated debate about how to define the bottom line, and who is eligible to do that.

In a broader sense, finance has increasing power to influence domestic or international economies, as well as policy-making in non-economic domains, such as the provision of social services by government (Epstein, 2005). Along these lines, “financialization” is no longer limited to being a descriptive concept demonstrating the models of economic growth in capitalist economies, particularly in the West. Rather, it represents a transformed power structure within and beyond financial industries global wide (Krippner, 2011; Orhangazi, 2008), a set of behavior patterns penetrated into everyday life of human beings (Martin, 2002), and emerging ideologies towards risk, value, and wealth. (Appadurai, 2015; Chumley & Wang, 2013; LiPuma & Lee, 2004), all related to the new modes of governmentality in national or global context.

Specifically, financial capital has produced a wide variety of derivatives at the domestic level, such as housing mortgage, education loans, consumption with credit cards which make finance becomes the means and ends of life (Martin, 2002). To manage the debt that our lives depend on, we have to learn wealth management skills and take “training” provided by financial institutions or professionals who perhaps lead the “trainees” to invest their savings into the financial market. “If you don’t take the risk of loss, you may have to risk being poor” has been frequently used by these trainers in the relentless promotion of numerous financial products. For those trainees, the consumption, debt, investment, and risk, as well as hope, constitute a circle that transforms their ideologies towards value, wealth, and social status (Chumley & Wang, 2013).

The broader definition of financialization is not constrained within any capitalist structure but focuses on the power of financial capital (Epstein, 2005; van der Zwan, 2014). It then invites further empirical cases reflecting the various forms and consequences of this trend in a global context, particularly the societies in which the emergent politico-economic formations challenge the capitalistic paradigms defined along the Euro-American logics. China perhaps is one of the most complex and reflexive cases. The socialistic market economy with Chinese characteristics highlighted by the Chinese party-state is experiencing all the troubles the other financialized economies have encountered but based on its unique politico-economic and cultural conditions. In addition, it has experienced an accelerated process of financialization and influenced the world economy in the post-2008-crisis era with its enormous overseas investment and its financial alliances with many other developing countries (Jin & Jin, 2015).

The first decade of the 21st century witnessed the rise of the Chinese economy. The continuous GDP growth, decline in poverty, and infrastructural expansion underpinned the income increase of Chinese people in most socio-economic strata. How have Chinese people managed their savings differently as their nation is getting wealthy? Getting rich is pivotal for Chinese households and younger generations, and in recent years, this goal has been individualized and rationalized through the discourse of “outperforming the GDP growth” (*pao ying* GDP) surrounding wealth management practices. As caricatured in this picture, the two figures—GDP and Income—are competing and running up the stairs. The red



arrow points up signifying the overall economy is elevating. “Pao” means to run, and “ying”

Figure 02 A caricature of income increase outperforms GDP growth” /Sina.com

means to win. When the overall economy is good, a true “winner” not only has an increasing income, but also has the income growth outperformed the GDP growth. This is how wage earners increase their wealth status, and wealth management is key to achieving the turnaround in their lives. The “run and win” discourse is an inclusive one because people of all income levels could manage to uplift their wealth status if they know how to rationally spend and invest. In this sense, these “runners” are liberalized individuals utilizing financial instruments for better lives. At the same time, the “run and win” discourse is recognized and promoted by the government. On January 18, 2018, Xinhua News reported that “the average individual discretionary income increased 7.3%

in year 2017, which ran and won (outperformed) the GDP growth of 6.9%” and this report had been cited by the State Council on its official website.

The “run and win” discourse sounds like an inspiring one but in real life has triggered the anxious affect among people who try to manage their savings through financial investment. I have been part of the WeChat group organized by Stone Finance, a Shanghai based fin-tech company, and investors post their comments and exchange ideas in the group. During the Spring Festival holidays in 2017, no investment products were available, but the group chat was exceptionally active. The most often raised question was “do you have any (investment) products today?” Some investors commented on the situation like this “the most needed thing is not splendid feast², it is investment products, “my money has been parking in my bank account!” or “I don’t want my money standing there for nothing!”

The rhetoric of “outperforming GDP growth” is a consequence of the centralization and standardization rooted in the socialist history. The government reports and statistical data seemed to be defining a single “running track” and creating a shared destination for the individual investors. At the same time, these individuals have also developed a set of digital techniques to “run faster.” Using the Internet, smartphones, and digital apps has become ubiquitous but with extremely diversified patterns among the Chinese lay investors. All those people that I interviewed for this dissertation had “folders” on their smartphones specifically for wealth management, but they used the folder in quite different ways. The WeChat group I mentioned earlier has been an information channel for the Stone Finance company to serve and maintain customers but

² Splendid feast is part of the holiday traditions during the Chinese Spring Festival.

also a space for the customers to complain. Some informants with full-time jobs were not able to check the app or WeChat group very frequently and they turned the “Auto Investing” function on. They set their expected return rate and investment terms, and the app would automatically get their money out to the market when there were investment products meeting their criteria.

In these cases, the line between the individualized wealth management and Chinese people’s collective movement toward a financialized society is porous. How have digital financial technologies complicated the relations between the formation of financial subjects and the deepening financialization in China? This dissertation answers that question by sorting out the structure with in which a wide variety of actors interact with each other in the domain of the Chinese fin-techs. As mapped out in the figure below, these actors include the fin-tech users composed of fin-tech investors and borrowers, fintech companies, app makers, regulators, and the popular media. Each chapter focuses on a specific group of actors and the following section elaborates what is covered in each chapter and how the chapters are connected.

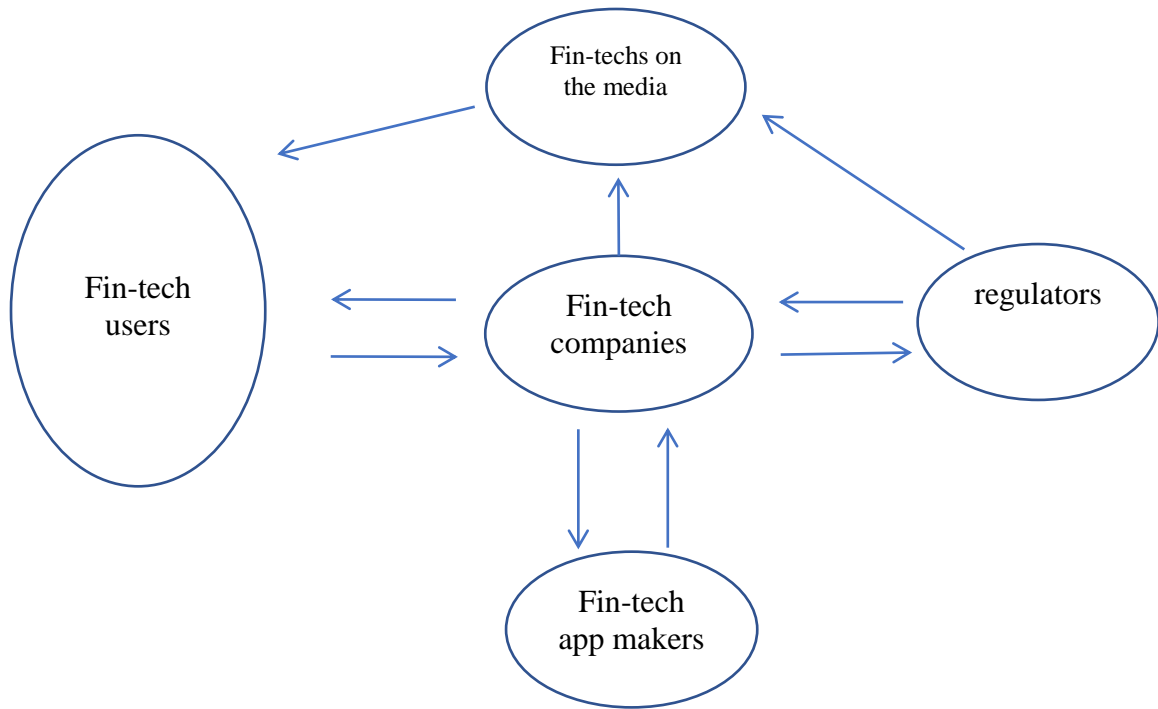


Figure 03 Chinese fin-techs as a social domain: actors and interactions

Structure of the Dissertation

This dissertation is structured topically, following the analytical scheme outlined above. The Introduction provides the empirical background and theoretical framework of my thesis, which is followed by a methods chapter detailing the methodologies, data sources, and analytical approaches used in the dissertation. The following three chapters examine the three groups of communicators involved in the money-related communicative practices organized by fin-techs. The fourth chapter focuses on the media representations of fin-techs which disseminate digital financial cultures through

advertising and marketing campaigns. The concluding chapter summarizes how the four chapters piece together a social and cultural study of Chinese fin-techs.

Chapter Two situates Chinese fin-tech users in relation to the “stock people” (*gumin*) in the 1990s and “wealth management people” (*licairen*) in the early 2000s arise upon China’s economic reform and financial marketization. Based on in-depth interviews and participant observation, I divide these users into three groups according to their various usages of communication technologies. Each group is depicted with a focus on how its members understand, use, and disseminate the Internet, mobile network, smartphones, and digital financial apps for practical and emotional purposes. In addition to defining an emerging social group that is meaningful for communication scholars, the chapter argues that Chinese fin-tech users are a new form of financial subjects who use digital technologies to manage their everyday money-related practices (payment, loans, investment, gift-exchange etc.), to govern their emotions, and to adapt to the contingency and volatility embedded in the contemporary financial economy.

Chapter Three examines the designers and makers of these technologies, who are the actors defining the users’ perceptions and interactions with fin-tech apps. At the micro and meso level, product managers have been a key group of workers who determine how information and data are processed and how the fin-tech app interfaces are designed. By analyzing the detailed workflows, sample working documents, and examining the working cultures that the fin-tech product managers have adopted, this chapter demonstrates the management rules, product design logics, and cultural cognitive factors that determine the availability and usability of fin-tech apps. At the macro level, this chapter points out a trend of platformization in which large fin-tech corporations are

dominating the fin-tech industries due to these companies' financial power and technological advancement. While the government tried to intervene the fin-tech development through regulations, it had paid inadequate attention to the pitfalls related to the rampant growth of platform corporations. Instead, it had given space to such companies as Alibaba, Tencent, Baidu, and Jingdong (BATJ)³ for them to expand their territories in the financial sector.

Chapter Four studies the regulatory realm and shows the Chinese government's shifting tendencies on fin-techs from 2012 to April 2018. Based on a collection of 64 items of fin-tech related policies, guidelines, and management methods officially announced by the government, as well as policy-related case studies, this chapter analyzes who are the major regulators and what are their considerations in promoting or controlling the development of fin-techs. The government had a sharp turn in year 2015 from being supportive to controlling the fin-tech companies. The policy changes urged fin-tech industries to re-define their business boundaries, ethics, and code of conducts. Moreover, many cross-sector businesses that combined digital technologies and finance services and fell out of the financial regulation now have been put under the formal regulatory controls. In line with the complicity of the regulated businesses, regulators become increasingly diversified. In addition to the traditional regulators such as the central bank and State Council, many non-financial departments—such as the Ministry of Industry and Information Technology, Ministry of State Security—started to play a role

³ BATJ are considered the four largest IT corporations in China. Baidu provides the most-often used search engine and Alibaba has the largest e-commerce platform. WeChat, the most popular social media app is provided by Tencent. Jingdong, the new comer of e-commerce market, however has rapidly grown to be the most threatening competitor of Alibaba.

in policy-making. At the same time, the Chinese Communist Party has assured and strengthened its dominant position in the growing regulatory system. These policy analyses aim at theorizing how the Communist Party considers and utilizes information and communication technologies (ICTs) in its institutional reform, namely *tizhi gaige* in the post-socialist era.

Chapter Five takes Chinese popular media as a site for studying the cultural discourses surrounding fin-tech products and constructed by fin-tech companies. Based on the content analyses of 23 advertisement and marketing campaigns launched by six major fin-tech companies, this chapter showcases how the fin-tech users, products, and cultures have been portrayed in popular media and what are the social and cultural implications of these media products. On one hand, these advertisements align with and reflect the emerging consumer culture in the past decade in urban China. On the other hand, they prioritize the goal of attracting a larger consumer group than elaborating the benefits and risks of fin-tech products and services, which is highly problematic for the public understanding of digital technology and its role in finance. Moreover, in October 2016, the Chinese government announced the “Nine Rules” for fin-tech advertisement. The interactions between the new regulations and fin-tech marketers are also analyzed.

The Conclusion summarizes the arguments of the dissertation and reflects on larger issues of social change. I argue that the rise of Chinese fin-techs is a consequence of co-occurring processes of the deepening financialization of Internet companies and the digitization of China’s finance sector. In this dual process, the application of digital technologies in finance has disrupted the existing industrial and power structure in the Chinese finance market thus has rendered the reforms in policy and regulatory regime. At

the same time, economic and political changes have reshaped how digital financial technologies could be used and comprehended. After all, fin-tech, a new form of technology-mediated communicative practices, has engendered the digital investing public in China. This group of people is part of the global financial self-help community and has informed the ideas of governmentality and subjectification in the neoliberal context. However, these individuals are also decontextualized in the sense that they are stripped of body and community in front of the digital financial platforms and positioned as detached technical subjects, who in some cases become part of the technologies. The digital features of the new investing group in China are replicated in other contexts when the Chinese fin-tech businesses are promoted globally by the internationalized fin-tech corporations, such as BATJ. For example, the Chinese fin-tech companies have taken more than one-third of the mobile payment and digital loan market in Indonesia. At the same time, the affordances of digital technologies in the financial contexts also invite further investigations into their socio-cultural implications linked to equality, justice, and welfare of human beings.

Chapter One: Methods

This dissertation is based on research from winter 2012 to summer 2018. These five and half years have witnessed the birth, growth, and strengthened regulation of Chinese fin-techs. In this process, I often encountered new phenomena that urged me to come up with unplanned methods in order to capture useful data and materials for my questions: who constructed the fin-techs domain and how do these actors interact with communication technologies, with what kind of social, political, and cultural consequences? My research materials come from interviews with fin-tech users, designers, and regulators; participant observation of the fin-tech users' activities, as well as the everyday work of fin-tech apps makers (Rutgers Institutional Review Board Number: 16-694M). I also conducted policy research by collecting the policies from archives and by interviewing policy makers. In addition, I did qualitative content analyses based on my collection of marketing and advertising materials that fin-tech companies published in a wide variety of media forms, including newspapers, magazines, TV, and outdoor advertising. Last but not least, I used digital ethnography to collect the communicative information from the fin-tech users' WeChat groups.

First and foremost, my interviews with 42 people in China and the U.S. provided me with my primary research materials. I incorporated elements of “multi-sited ethnography” (Marcus, 2011) because the global and networked nature of digital financial technologies requires strategies to understand the connections between phenomena that took place on multiple sites. The interviews were semi-structured with a questionnaire (for the fin-tech users, attached in the Appendix III) or key questions (for the other respondents) prepared before the interview. I also came up with prompt

questions in the interview processes according to the informants' responses. Each interview lasted 30-40 minutes, but the interviews with policy makers mostly took an hour to 75 minutes. All direct identifiers were removed upon the interviewees' requests. I put down some key notes during the interviews. Also, with my respondents' consent, I audio-recorded or video-recorded the interviews on a password-protected smartphone. The consent form was translated into Simplified Chinese (see Appendix I), and the prepared consent form was provided to the interviewees before each interview. The respondents were assured that participation in interviews was voluntary, as was audio-recording. All the recorded audio materials were transcribed through Xunfei Tingjian, a paid Chinese transcribing service provided by iFlyrec. In line with the principles mentioned in my IRB consent form, all the identifiers were removed immediately after recording. The informants that I interviewed for this dissertation are all anonymous or using fake names. I also faked some of the fin-tech companies' names upon the informants' request.

I travelled from the U.S. to Shanghai in winter 2012 as the research assistant of New York University Professor Lily Chumley for another ethnographic project. But like a serendipity, that project (Chumley & Wang, 2013) provided me a valuable opportunity to understand the nitty-gritty of daily operation in Chinese banking institutions. My interviews with bank managers and two sales people in the Communication Bank of China allowed me to have a more concrete idea of the institutional factors (Scott, 2008) relevant to China's financial marketization during the early 2010s. It also helped me to set up contacts in banking industries. Some of them introduced me other contacts for the later interviews on the fin-tech project.

Between January 2013 and November 2016, as the preliminary research for my dissertation, I interviewed four individual (as opposed to institutional) investors in Beijing and five in Shanghai when I had short conference trips there. I recruited these informants through an introduction by the bank managers that I have set up contact with in my 2012 fieldwork. Most of them were traditional investors on stocks and wealth management products provided by banks. They used the Internet and sometimes smartphones in their financial practices but only took them as an online information channel connecting them with the market or their bank managers. In this phase, I also did participant observation at the local branches of the Communication Bank of China (Shanghai) and Industrial and Commercial Bank of China (Beijing) for how these investors interacted with their bank managers in offline settings. For all the major on-site interviews, I officially reached out to the institutions several months before the interviews and ensured that they would be collaborative. The correspondence emails and WeChat records are attached in Appendix II. This preparatory step turned out being very helpful in terms of securing my interview opportunities.

Between May and August 2017, I interviewed 28 people in Beijing, Shanghai, Hangzhou, and New York. Sixteen of them were fin-tech app users, eight of them were responsible for the design and making of fin-tech apps, and four interviewees were affiliated with the government in fin-tech related policy making. Two Chinese fin-tech managers were interviewed in New York when I attended the Fifth Global Fin-tech Summit at the Javits Center in Manhattan. I recruited the fin-tech users by snowball sampling. I first announced the “hire” on my WeChat account and got four respondents. They then introduced me to their friends and acquaintances qualified for the interviews.

When I interviewed the fin-tech app users, I used the semi-open questionnaire (See Appendix III) before asking them to demonstrate how they use the apps. Also, I video-recorded their interactions with the apps upon their consent. Video recording is a mundane “method” to collect data, but in my research, video-recording the users’ interactions



Figure 04 A screenshot of a wealth manage app interface

with apps is innovatively meaningful for two reasons. The videos included the informants' investing status which could be much more difficult to get only through face-to-face interviews. These materials are very useful when I analyzed the informants' financial behaviors in Chapter Two. As I learned from my previous fieldwork, many of the investors could hardly remember the exact amount of investment or how they transferred money between various accounts. Further, some informants would not tell the “truth” that he considered unethically against Chinese culture. For instance, as shown in this screenshot, the respondent invested 6187.39 yuan for a three-month term using this particular wealth management app. Another screenshot showed me that he had borrowed a 1000-yuan consumer loan from another app. It is quite clear that he borrowed money for consumption and saved his cash for investment, and it would be socially unacceptable for him to tell me his “strategies” no matter if I asked him. To be sure, this method could be controversial if the researchers got the interviewees' asset information but without stressing to them what the researcher might get from the recording. In my interviews, all the recordings were based on interviewees' consent and I

stressed to them that by showing me the screens, they might disclose their asset information to me. As mentioned in my IRB protocol, I reiterated this statement in the consent form: “If, for any reason, at any time, you wish to stop the interview, you may do so without having to give an explanation.” I was very struck that none of those young fin-tech investors were reluctant to show me those numbers in their investment accounts. Secondly, these videos are very useful to evaluate the Application Programming Interfaces (API) (Henning, 2007) which have been pivotal in app designing (particularly for my analyses in Chapter Three).

During the summer 2017, I also did participant observation at two fin-tech companies in Beijing, three fin-tech companies in Shanghai, and one in Hangzhou. I observed the programmers and product managers’ working environments and how they communicated with each other. I also got some sample working documents they felt comfortable sharing and having included in my dissertation. Together with the API screens I obtained from my interviews with fin-tech users. I was able to piece out how the app makers attempted to attract, satisfy, and maintain the app users.

Moreover, I went to Stone Finance, one of the above companies in Shanghai for an open-house event for their investors. Stone has two WeChat Groups online, and it sends out information about this monthly event. Those who are interested could sign up. For research purposes, I have invested with this digital lending platform for more than a year. This seminar allowed me to observe how the fin-tech companies communicated with their investors in person. I made notes and took pictures of the office location, office settings, and the agenda of the event. I also made notes about the presentations, and the

questions raised by investors. These notes and documents obtained from my participant observations are vital for my analysis in Chapter Two.

Besides interviews and participant observation, another major method was archival research. I used this approach to analyze the financial policies related to the applications of communication technologies. The major sources include the official websites of the People's Bank of China, China Bank Regulatory Commission, China Securities Regulatory Commission, and the Association of Internet Finance. Another important source is the archive of *China Finance*, the fortnightly magazine established in 1950 and managed by the People's Bank of China (the central bank). This national magazine reports financial policies and industry updates and has been the most often used source of policy studies for Chinese financial officials and business executives. The archive has an online version for all the issues since 2000 and supports keyword search (the magazine is in the Chinese language and the search word has to be in Chinese). I used keywords including “Internet” (*hulianwang* 互联网), “Internet finance” (*hulianwang jinrong* 互联网金融), and “fin-tech” (*jinrong keji* 金融科技) to search policies which titles contain any of these keywords. To analyze these collected policies, I took a grounded theory approach (Glaser & Strauss, 1967; Martin & Turner 1986) to identify the general features of the technology-related policies in Chinese financial industries while simultaneously grounding the account in empirical data or case studies (particularly for Chapter Four). The archival research combined with studies of formal policies and case studies rendered a repertoire of articles on the major policies or events reflecting the government's attitude toward fin-techs since the year 2012.

Third, I collected videos and pictures for the fin-tech companies' media and marketing campaigns. These collections provided me rich content for cultural analyses and discourse analyses. To identify the data collection boundaries, I started with a two-pronged preliminary research. First, I searched the most-cited fin-tech companies on China's portal websites for marketing and advertising professionals, including *Top Marketing (Xinrui Yingxiao)*, *HuXiu*, *TechCode*, and *PRNews*. This search provided me a list of four companies with high “media exposure” and consecutive marketing campaigns. Second, I asked advice from my interviewees who worked in fin-tech companies: The two-pronged approach collectively rendered a list of six companies that the marketing industry and fin-tech industry considered most representative. Then I searched their advertisements and other forms of media exposure through Baidu, the most often used search engine in China. The online search of these seven companies' marketing strategies focused on three questions: who are they targeting, what medium or media forms do they use, and what are their slogans? This search provided me 32 videos and posters. In addition, I also collected the outdoor advertisements, posters, and fliers of these companies during my fieldwork in Shanghai and Beijing. All these pictures and videos are fundamental for Chapter Five.

In addition, this study also collected statistical data from the recognized official or business databases, including China Internet Network Information Centre (CNNIC), and Yearbook of World Electronics Data, China Statistic Bureau, the World Bank, industrial associations such as National Internet Finance Association, Wangdai Zhijia, and the yearbooks from major management consulting firms such as McKinsey& Company.

Last but not the least, I used digital ethnography (Underberg & Zorn, 2013) to survey the fin-tech investors' online experiences and found out how social media platforms played a role in forming and sustaining an investment community (for Chapter Two and Chapter Three). First, this method allowed me to sort out the processes and exact steps through which a fin-tech investor was bonded with the digital apps (a core question answered in Chapter Three). I invested with Stone Finance and the client service staff guided me through WeChat, emails, and phone calls to bond my bank account with the investment account. They also followed up through WeChat messages for subsequent services. Second, I joined the WeChat group set up by Stone. To join the group, an investor needs to be “invited” by the company. There were two types of communication in this online group: Stone's group notices to all the investors, and the inter-group chats among the investors. I checked the “chats” on daily basis and collected the relevant ones in my archive.

At this point, I have to highlight the role of WeChat in my ethnographic work. It has served as a stable channel connecting me with some of my informants in the post-interview stage. I used WeChat to be in touch with my research subjects in China while I wrote my dissertation in New York. I was very lucky that many of my informants wanted to exchange WeChat contacts and stay in touch in the virtual space. I also feel extremely privileged that most of them have been very supportive when I WeChated them a follow-up question and asked them for more information during my dissertation writing. Thanks to this unique channel, the information I collected after my fieldwork in China is growing and reflecting what have emerged in early 2018.

In the summer of 2018, I took a two-week trip in Beijing and conducted my last round of fieldwork to address some unanswered questions when my dissertation was almost in full shape. The planned questions were well resolved, but I also bumped into new questions that are fascinating and extremely intriguing. These questions include but are not limited to: How is the state-led construction of the “social credit system” (*shehui xinyong xitong*) related to the digital credit scores that I have analyzed in Chapter One of this dissertation? What is the role of Chinese fin-tech companies (which are the focus of my Chapter Three) in this government-oriented project, which is semi-political and semi-commercial? How have the young fin-tech users introduced their parents’ generation to the digital finance? How will the digital facilitated fin-tech movement re-stratify Chinese society, and how will the re-stratification correspond to the “appropriate financial resources allocation” “adjusting redistribution” and “narrowing the gaps in incomes”, all are the goals that President Xi Jinping set upon the 19th National Congress of the Communist Party in October 2017?

To be sure, the methods that I have elaborated in this reflection seem inadequate at all to answer these new questions. Perhaps, studying Chinese fin-techs will be my life-long project, and I am always very excited to explore the new methodological opportunities.

Chapter Two

Technologies of the Financial Self: The New Investing Public in Digital China

“Yu'ebao, A PayPal that Can Make Money for You!”

– Advertising slogan by Alibaba's Ant Financial

“To manage, or not to manage, it is a matter of your life.”

–From a Chinese article with more than 100 thousand online readerships in the year 2017.

A 2017 article in *The Economist* magazine flagged China as the worlds' leader of fin-techs and noted that the country has taken more than half of the global market. More than 300 million fin-tech users are using money-related apps on daily basis. Moreover, four of the top five global innovators in fin-tech industries come from China (*The Economist*, 2017 February). China is not advanced in financial development and Chinese financial industries are mostly state-controlled and seem to be too conservative compared to the liberalized financial market in the West (Calomiris, 2007; Zhou, 2015). In addition, China has seldom been considered leading the innovative fashion in the development of information and communication technologies. However, the “marriage” of the two weak areas have made China the lead in the global arena, and digital finance has become extremely popular in the domestic market.

In June 2013, Alibaba, the largest e-commerce company in China, launched an online application, Yu'ebao, which allows people to transfer their dormant cash surplus from their online payment accounts, Alipay, or bank accounts to an investment account. The “app” is extremely user-friendly and shows investment returns in real time. App

users can start investing from one Chinese yuan⁴ (about 15 cents), and Alibaba does not charge any transaction fees. In less than a year, Yu'e Bao, with its advertising slogan “a PayPal that can make money for you,” had attracted more than \$65 billion from Chinese people who enjoyed being lay investors without any technical or financial constraints. Several months later, Tencent took the opportunity of the Chinese Spring Festival Eve and launched WeChat RedPacket, which allowed Chinese WeChat users to exchange cash gifts through the app. Later, Tencent developed WeChat Wallet, which by year 2017 more than 700 million Chinese people use as their e-purses for a wide variety of purchases from shopping online to getting groceries at street markets. The Wallet users were also able to borrow money from Tencent Finance so long as their cash transactions on WeChat were verified and their digital credits qualified.

Who constitutes such a huge emerging market and within what kind of social, economic, and political mechanisms or cultural settings? Further, if taking the emerging digital financial technologies as a new form of “technologies of the self” (Foucault, 1988), how have such technologies informed the (re-)formation of financial subjects in the digital era? This chapter studies how communication technologies played a role in the re-formation of financial subjects in the digital era. In addition, it looks at how such technologies have informed governmentality and subjectivation in Chinese society. Based on ethnographic work between 2013 and 2017, I divide the fin-tech users into three categories by their various practical purposes of using financial technologies: the “rate-watchers” who are digitally savvy and use digital technologies to maximize their investment returns; the “indebted freemen” heavily engaged with digital consumer loans

⁴ In this dissertation, a US dollar approximately equals to 6.6 Chinese yuan.

and take debts as a form of investment; and “trend catchers—the traditional investors who take digital finance as new investable opportunities. In studying each group, I tackle the interactions between two different layers. One layer is the technological, the visible, and the everyday: the fresh experience of using smartphones, digital apps, and the Internet on desktops or laptops for investment and loans. The other layer is the Chinese economic system, the political complex, and the cultural and ideological environment as a whole: the grand backdrop of the socio-technical formations of the digital investing public—a concept that speaks to the understandings of identity, class, and politics in post-socialist China.

Technologies of the Financial Self

In “Technologies of the Self,” Foucault questions how human beings have come to understand themselves within the context of society. In the modern world, knowledge of oneself constitutes “the fundamental principle” (Foucault, 1988, 21) that allows humans to perform operations to transform themselves to achieve an ideal goal (Foucault, 1988, 18). Two key constructs of such “technologies” are highlighted here to identify the individual-societal relations. In the first place, “technologies” are the epistemological settings determining an individual’s self-perception of his/her identity, and current and future social status. Then, based on this knowledge of the self, one needs a set of plans and actions to take care of himself/herself and fulfill the to-be. Although “technologies of the self” could be an enlightening way to understand the individual-based self-management on all aspects of everyday life, such a management is essentially social. The ruling forces for one’s knowledge formation (in Foucault’s analyses, Stoic and Christian

doctrines) align with social and political changes, and the self-care approaches are often determined by what is socially available.

The social aspect of “technologies of the self” is key to understanding Foucault’s later work on “disciplinary societies” (Foucault, 1979; 1997). The knowledge sources and provisions of self-care facilities could be effective instruments to enhance the governmentality of the ruling power. The “self” then turns into a “subject,” adhering to the socially, politically, or culturally defined orders. This group of concepts unpacks the governing mechanisms with a focus on the individual-societal dichotomy. In this context, governmentality works on the transformation of individuals and its power is individually based.

In contrast, Deleuze (1992) argues in his “Postscript on the Societies of Control” that governmentality has been realized through the process of “dividualization”. While the Foucaudian disciplinary societies simultaneously individualize and mass together each person within the social, the Deleuzian societies of control “... no longer find ourselves dealing with the mass/individual pair. Individuals have become ‘*dividuals*,’ and masses, samples, data, markets, or ‘*banks*’ (Deleuze, 5). In addition, the ‘dividuals’ within the societies of control become viewed as merely labor or ‘codes’ for a higher-order of capitalism that has evolved to utilize higher forms of technology; primarily computers which codify every aspect of society into “... coded figures—deformable and transformable—of a single corporation that now has only stockholders” (Deleuze, 6). The Foucaudian idea of “disciplinary societies” and Deleuzian idea of “societies of control” are closely related since they both reflect the mechanisms of governmentality. Yet, the Deleuzian idea of “society of control” heavily stresses the role of financial capital and

information technologies in addition to the other social forces that have been instrumental to the “disciplinary society”.

The governmentality approach has been adopted by many scholars to study everyday finance (de Certeau, 1984; Langley, 2008), and “technologies of the self” have been embodied in a large set of political, cultural, and financial relations. Fundamentally, it is the human-cash relations that determines the shifting governmental modes. Money is personal but also impersonal (Hart, 2007) and it mediates the communications and interactions between the controlling power and individual financial actors. For example, the value of currencies is decided by the government and then determines the value of an individual or household's assets. In the context of post-industrial, finance-oriented society, the notion that money should work and not people emerge successfully in popular culture (Davis, 2009). In turn, media and cultural representations of the fictitious capital (Marx, 1932; McClanahan, 2013) that has been invested for re-production also influence how people valorize their assets and investment opportunities. Moreover, with the collaborative promotion by banks and marketers on and off media, borrowers (of the consumer loans) consider themselves autonomous market actors endowed with infinite consumer freedom and having full responsibility and rationality for their wealth re-production in an economy fueled by consumer debt (Medoff & Harless, 1996).

In the digital age, the markets have also been used as a governmental technique. For instance, the value of bitcoins highly aligns to the speculators' predications and calculations. In the same vein, technological advancement in data collection and processing made it possible to evaluate individuals' credit to a fine level of quantifiable detail. At the same time, the very close-touch between the e-credit providers and

creditees makes the latter increasingly adhere to the former. In addition, digital loans (debt) have been made a fungible commodity by creating a secondary market for their sale, fueled by the supply of consumer credit.

Everyday finance is not new in post-socialist China, and the formation of financial subjects has drawn increasing attention since the inauguration of the Chinese stock market in Shanghai in 1989. The Chinese government's first unambiguous signals in favor of popular participation in the stock market resulted in a “stock fever” of an intensity which China had not experienced since the Republican era in the 1950s (Hertz, 1998). The neoliberal reform since the early 1990s (Wang, 2003; Harvey, 2005; Ong, 2006) has remarkably increased people’s cash income at the cost of decreased state benefits, pensions, and insurance. In other words, benefits which used to be indirect incomes maintained and managed by the state have been transformed into cash payments or non-discretionary income. In addition, inflation seemed an inevitable consequence of China's stimulus approach to economic reform (Bowles, 1990). As such, those increased cash incomes do not necessarily delight most of the mid-to-low income families. The central bank issued billions of additional currency notes in 2008 upon the global financial crisis, and the resulting inflation has significantly reduced the value of people’s increased incomes. In 2011, the national inflation reached its peak of 5.5% (Yu, 2012). On one hand, people do have some extra cash, but on the other hand, they do not know how to secure the value of this money and, thus, to secure their future after retirement. Such a dilemma pushed Chinese people to chase after all kinds of emerging financial investments. The long-lasting belief of “no pain, no gains” has been replaced by “if you don’t care for your money, your money won’t care for you” (Chumley & Wang, 2013).

The Chinese investing public in a neoliberal context started with the form of stock people (or *gumin, sanhu*) (Hertz, 1998). In December 1990, Zhu Rongji, the Mayor of Shanghai announced the establishment of Shanghai Stock Exchange, the first official stock trading company in socialist China (Yang & Yu, 2001). In the 1990s, there were 300,000 stock people, mostly from the coastal areas, primarily Shanghai and Shenzhen. The average investment return was around 20%, and many stock players turned into *wanyuanhu*—people with more than ten-thousand-yuan in assets. Some of them resigned from their jobs and enjoyed being lay investors without constraints. The novel opportunities of re-making one's social and economic identity through investing in stocks attracted thousands of Chinese people to enthusiastically participate into the movement of “stir-frying stocks” (*chaogu*), speculation of stock values (Shao, 2007). The stock favor lasted for almost a decade until the Asian Financial Crisis taught Chinese stock people a lesson that “stock market has risks, be cautious when get into the market” (*gushi you fengxian, rushi xu jinshen*).

A decade later, wealth management (*licai*) became the most popular investment forms, particularly after the stock plunge in 2008. Unlike bank savings with flexible but very low interest (usually around 0.3%), *licai* products offer much higher interest rates (around 4%) but require a minimum deposit (usually above RMB 50,000 or USD 8000) and a fixed deposit term (usually more than 3 months). In 2010, all the major banks in China started their relentless promotion of *licai* products and services. According to Fitch Ratings report in July 2013, the total wealth management products offered by Chinese banks had tripled compared to the supply in 2010 and amounted to more than 12 trillion RMB. During these years, foreign banks and financial capitals also invested more in

Chinese wealth management market and provided more diversified products and services to Chinese investors (Asian Investor, 2014, October). Along with the diversified wealth management market constructed by the formal financial sector, shadow banking (Hsu, 2017) and other transactions of money capital that are *not* recognized by legal systems (Jiang, 2000) constituted the increasingly vibrant informal finance sector in China (Li & Hsu, 2009), a unique financial channel for a specific social group, particularly small or micro business owners (Tsai, 2002).

It was against such an exponentially marketized financial background that the Chinese investing public became so eager to try the new categories of financial investment, particularly those digital financial products and services. Thanks to the universal digital infrastructure, by the year 2017, more than 730 million Chinese people had access to the Internet or mobile network (CNNIC, 2018). At the same time, digital technology was widely taken as a new dynamic for financial innovation after Chinese Premier Li Keqiang announced the “Internet Plus” initiative in the year 2013. The technological progress and the political discourse boosted Chinese investors’ confidence and enthusiasm in digital financial technologies, a convenient but also novel intermediary to access everyday financial practices. In addition, news reports and magazines celebrated the “Internet finance” as the democratization of finance thus another rags-to-riches opportunity (Wang, 2017).

Since 2013, the prevalence of fin-techs has rapidly socialized financial investment and engendered a growing investing public that cut across all social strata. Students, office workers, retirees, lately even rural populations joined in this digital financial fashion and enjoy being lay investors without technological or financial constraints

(Wang, 2018). In this fashion, the flow of financial capital has been mediated by the mobile apps and the Internet rather than the trading halls during the 1990s stock fever or the bank counters for the promotion of wealth management during the early 2000s.

All of these governmental techniques applied in the financial sector reject the significance of human agency. “Disciplinary technologies” have been considered as formulae of domination and operating throughout the social body as a whole (e.g., Dreyfus & Rabinow, 1982; Dutton, 1992). The self is expected to be governed by the (digital) financial technologies. However, the financial self is not completely confined by the processes of digitally or financially governing. For example, the organization of financial self-help groups in the U.S. and Latin American countries is through the financial market and digital apparatus, but the groups also have created new ways of networked socio-economic relations (Fridman, 2017). In addition to the peer-to-peer (P2P) transactions imagined by the designers, early adopters of the service are using me-to-me (M2M) transactions (Baptiste et. al, 2010) to store money on their mobile accounts for safety and security. Volatilities and contingencies embedded in financial practices make the individual investors agents within investment processes that are controlled by financial corporations. Yet, their agency is not socially confined. The financial self is not only a new type of economic practice, but also an attitude reflecting how the players adapt to the ever-changing world, a readiness to self-improve, a disposition intimately connected with a disordered world that always carries within it the possibility of incremental or even radical change. Although many scholars argue that this kind of agency is largely performative (e.g., Butler, 2010) –with financial investors’ role-play (Goffman, 1959, 1975) having been socially assigned–there still are more work interested

in finding out the complicity of human agency in everyday financial practices (Fridman, 2017; Kim, 2016). This chapter focuses on the agency of the emerging digital investors while they have been situated in a financial infrastructure governed by digital technologies and the rules of contemporary financial markets. Further, it addresses the social and cultural implications of the interactions between the new investing public and digital financial technologies in Chinese society.

The Rate Watchers

All smartphones have a “folder” function by which the phone users can sort and organize their most often used apps. On the iPhone, for instance, there is a default folder called “Utilities” which contains instrumental apps such as “weather,” “calculator,” “alarm clock” etc. These apps can be taken out of the utility folder and put in another folder according to the users’ preference. A phone user can also design the folder space according to his preference. For example, he can create a folder called “Game” and then download new game apps into the folder so that he could easily find the game he wants to play. Most of the digital investors that I interviewed in China had a particular “folder” to download and place money-related apps. Like the mattresses that Afghanistan people put their savings under (Chipchase & Lee, 2011; Maurer, 2015) or the tin-cans that the 1950s

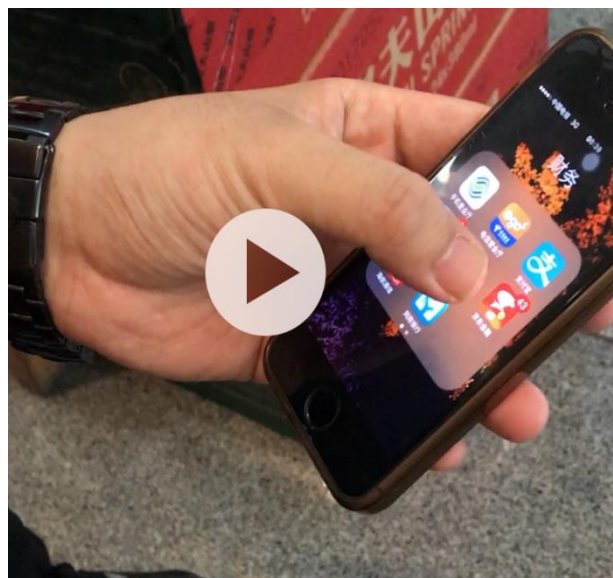


Figure 05 Xiao's financial apps in a folder titled "Finance"

American working-class housewives used to separate expenses (Rainwater et. al. 1959; Zelizer, 2017), a folder that a Chinese digital investor has created on his smartphone is a virtual but also private space in which he could manage his assets digitally. Shao, a masters student in his early twenties had 15 apps in a folder titled “Finance” (*caiwu*). He fluently described the major functions, advantages or disadvantages of each app before showed me how he had used them on a daily basis:

I have divided my apps into three categories. The most often used app is Huabei. It is easy to use and I could pay off the loan conveniently. Also, I use Huabei (rather than credit card) to pay because it often provides incentives and lotteries. Usually you will get several dimes cash back, depends on the deals. Then, I have a 30K credit line for consumer loans from Ant Cash Now. Right now, you can see I only borrowed a little more than 1000 yuan. When it comes to the wealth management category, I used to have all my savings in Yu'eobao, but the return rate kept declining. So I transferred them to Jingdong Finance. I have more than 6000 yuan there for three investment products.

I noticed that Shao also had several financial apps provided by banks and asked him what he used them for. Xiao told me, “I will need these apps to transfer my money out from my bank accounts. My living expenses from my parents and my part-time job payment all go to my bank account. But the bank's interest rate is too low and is getting lower and lower. I have transferred all my money out and put them in Jingdong Finance”.

I call Shao and many other digitally savvy lay investors “rate watchers” because they were very good at calculating the rate differences and used digital apps to transfer their investment money based on their calculations. Yet, what they were pursuing were not only about the higher interest rates or investment returns. Most of the rate watchers mentioned that they enjoyed using these digital apps because “it is very flexible (in Chinese ‘*linghu*’)”. They could transfer in to or transfer out from a saving or investment account almost anytime anywhere as long as they have Internet access. In a very quiet

and lofty bookstore in Hangzhou, Han, a doctoral student in her late 20s eloquently elaborated her logic of money management:

I am using Huoqiyin (for investment). When I need (money), I can take my invested money back very quickly. The annual return rate provided by H is similar to that provided by Y (another major digital investment app) but sometimes is a little higher. I don't touch other digital investment apps since they are not that convenient in terms of transferring in or transferring out. However, when there is a promotion (provided by other apps), I would participate. (For instance,) They (another app with a one-week promotion of 6.5% return rate that she pointed out to me on her smartphone screen) usually increase the return rate upon traditional or public holidays and I would transfer in some money. I would also transfer in some money when they provide new wealth management products that I think fit my situation by then.



Figure 06 A screenshot of one-week promotion with a 6.5%

Flexibility was the keyword mentioned time and again by Han and many other rate watchers. As the central dynamic of the rising fin-tech market, *digital flexibility* has multiple layers of meanings to various groups of actors. First and foremost, digital flexibility is a new form of affordance designed and promoted by the fin-tech companies. In the users' daily practices, digital flexibility is reflected as a technological advantage of digital finance. Fin-tech users decide the amount and timing of transactions, and these transactions take almost no time to put the money in the place that users have wanted. Compared to the traditional financial practices with banks, digital finance is more liberalized, convenient, and efficient.

At the same time, digital flexibility is also the fin-tech users' capacity for utilizing digital technologies to calculate the differences among various kind of investment products provided in the market. It allows the users to manage their assets in a more pliable manner and to better adapt to the contingencies embedded in financial markets. Many of my informants felt that by using fin-tech apps, they had become more capable to juggle between multiple variables, including the emergent use of cash, the shifting saving interest, and the volatile financial market. As Qing, a young woman just hired by a university in China as an assistant professor claimed, “(The value of) my money used to be decided by the market and the banks, now I feel my money is eventually under my control.”

While most fin-tech users consider digital flexibility positively, the financial industries and the regulators do not necessarily promote it without hesitation. On the one hand, digital technologies allow fin-tech users to “move” their money faster and more frequently which will lead to a higher level of “the fluidity of financial capital” (Lipuma & Lee, 2004). Ideally, the increasing fluidity leads to the situation that the market could make the most of the limited amount of financial capital. Yet, a high level of fluidity may also lead to a high level of risk. When the fin-tech users are able to re-locate their money arbitrarily, the fund they invested with has a weaker credit quality (Lee, 2017). Any large redemptions under extreme market conditions could create stress in other parts of Chinese financial markets and could transfer volatility to the formal banking sector.

Moreover, digital financial technologies have also played a big role in reshaping the rate watchers' socio-economic identity. In my interviews with Shao and Han, both of them showed me their screens of their “total investment” and said, “these are my assets

(*zhe shi wode zichan*).” Assets, in Chinese language is *zichan*. Although people could say I have one Chinese yuan asset, but practically, the term has always been paired with a big digit—at least million-dollar wealth. When Shao showed me the number of 6,290 yuan and confidently said those were his assets, I was quite struck because no one would relate this small number with the idea of “*zichan*” back to 10 years ago—it is too small to be considered as “*zichan*”. The young generation in China, however, is using fin-tech to construct their equity-based social identity. Like gender, occupation, education and many other demographic characteristics, equity has become part of these young people's identity. Their everyday use of digital financial apps is producing data and reproducing financial capital, both are part of the identity construction.

In addition to digital assets, credit lines are also part of the new socio-economic identity. Shao proudly showed me his credit line on Huabei was 7500 yuan. Although he had a part-time writing job, his monthly income was around 500 yuan. “How did you get such a high credit line?” I asked him. Shao explained,

First of all, I will need to do identity authentication. Huabei has my ID number and all my information that is linked to my school enrollment. So, they know who and where I am. Second, I used Huabei very often and I pay back the loans on time. I wanted to do that since that helps to boost my credit line. If I have a higher credit line, I could buy more things or more expensive stuff.

Like Shao, all the informants who have a good credit record proudly showed me the screen with the digits indicating their credit line. By no means, the digital credit line could be something confidential. Instead, they wanted to use this kind of line to “prove” that they are trustworthy. Also, they wanted to let me know they bought a lot and they were able to pay for all those purchases. This credit-supported lifestyle has been popular among the digital generation. The evaluation of digital credit scores is driven by a very

complicated algorithmic system. But in simple, five dimensions have been used to define a digital borrower's credit scores: the demographics and income status, credit history (typically the loan and credit balances, debt-to-income ratio and home value), social media network and online activeness, purchase records and level of consumptions. The first three factors have been used by traditional credit agencies such as FICO (Fair Issac Corporation) in the U.S. Yet the last two factors, although they weigh less in the overall evaluation system, have been adopted by fin-tech companies who consider the digital generation's online activeness (both of social and consumption) is highly relevant to their capacities of purchase and loan pay-offs.

The Indebted Freeman

When I interviewed Ting in summer 2017, she was a graduate student with a 5500-yuan annual funding from the Chinese government. This is the standard compensation for master's students and means Ting's stable income from her formal occupation is 500 RMB per month. However, her monthly credit line proved and provided by Aliay and Jingdong was around 13,000 RMB and she could still boost this credit line if she frequently uses Alipay or Jingdong Baitiao shopping and pay back on time. Unlike the prior two groups of fintech users who take digital finance as an investment tool, Ting utilizes fin-techs for extremely accessible digital loans. As Ting told me, "it (digital loan) is very convenient and provides you more financial freedom. To me, using these loans is almost a habit." On her iPhone, she had a folder named "Shopping" in which she had seven apps that could lend her money for online shopping or purchase in real stores and the total monthly credit line amounted to 30,000 yuan.

The proliferation of digital loans among young Chinese consumers has engendered an emerging digital culture which I call the “indebted financial freedom”. It reflects not only the new way of borrowing and lending in the digital era, but more importantly, the digital borrowers' perceptions of cash, credit, and financial freedom. As the sociologist Viviana Zelizer notes, money is more than a key instrument in the rationalization of social life and quantification of commodities’ values. She draws more attention to the cultural and social structures defining the *quality* of money by institutionalizing controls, restrictions, and distinctions in the sources and modes of allocation (Zelizer, 2017). Instead of treating money as a singular and general object and a form of currencies with standardized and unanimous value, Zelizer uses the idea of “special monies (1989) to emphasize that money plays a distinctive and extra-economic roles in defining one’s social identity and shaping economies in society at large. Such a focus on the socio-cultural aspects of economic entities can also be found in McClanahan’s work analyzing the ontology of assets (McClanahan, 2018). The ownership of a property (or other sorts of commodities) is not only identical with economic independence but also with sentimental attachment, moral legitimacy, and freedom. In addition to proving one’s affordances, buying and then owning a commodity turns one’s desire to it into a sense of fulfillment and liberty—she has the power and capacity to make her dreams come true. In modern economic and financial life, such affordances, powers, and capacities are not only realized through the money in one’s hand, but also underpinned by the bank-entitled credit (McClanahan, 2018) and financial investment (Fridman, 2017).

As Ting showed me during the interview, “Baitiao” is her most often used loan app. It affiliates with Jingdong, one of the largest e-commerce websites in China and provide zero down payment for qualified purchasers buying almost all types of consumer goods. In Chinese language, “baitiao” or a blank note refers to an informal receipt written by the receivers of a commodity. The typical scenario for “da baitiao” –issuing a note—is that someone can get the commodity she wants without paying since the seller fully trusts that she could pay the money back in the future. The key difference of the social function of a “baitiao” and formal receipt lies in the credit that the seller entitles to the buyer. Borrowing the meaning from the socially shared discourse, Jingdong Baitiao wants to construct a credit system which ultimately leads to more purchases on Jingdong. Ting shared me her experiences with Baitiao:

I use Baitiao whenever it is available. In this way, I have more cash. I need to save my cash for urgent situations. Also, Baitiao allows me to buy more commodities. I can use the least amount of cash to get the highest value and try more brands and products....I have been recommending Baitiao to my colleagues. My camera, smartphone, and iPad are all from Jingdong using Baitiao.

To Ting and many other digital borrowers, what counts as *cash* and in what circumstances? Ting had a *fixed* monthly compensation provided by the Ministry of Education, but the availability of digital consumer loans made her *feel* that she has more *cash* under her control. She used digital loans to buy new brands and products, particularly those digital products that are continuously updating. At the same time, she put her monthly income into her savings account. Such strategies made her feel that he had a higher level of financial freedom since she thought she had gotten a larger budget—the sum of her cash income and digital loans—for the purchase and consumption of those digital gadgets. In addition, her enthusiasm in these products were underpinned by the

beliefs that such consumptions should be part of quality life, which would brought her more value in the future. Ting's perceptions of cash and strategies of how to it highlight a slippery line between cash and debts, between commodities and assets. Debt becomes cash when it turns commodities into the borrowers' assets.

While digital loans have been considered as a form of leverage to achieve or maximize their financial freedom, those digital financial apps, such as Baitiao, Huabei, and Jiebei are instrumental in a sense that they make the desired purchase easier. At the same time, they are indispensable and powerful in these borrowers' life, and such powerfulness is growing while the contradiction between the borrowers' material (but also social) desire and their precarious income status is enlarging. On the one hand, digital borrowers are mostly graduate students, young workers facing a job market with increasingly more precarious labor and low pay positions with overtime workloads. While a 500 RMB monthly compensation could only cover food cost, Ting had to do three part-time jobs in addition to her research assistant work for her advisor so that she could live "a decent life." Getting a job offer two months before her graduation, Ting felt very lucky but still complained to me that her salary was only five K and she needed to do a lot of overtime work. Compared to her part-time working status during graduate studies, getting a full-time job surely made her future less uncertain. Yet, she was also very certain that she would need to use consumer loans as frequently as she had been to "sustain a financial freedom."

On the other hand, these digital borrowers' desires for the expensive digital products are fermented by a combination of occupational challenges and peer pressures. Qing, a master's student who was graduating and on the job market told me she bought a

Mac Pro laptop using Baitiao. This purchase would take her 16 months to get out of the debt but she was determined to buy the computer for two reasons. She needed two video-editing apps only available for the Pro, and these two apps would help to enrich her digital skills being required by her potential employers. Second, Qing considered the knowledge and expertise in using Pro and its new functions as part of her social capital that would enhance her sociability. “If you don’t really know how the newest functions on Mac work, you cannot discuss them with your colleagues and cannot participate in their chats.” Qing told me.

The fashioning of digital products is not the only source of peer pressure that has been mixed with professional challenges. After graduation, many college or graduate students choose to get an international graduate degree, which they consider will make them more competitive in the increasingly brutal job market. Yet, study abroad without scholarships is simply unaffordable for most Chinese families. Qing’s same-year cohort, a 24-year-old master’s student with a rural background owned 700K that she borrowed from a lending company for her study abroad plan. By the time I interviewed Qing, this girl had been sued by the company after they figured out she had no capacity to pay back the loan. Her future became extremely dim after being arrested by the police and she had not come back by the time her colleagues graduated and left the school. During my chat with Qing, we both felt very sorry for the girl since she was about to pass her thesis defense and get her master’s degree, and this would have been a huge achievement for herself and her family in her village.

In Qing’s view, this village girl was terribly irrational when she borrowed from online loan sharks. Like Ting and many other informants, Qing iterated to me time and

again that she had been a very *rational* borrower. While “rationality” embodies quite diversified meanings among Chinese young people (Li, 2016), almost all the digital borrowers that I have interviewed suggested to me three components of being rational: make sure you have the capacity to pay down the debt; make sure not to undermine your digital credit records; and make sure you borrow from large corporations.

Calculating solvency is a tricky work. It is almost like trying to balance a scale but without knowing the exact weights on both sides—the fetishized commodities on one side and income on the other. These digital borrowers’ desires and their part-time-based job status are equally unpredictable. Ting claimed that every time she bought new gadgets with loans, she would calculate whether she could pay it down by the due date. However, she often experienced such a moment that she felt the specific loan had been over her affordance but still took it since she was eager to “experience” the thing on her wish list. She also told me she had several loans paid by her parents and boyfriend when she had no money but did not want to make a payment after the due date.

This was not only for the slightly higher overdue interest. Ting, as well as many other fin-tech users really cared about their digital credit records. “They (the digital loan apps) are running this way, the more you buy using their loans, the higher credit line you will have so long as you pay back on time,” Ting explained. “I want to keep a good credit record because in the future, I will use this kind of loan as down payment to mortgage an apartment.” By the time Ting told me this grand plan, she was single in her twenties, about to graduate, and had just gotten a job in Beijing, the largest metropolitan area with the highest average property price in China. From the everyday supplies of a couple of dollars to the more than 100 K down payment of a property, Ting seemingly has tied her

life to digital loans, rather than the credit cards usage or bank loans that had been normalized in her parents' generation.

Being very open-minded to digital loans in general, Ting, however, considered herself as very picky about from which company to borrow. Her rule of thumb was “place your trust in large corporations since they do a better job protecting your privacy,” which I also heard from many other informants. Actually, by large corporations, they mean the Big Four (BATJ) that I have described in the Introduction chapter: Baidu, Alibaba, Tencent, Jingdong. Privacy protection has been the most prominent factor affecting the digital borrowers' choices. For instance, Ting started “disliking” Baidu after the CEO commented publicly that Chinese people do not mind trading their privacy for convenience and benefits (*Sohu News*, March 28, 2018), and she would never think of digital financial products provided by Baidu.

Abiding by these rational rubrics they constructed for themselves, these digital borrowers want to make their sources of digital loans—or in Ting's language, “the leverage” to fulfill her desires—sustainable. But in many cases, the self-constructed and self-governed rationalities are quite fragile. Ting never thought herself indebted and had been very confident with her calculative agency and capacities of self-control. However, there were several times that she had turned to her families and other social bonds to pay off the debt. The hope of getting a higher credit line motivate Ting and many other digital borrowers to buy more and then have to borrow more, which lead them to a deepened indebtedness.

The Trend Catchers

If the prior two groups of fin-tech users are mostly young Chinese people ranging from high school students to young couples in their early 40s, the third group is more diversified in demographics. What this group share though is that they all have been part of the traditional financial market for stocks or bank-provided wealth management products. To them, digital finance is something that they *have to* understand and practice because it might be another round of opportunities to make a good fortune. In addition, investing through digital technologies is also a symbol of self-progressing with the times. This group of people—whom I would call “trend catchers”—have developed a set of strategies and rationales utilizing digital technologies and enhancing their financial literacy upon their encounters with fin-techs.

As part of the Third Front Movement in the late 1960s (Meyskens, 2015), Shen was sent from his hometown, Shanghai to a state-enterprise in Gansu in northwest China and worked there as a mechanical engineer until 1996. After working for a private company for 15 years, he retired at the age of 65 and started spending most of his time researching how to manage family savings. He invested in the stock market, and also bought some wealth management products from banks. Upon my interview in 2017, Shen only had a very small amount of money in the stock market and government treasury bonds. Most of his savings are in banks’ wealth management products. It was hard to tell he was 72, not only because he looked much younger, but also because his very logical narration and clear mindset, particularly about his “6% ceiling”. As he enunciated each word carefully:

I like to buy the six-month term products which usually has 4.95% return. The twelve-month ones, however have a lower return rate, about 4.9%. They are equally low-risk products. The C bank's rate is always 0.5% or 1% lower than the others. I would compare the rates of all the banks. I also wouldn't buy if the rate is

very high and far off what is normal. I have some fund in P bank and the bank next door to it gives 2% higher return. Who dares to go for that?! Not me!! No matter what, I won't consider it if it is higher than 6%! Many people, especially the older ones like the higher rates and consider the higher, the better. They lost their money after all, not to mention the returns!

His core investment rational is embodied in his meticulous comparison of return rates and reputations of individual banks, and the boundaries of his investigation and comparison have been clearly defined—he won't consider any wealth management products if they propose a return rate higher than 6%. I was intrigued by this firm line and asked, “Why 6%?” Shen smiled and paused for two seconds before he responded: “Why 6%? I read SO many posts from the online forums!” I then asked about what are the websites, forums, and authors that he had been checking in, his answers, however were quite rambling and could not lead me anywhere. He could name a few popular financial websites and experts but was not able to articulate “who says what in which media.”

What does the Internet mean for Shen and many other trend catchers' investment practices? In certain sense, it defines his point of departure in his decision-making process. Those popular financial websites, online forums, and so-called opinion-leaders in the online financial communities are the information sources, and the Internet at large is his channel for information seeking. However, such a starting point does not lead to an online-only information collection that solely depends on what has been provided on the Internet. The 6% threshold is a consequence of his *reading* and *synthesizing* of all the online information. In addition, Shen went to the banks in person and talked with branch managers trying to get some professionals' opinions. On one hand, the Internet is significant upon those moments when Shen feels the imperatives to navigate the “new

world” of digital finance, and maybe finance in general. Numerous information has been easily accessible online and can help the inexperienced investors to start. On the other hand, the digitalized information sources do not count that much in the formation of Shen's investment rationale. He was very familiar with all the bank branches in his neighborhood and clearly remembered their return rate offerings. In contrast, he was not able to articulate the specific online sources and how they related to his actual investment decisions. The Internet makes digital finance easily accessible, but it is *his* choice about which one he is putting money in.

While the prior two groups settled on mobile phone platforms for digital financial practices, the trend catchers have very limited dependency on mobile apps. Shen was very proud of his smart use of his mobile data package—he did not buy any package and only used wifi at home. In this way, he could save about 150 yuan every month without feeling inconvenienced. For my interview, we chose to meet at a coffee shop he had never been to. After getting my message with the address, he searched on his smartphone with map apps but used wifi at home and downloaded the route. Before leaving for the coffee shop, he turned off the cellular data roaming and was able to find me by his downloaded directions. Another interviewee, Tang who was in his 60s, adopted very similar strategies using mobile apps but he occasionally had data roaming and that was when his son bought a data package for him—he did not know which data package could be a better deal or where to buy them.

The calculative agency of the trend catchers and their families embodied in the process of defining the access to the Internet and mobile apps is fundamental to their digital financial practices. Unlike the prior two groups, the trend catchers chose *not* to

play fin-techs “anytime, anywhere” because there is data roaming cost occurring to it if there is no wifi. Checking, calculating, and comparing the changes of return rate is *not* a digital thing, it is part of their everyday life, not most of which has not been digitalized. For example, the rate watchers would check their mobile apps and compare the rates provided by different fin-tech companies using any pieces of their spare time, and they would very frequently transfer money to the higher rate products. The time and space that matter for high frequency traders and rate-sensitive investors does not matter that much for trend catchers although they are smart calculators in grocery shopping, data package consumption, and management of their family assets. When I asked Shen whether using digital technologies to watch the rate changes more closely would help to make more money, he laughed loud and said, “we cannot do that kind of (technological) stuff!” In this sense, they embrace digital finance but without letting it changes their investment rational or routines too much.

At the center of their investment rationales, it is their risk-proven strategies that they have applied in traditional finance and continued using in digital financial practices. The information from the Internet or traditional financial newspaper contributes to their financial literacy. However, this part of knowledge seems always insufficient for them to make a resolute decision against the extremely volatile nature of the financial market in the past decade. Upon the moments that they can hardly make a choice but had to do so, there have been two philosophies characterizing the decision-making processes of various trend-catchers. First, they tend to disperse their money to multiple funds. During my interview with Shen, he had a very clear map of where he put his money and all his arrangements are based on his “here and there” rationales:

I have some money in funds, some in repurchase (a type of financial products), and some in the stock market. Who knows what's going to happen?! Sometimes this (kind of financial products) has higher returns, sometimes that one has (higher returns). After all, do not put your eggs in one basket. Also, I have to set aside some petit cash—no more than 50K in the saving account. My family has to have a cash flow.

The other belief that had been persistent in their financial practices was their trust towards the people and places that they felt very acquainted. Specifically, they tended to invest in the funds recommended by their family relatives or old friends, particularly when those acquaintances had also invested in the recommended funds. Xu, a famous economist and public intellectual in China had been quite critical of the digital lending businesses. As a professional with a background in economics and finance, he knew that the mushrooming digital lending industry had many unsolved problems, particularly fraud issues due to the lack of regulations. However, he invested one million of his savings to S company, one of such platforms because he personally knew the owner and president of this company.

Their connections allowed Xu to know more about the companies'

operation details, technological resources, and risk-control strategies.

Not everyone has such privileges to accessing “the inside.” Most of the regular investors take the trust-and-invest strategy because they believe in experts and successful cases. In my interview with Liu, who came all the way from Guangzhou to Shanghai for an investor seminar at Stone, a Shanghai-based fin-tech company, he mentioned that he



Figure 07 Liu and his son were showed around at the S company on the open-house day.

invested on this platform because of his belief in Mr. Nian, a very famous economist. He had followed Nian, reading his commentaries, articles for years and quite agreed with N's opinions on the Chinese economy. When he learned that N praised S company in public and even had invested with S, he took no time to decide on investing with S in Shanghai, although all his other businesses were based in Guangzhou. During our meeting, a very quiet young man sat besides Liu, showing no interests at all in our chat about digital finance. He stayed with us for our 45-minutes chat with no impatience. He did not laugh while we talked about something really hilarious—he listened to us but perhaps did not hear anything. Liu later on introduced the young man as his son, an 18-year high school graduate. Liu took his son for this Shanghai trip since he wanted to show him why he chose to invest this platform as opposed to others. In Liu and son's case, choosing “the familiar” is an investment strategy passed between two generations.

In addition to the various types of trust towards individuals, trend catchers also have a set of shared beliefs towards the creditworthy fin-tech companies. For example, they prefer to invest with large national corporations as opposed to small regional ones. Also, they trust the companies having headquarters in town more than the companies headquartered in other cities. Between two companies equally accessible, they chose to invest with the company which has a branch closer to where they live. All of these norms reflect the rule of accessibility. Although they take a digital approach to the financial world in the cyber space, what they believe in are companies that are tangible and accessible.

According to CNNIC, more than 750 million Chinese have used the Internet and more than 500 million used mobile data (CNNIC 2018). The easily accessible digital

infrastructure was constructed by the government and Internet companies and has made fin-techs available anytime, anywhere. However, many investors' strategic and in some cases even frugal use of the Internet and data package is defining the time and space in which they access and practice digital finance. In addition, the Internet has served as an information channel through which they attempt to diminish uncertainty while they know it is impossible to eliminate it. Further, their digital financial practices have often been guided by their investment rationales inherited from their traditional financial activities, such as speculating stock prices and buying wealth management products. Unlike the other two groups, the trend catchers are more of financial subjects than the subjects of digital technologies. Embracing digital finance, this social group has been influenced by the digitized financial practices in a very limited sense. Yet, their interactions with digital financial technologies and the emerging fin-tech industries have been vital components of the emerging digital financial culture in China.

Conclusion

Trained in Communication studies, I often tend to pay extra attention to the role of communication technologies in the socially sophisticated phenomena. However, a close touch with fin-tech users—the people who use digital technologies to start or continue their interactions with the financial world—has much broadened my horizon and led me to understand Chinese fin-techs not only as an emerging technological and business category or a set of communicative practices, but also a complex of social, political, and cultural relations formed and being transformed in the past decade in Chinese society. The people construct such a technological but also financial complex.

This chapter takes such a social group both as financial subjects and technological subjects. As the pragmatist philosophers have portrayed, the world is irreducibly contingent (Malaby, 2009, 2006), and finance perhaps has made volatility eternal to our everyday life (Martin, 2002; Lipuma & Lee, 2004). If the self-helped financial practices (Fridman, 2017) allow people to adapt to the contingency embedded in the contemporary financial economy, digital technologies have been utilized to enhance such adaptabilities primarily by two means. To some of the fin-tech users, digital financial apps are utilitarian. Many of my informants put their most often used fin-tech apps in the “Utility” folder together with the apps of weather, calculator, and alarm clock. Some fin-tech users took such apps as a fancy dashboard by which they monitored and managed their wealth. In addition, those financial apps have rendered the three-layered digital flexibilities: a higher level of adaptability based on speed transactions and the enhanced fluidity of investment capital. They were able to relocate their money in the cyber financial space almost anytime, anywhere. To these investors, being flexible is an important quality for financial investors to hedge risks.

Financial subjectification has employed to study the lay investors in the stock market, or other wealth management settings. In the fin-tech case, the lay investors are also technological subjects. The technology-based utility and flexibility have transformed the traditional financial self into a *sublimed* financial self. Sublime is a metaphor borrowed from chemistry which means to change a solid substance to its more advanced stage—vapor. Thus, the metaphorical meaning of being sublimed is often connected with a status of higher degree of excellence. The sublimed financial selves are aware of the

control by the financial market and by the ubiquitous digital technologies. Yet, they still strive to utilize these controlling forces to be more adaptive to the changing world.

The dual processes of subjectification have at least three dimensions of social consequences, all linked with the digital governmentality of financial capitalism. Firstly, digital finance has introduced a wider variety of social groups from all strata to financial practices, and the digital financial market seems beyond a centralized policy framework or a top-down ideology. Second, digital financial technologies have facilitated the free and entrepreneurial individuals and make them easily and firmly attached to financial markets. Last but not the least, fin-techs articulate the idea of subjectification with individualization in many interesting ways, which I think perfectly instantiate the debate between foucauldian and deluzian understandings of “governmentality.” These investors are de-contextualized in the sense that they are stripped of body and community in front of the digital financial platforms and positioned as highly individualized technical subjects. Meanwhile, a highly simplified world is disclosed to the digital investors which is open to their rationality and calculative capacities—liberalizing them in terms of their asset management choices. In this sense, the fin-tech users are the scattered individuals using digital technologies to manage their individual assets, governing their personal emotions, and adapt to the contingency embedded in the contemporary financial economy. But at the same time, these individuals have become part of the technologies—the financial self has been engulfed by the digitized collective and ultimately become automated. By automation, I mean these users’ money-related activities are synchronized and controlled by the digital financial services provided through these interfaces. The

money-related activities include transferring in and out based on their calculations, brand or product choice in their shopping processes, where and how they put their money etc.

The generation of the sublimed financial self has to be linked to the social and economic reform in China in the past decade. While many studies have examined the social stratification in China engendered by the open-up policy in the 1980s and neo-liberal reform since the 1990s, there is no agreement on how the strata could be classified. During my fieldwork in China, I stumbled on this very informal categorization more than once and it has successfully provided me an outline of who are the new investing public in the digital era. As Sun, a very senior financial executive with decades of experiences in Chinese financial industries summarized this folk wisdom,

Chinese people now fall in three strata: The little riches feel content, the middle riches feel upset, and the huge riches feel mild. (Xiaofu ji'an, zhongfu bu'an, dafu ping'an) Those people with little savings feel satisfied with what they have, those very rich people want their fortune stay safe and stable. It is the group in between being the most dynamic in financial investment. This group can be further divided into several subgroups. Those on Yu'ebao are mostly "petite white collars". Yu'ebao is a wealth management product but as flexible as investing in the stock market. Yu'ebao's return rate is slightly higher than the banks saving interest and it is less risky than the stock market. More importantly, it is much more convenient compared to the services provided by banks. These little white collars introduced their parents generation to the fin-tech market. Another important group is college students. Their e-commerce experiences on Taobao and Alipay introduced them to digital investment and consumer loans.

The digitally savvy and financially fluent "middle group" is the product of the unprecedented marketization of Chinese finance. The booming wealth management market since the early 2000s signified a state-initiated financial movement that had swept Chinese people's saving accounts. As Sun elaborated, "wealth management is an alternative form of financial marketization. Although the government still decides the benchmark interest rates (of saving and lending) for all Chinese banks, these banks

actually have much more autonomy in designing and promoting their particular wealth management products.” At the same time, the birth of the digital investing public is closely related to the government's “Internet plus” initiative in 2013—implementing the Internet and digital technologies for innovative businesses and to deal with the economic downturn in the post-crisis depression since year 2008. Together with this chapter, the subsequent two chapters—one on fin-tech companies and the other on fin-tech policy makers—all reflect the deepening financialization facilitated by the prevalent application of digital technologies.

Chapter Three

Chinese Fin-techs in the Making: Apps, Product Managers, and the Platforms

“Shorter and faster steps lead to a more efficient stride; rapid iterations lead to a successful product.”

—Lei Jun, Founder of Xiaomi

Before visiting Midas Touch, a Shanghai based fin-tech company, I had interviewed my informants at several banks and IT companies in China. While most bank buildings looked breathtakingly solemn with some swanky details, the IT companies often strived to be casual. “Does a fin-tech company look like the combination of the two?” I wondered on my subway ride to Midas. Forty minutes later, I found myself in a high-end business area adjacent to Nanjing West Road, one of the four major commercial areas in the Inner Circle of Shanghai. The building I was looking for sat next to a Four Seasons Hotel with a five-meter high waterfall – the symbol of endless fortune in Chinese culture – running in front of it.

This visit was for a bi-monthly seminar organized by Midas for its investors to visit the company and learn about its business and technological development. In addition to managing the two WeChat groups of VIP investors, the company has a WeChat account for publicity and tweets everyday with company announcements and selected business and financial news. Information about offline seminars is delivered through these online channels, and investors can register online or by phone. I had invested with Midas for more than a year, but this was my first opportunity to meet the workers who made the digital apps that thousands of fin-tech investors, myself included, had been using on daily basis.

The seminar was held in a room with a large conference table surrounded by about thirty chairs. The room was fully equipped with information technology, including a Polycom Sound Station, a touch panel control, a ceiling-mounted projector, and a large display screen. In Chinese business culture, it is quite common to provide a simple cup of tea to visitors, but for this seminar, our cup of tea was accompanied by watermelon slices,



Figure 08 A customer service representative explaining the company's Code of Conduct, or *xinwei guifan* (hung on the wall) to the investors.

strawberries, and a banana. Before the seminar started, a customer service representative showed us around the office. We stopped in front of the "Code of Conduct" wall for about five minutes while the staff explained the codes and bullet points hung along the corridor between the conference room and

the workspace.

Facing the workspace, a white board showed the Benchmark Interest Rate announced annually by the People's Bank of China (the central bank). This is the standard rate that Chinese banks and lending companies use to determine their interest rates. As of 2017, individual banks could self-adjust their deposit interest rates 10 percent above or below the benchmark rate, and 20 percent above or below for the loan interest rate (People's Bank of China, 2017). Next to the whiteboard, four pledges were displayed, signed by four departments, indicating the specific goals they were determined to achieve by the end of 2017. The pledges were framed in striking red, a color often used in

Chinese military settings and referred to as *junling zhuang*, meaning “the committed military orders.”

Compared to the grandiose office settings of banks or Internet companies, my first impression of Midas and many other fin-tech companies reflected a hybridized style that is different with the banks or IT companies. They were located in highly modern office districts with high rental costs, but they hosted public events for lay investors in a way that most brick-and-mortar stores serve walk-in

customers. They wanted the visitors to feel at home and provided them with fresh fruit, but only served a fixed amount of refreshments to the visitors rather than allowing them to pick up as much as they wanted from the pantry room. The workspace was open and spacious with flexible seating arrangements but displayed two sets of symbols signifying the powerful control of the central bank and the company's assessment mechanisms.

All of these contradictions are embedded in the fin-tech workers' daily routines, workflows, and management philosophies, leading to a set of new logics of production and accumulation (Boltanski & Chiapello, 2005; Mandel, 1978; Marx, 1977; Neff, 2012) in the context of contemporary financial capitalism. This chapter aims to understand how fin-tech products and services are made and updated, and how have these processes shaped or were shaped by new digital cultures in China. In the following analyses, fin-tech makers are a group of *digital professionals and workers* who have acquired or are acquiring new knowledge, expertise, and managerial methods to adapt to the shifting



Figure09 Four pledges and the board of CBC's benchmark interest rate.

business environment. At the same time, fin-tech makers are *a network of companies* who have utilized digital technologies to disrupt the existing state-corporative relations (Morozov, 2015; Srnicek, 2016) and redefine the interactions between the market and the public (Evans & Schmalensee, 2016; Langley & Leyshon, 2017).

Along these two complementing dimensions, this chapter first studies the product-manager-centered organizational structures that are commonly applied in fin-tech app productions. Next, it focuses on the role of product managers and identifies how individual agencies influence the design, production, and modification of fin-tech apps and related services. The combination of the structural and individual forces in the fin-tech context resembles but also differs from its counterpart in IT industries. Thus, the culture of fin-tech making which I call the *culture of rapid iteration* reflects the Chinese digital making culture and its specificity in the financial context. Lastly, based on a case study of Alibaba's business development in fin-techs, this chapter argues that the new mode of production and the ubiquitous rapid iteration lead to the oligopolization of the fin-tech industries in China. The larger companies with more technological resources also have a higher capacity to upgrade their apps swiftly, and thus are able to occupy a larger market share. The evolution of Chinese fin-tech companies demonstrates the idea of re-platformization—a process in which digital financial technologies allow the convergence of multiple apps and digital service providers, and ultimately form a multi-sided market.

The New Logics of Production and Accumulation

In his groundbreaking work, *The Condition of Postmodernity* (1989), David Harvey identified a new stage of capitalism following finance capitalism (Hilferding, 2006 [1910]), characterized by highly mobile labor and capital. Organizations and

management of labor have taken new modes, typically flexible specialization (Sabel, 1982), to adapt to the shifting paradigm of economic growth. Managers and workers have been expected to be flexible, using their professional knowledge or skills for a wider variety of scenarios in production processes.

In the late 1990s, information technologies enabled the network society (Castell, 1996), and further intensified the “time and space compression” (Harvey, 1989, p.36)—production processes were expedited, and workers had to catch up and acquire a wider range of professional knowledge and skills. This situation signified the new logics of production and accumulation—technology-facilitated labor and professional flexibility, which in turn enhanced the prevalence of such technologies in the capitalistic development. Some scholars consider mobile labor a reflection of an increasing recognition towards professional autonomy, as opposed to the hierarchical management typical of Taylorism and Fordism (Noble, 2017, [1984]) or the degradation of work under monopoly capitalism (Braverman, 1970; Burawoy, 1974). The central theses of the new management discourses under post-Fordism include anti-authoritarianism and a focus on flexibility and ability to react to contingency (Amin, 1994). In addition, post-Fordism is not composed only of practical recipes for improving the productivity of organizations as one improves the performance of a machine. It also has a high moral tone, paying attention to how work could benefit workers' enrichment and career development (Boltanski & Chiapello, 2005). It focuses on the idea that work should be personally meaningful for managers, which justifies a new organizing logic in which work is organized into projects, and managers, direct teams and networks are more democratic. If post-Fordism is mostly conceptualized by management literature with a focus on how

production should be re-organized, the new spirit of capitalism (Boltanski & Chiapello, 2005) draws more attention to a new set of socioeconomic relations in which more power has been assigned to the technicians and managers with in-demand tech skills.

Yet, critics of post-Fordism consider this kind of liberty a very limited one and argue that the stress on flexibility is just part of the intensified Fordism – for a higher level of control and lowering the labor cost (Tomany, 1994). At the beginning of the new century, the Internet and digital technologies were seen as the new productive materials. Capitalist development encountered an unprecedented time-space compression, which led to the shifting logics of production and accumulation in the New Economy (Amman et. al. 2006) featuring IT start-ups, venture capitals, and financialization of IT companies. It has not only required workers to be versatile with respect to technological knowledge and skills, but also transformed their perceptions of risk, resulting in a growing group of venture labor (Neff, 2012). To the managers and workers in the IT sector, the line between uncertainty and risk is blurred. Since contingency is something they could utilize to improve socioeconomic status, taking risks is necessary even if it is at the cost of a failure in career or wealth development.

Parallel to the socio-technical reformation of labor, digital financial capitalism has developed a new corporate structure platform. Business scholars understand platforms as “matchmakers” (Evans and Schmalensee, 2016) or “platform-mediated networks” (McIntyre and Srinivasan, 2017), that interface among different “sides.” This can mean various kinds of institutional actors (“complementors”), as well as “end-users” (i.e., consumers), thereby constituting *multisided* markets. While multisided markets are not new, they have been proliferated with the advent of digital technologies and connectivity

over the last two decades (Bogost, 2009, Van Dijck, 2013). Particularly in the later stages of a platform's evolution, there seem to be few opportunities for individual developers to mitigate winner-take-all effects or alter unfavorable pricing structures (Montfort & Helmond, 2015; Plantin et al., 2016).

In a nutshell, digital financial capitalism is a growing financial system constructed on the foundation of flexible labor and business platformization. On the one hand, versatile labor enables digital production and the new assemblage of human, capital, and technological resources. Ethnographic studies on these digital professionals help to demystify productivity and production relations in the digital age. On the other hand, by building on insights from political economy and software studies, it becomes possible to systematically address such issues pertaining to platform power, platform politics, and the long-term sustainability for *all* inhabitants of an ecosystem, as well as questions related to plurality and accessibility.

Fin-Tech Apps in the Making

Since almost all digital financial practices take place on mobile apps, the designs and updates of these digital architectures are crucial to these app users' everyday financial practices. The prior chapter has described such digital architectures with a focus on how the users interact with the applications interfaces. However, the interface is a visible but very minor component of the overall digital architecture. "It (the interface) is only the tip of the iceberg! The core competence (of my company), for example, our risk management software, is not visible," one of the interviewed Product Managers (PM) explained. Moreover, the production of fin-tech apps is an ongoing process by a group of

professional actors with complex administrative, economic, and political factors to consider.

In most fin-tech companies' organizational structures, digital apps are made by two groups of professionals: the “front stage” people and the “back stage” people – very telling metaphors for the designers of the interfaces visible to all users and the programmers of software only accessible to staff with permissions, respectively. User Experience Designers (UEDs) often have a background in arts, whereas the programmers, including the Software Development Engineers (SDEs) and the Software Development Engineers in Test (SDETs), mostly hold degrees in computer science. Most of my informants working in IT industries estimated that designing and maintaining the front stage accounted for only 30 percent of the overall architectural work. The major investment of technological and human resources was in the SDE and SDET sectors, which defined the *products* of a fin-tech company.

Project Managers (PMs) are a new category of IT professionals. They have been in high demand in China since 2007, when Chinese Internet companies turned to the businesses of social networking sites and started to pay more attention to users' experiences (Du, et.al. 2013). “Products” in this context refers to websites, apps, and other forms of interactive experiences that are based on the Internet and digital technologies (Chisa, 2014). Supervising the entire production process, PMs must ensure that their products are competitive in the market and economically successful for their company. They are also expected to have comprehensive skills in addition to professional knowledge. To quote Tian, the Vice President of a Shanghai-based fin-tech company:

A PM has to have a set of “soft” skills that make him outstanding in cross-department communications, dealing with customer complain and competitors'

analyses. He also needs to be logically coherent, understand or have the capacities to understand the basics of computational methods, programming development etc. A senior PM is also good at balancing the interests of different departments. It is *very interesting* that in Chinese colleges, there is no such a major or program for students to be developed into PMs. But at the same time, there is a slogan widely accepted by the Internet industries which is “everybody can be a product manager.” So, it is really about your soft skills and your personalities. Some people have such skills and are more suitable for the PM positions.

In the design and production of fin-tech apps, PMs have been pivotal in coordinating various groups of professionals. The higher level of managerial power comes with more challenging responsibilities. In this sense, PM is a managerial role with a higher level of project-based autonomy in defining the architectures and life cycles of digital products and services. More than an agent embodying the idea of techno-liberalism (Malaby, 2009), the organizational role of a PM in Chinese fin-techs also draws more attention to the agency of those individuals who have to integrate professional knowledge with multiple layers of skills in corporative management, communication, and business administration.

In addition to his managerial role, the ideal PM should be a good translator between different actors who are taking equally significant roles in the making of fin-tech apps. In my interview with Tian, he described a case of a product manager interacting with the regulators, user experience (UE) designers, and programmers before he presented the first version of a small plug-in product to his CEO, and how he took care of the continuous modifications since the product was online.

The translating process in this example started from turning the grand policy narratives into a specific project plan. In order to increase the fin-tech companies' risk prevention capacities, the Chinese Banking Regulatory Commission sent down an order in June of 2017 to all Chinese fin-tech companies asking them to plug a questionnaire

into their apps. This questionnaire was meant to evaluate the level of risk the fin-tech investors could afford based on a survey of investors' family assets, income and debt status.

Getting this order, the CEO met the head of Product Managers and said, "I am not sure if we need to plug in this questionnaire. It might be a hassle to our customers. The existing customers may feel less satisfied with our service and it also may keep our potential customers away from us. You see, it asks the customers to put down a lot of confidential information." The PM responded: "Let me find out whether our major competitors are doing this and how are they doing this." Several days later, the PM reported that very few of the competitors were complying. The CEO then asked the PM about the costs of launching the survey. The PM calculated and filed a budget. Based on the PM's reports, the CEO decided to launch the survey because the risk of violating regulations was much more unaffordable than the risk of losing clients. From this point, the PM would need to write out a project plan addressing the CEO. To put this plan into practice was to satisfy the regulatory command on one hand and maintain the level of customer satisfaction on the other.

As shown in the figure below, in the second step, the PM translated the project plan into two sets of documents: the Product Design Documents (PDDs) and the Product Requirement Documents (PRDs). He took the PDDs to the financial business manager to revise the specific questions before he passed the revised PDDs to UEDs. At the same time, he passed the PRDs to SDEs and SDETs. In these documents, the product manager adopted different set of terms and different language for his communications with interface designers and programmers, respectively.

Until the first version of the plug-in questionnaire was put online, the PM only fulfilled 60 percent of the entire project. He then started to focus on the users' responses by monitoring the data and text information collected from the survey. In this third step, the PM translated the customer data into a set of problem descriptions and revision plans to address the various groups of actors involved in the prior steps.

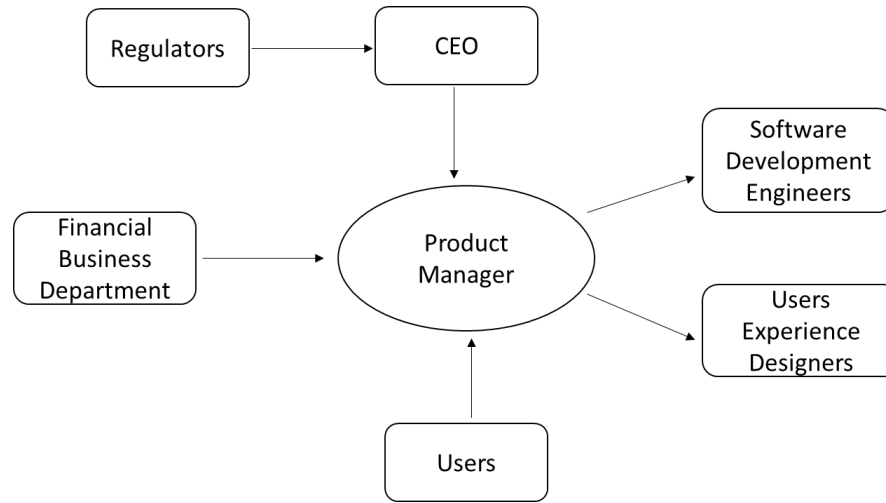


Figure 10. The product-manger-centered workflows in the making of fin-tech apps

In studying the organizational mechanisms and human resource arrangements in Chinese fin-tech companies, I often found that product managers act as translators between workers using different sets of terminologies, neologisms, and symbols in their everyday work. However, the PM-mediated communicative practices are also processes through which product managers have generated new meanings and values that enabled the rapid development of fin-tech industries in the past decade. First and foremost, the project-based and PM-centered management scheme fully utilizes human resources in today's digital economy. Tian's company, ranked 120th out of more than 1800 online P2P companies, had accumulated more than 32,400 digital investors from May 2014 to March 2018. Yet, it only had one UED and five people looking after SDE and SDET work. It

was a very efficient team, given the large number of active users that Tian's company had obtained. While the product managers have integrated soft skills and their professional IT knowledge in managing and planning the software teams, their comprehensive skill set has facilitated a two-layered horizontal management system in which the PM is at the top and the other employees at the bottom. Compared to the multi-level matrix management model (Barlett & Ghoshal, 1990; Schein, 2010), the institutionalization of PM management has reconfigured the structural relations between executives, managers, and professional workers. Soft skills and individual agencies surrounding the designs, perceptions, and utilizations of digital technologies have been a major force leading to neo-management pattern and ultimately the new spirit of capitalism.

Secondly, how product managers understand the relations between users' investment practices and the functionalities of digital financial apps determines the design and use of these apps. Product managers need a basic competency in finance and computer science, but more importantly, they need to comprehend and manage the communications between human and digital technologies. During my interview with Ye, a product manager at a Shanghai-based fin-tech company with 12 years of experience in Chinese Internet industries, his most frequently used technical term was "mapping" (*yingshe*). In mathematics, mapping (sometimes shortened to map) refers to the making of a function (*hanshu*) that reflects the idealization of how a varying quantity depends on another quantity (Lang, 1971). As shown in the diagram below, the rules of mapping determine how the function looks, and the function reflects how the changing variables in the "domain" influence the changes of variables in the "range."

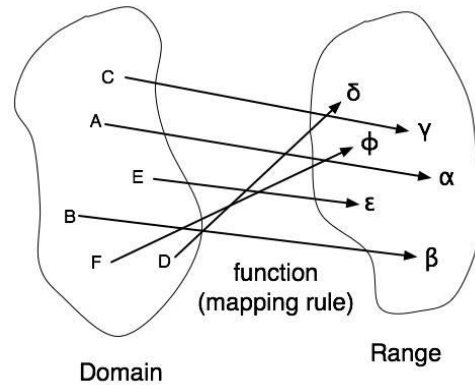


Figure 11. A diagram of function (By umdberg.com)

Ye's job was to define the mapping rules that the software development engineers could use to turn the investors' entries (of the amount for investments or withdraws) on apps to the inputs into his companies' database. "It's like a translation from one structure to another," Ye told me, "the key thing is how the *product manager* understands the relations between the two sets of changes." He showed me the table below and told me how the digital investors had been categorized in the database and how these categories influenced the design of the companies' core competency—the risk control software. Based on the readings of computer-generated codes, which to the product managers are reflections of app users' investing behaviors, the PMs define the classes of these investors. He further explained,

If the percentage of higher-risk investors, see those "one-star" to "three-star" investors, is too high, the company would have to lower the return rate a little bit. This kind of change will influence the company's income and influence the number of investors who still want to invest with us. I am not exaggerating. The product managers' decision (in defining the mapping rules) is very important to the risk level of the overall fin-tech market in China.

资产等级	用户风险评级	资产等级描述
★★★★★ 极低风险	保守型及以上	本金保护，并且约定年化利率不能实现的概率极低
★★★★★ 较低风险	稳健型及以上	本金亏损的概率极低，约定年化利率不能实现的概率极低
★★★★★ 中等风险	平衡型及以上	本金亏损的概率较低，约定年化利率实现存在一定的不确定性
★★★★★ 中高风险	积极型及以上	本金亏损的概率较高，约定年化利率实现的不确定性较大
★★★★★ 高风险	激进型及以上	本金亏损的概率高，约定年化利率实现的不确定性大

Figure12. A sample mapping between customers' risks levels and their assets levels

(from left to right: assets levels, risks levels, remarks of assets levels)

The rule-defining process is not an arbitrary one, as I was informed by most product managers I interviewed. Instead, as one of them put it, "I keep iterating, dealing with error, even for a very small set of rules." In the context of mathematics or computer science, iteration (*diedai*) is the act of repeating a process, to generate a (possibly unbounded) sequence of outcomes, with the aim of approaching a desired goal, target or result. Each repetition of the process is also called an "iteration," and the results of one iteration are used as the starting point for the next iteration (Dixon, 2009). In the age of big data, computer-run iterations constitute digital algorithms and have been applied in increasingly more business and public areas (Mayer-Schönberger & Cukier, 2013).

The below diagram shows specifically how iterations take place. The overall work flow seems standardized, but the product managers' *interpretative role* in the data collection and analyses step could make a huge difference in outcome. The interpretation of users' experiences significantly relates to product managers' individual understanding of what is ideal and what should be improved. Cheng, a recently promoted product

manager who previously worked as a software engineer, told me, “what and to what extent do you care about the users’ experiences is very, very important. Then, it is the question of how you can ‘add’ your understandings and ideals of their experiences to the existing software.”

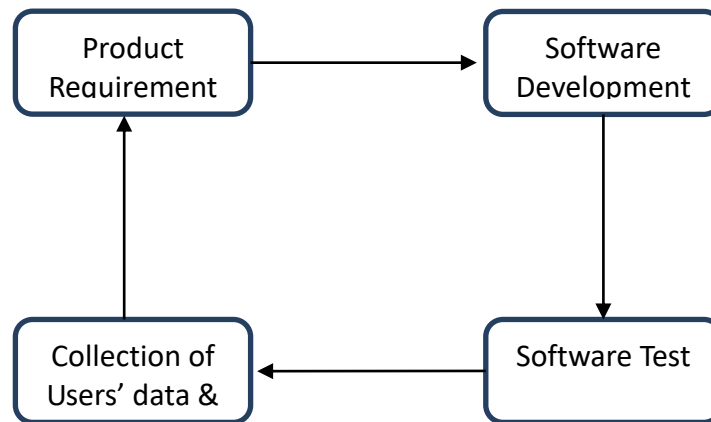


Figure 13. A workflow of iteration processes

When I asked Cheng whether this kind of “adding” could be capricious, he replied, “in some cases, maybe, but we (product managers) are making decisions based on users’ data! We have the customers Conversion Rate (CR).” In Cheng’s elaborations, CR was the key index *evaluating* the quality of a new software. CR has various meanings in distinct contexts but mostly refers to the percentage of software users retained from their experiences with the prior step(s). For instance, on e-commerce sites, the conversion rate is what percentage of customers converted from “window shopping” to real shopping (CR 1) and eventually close the deal (CR 2). Each percentage (or CR) and the differences between two consecutive CRs (CR1-CR2) could reveal software issues yet to be resolved.

Similarly, in the making of fin-tech apps, product managers pay attention to what percentage of app users turn into real investors after each of these steps: registration,

bonding bank accounts, transferring money, and purchasing financial products. While conversion rates help to identify which issues to solve, the product managers will have to decide how to solve them. The solutions vary according to the product managers' experiences, but all my informants mentioned a set of norms: "You don't want them feel tired while using your software. Use icons and do not use words unless you have to. Also, you want them to feel comfortable and stick to the app longer," Cheng explained. He then added, "in the making of fin-tech apps, you also want the investors to feel safe—to trust the company and then to invest with the company." In addition, fin-tech app designers also want the investors to use the apps as often as they can, but they use a step-by-step approach. "In each step, you give them very small amount of information, but very clear and easy to understand so that they can continue to the next step. Until the very end, you show them the investment contract and make them feel at ease," explained Liu, the product manager of S, a fin-tech company based in Shanghai.

Liu was not aware that I had been using his company's app for the past year, but my experiences with S apps aligned perfectly to his philosophy of app-design. Shortly after I registered with S using my name and phone number, a customer service representative called me and pushed me to take a step further. "Ms. Wang, I am reminding you that you have just registered with us. There is a 20-yuan coupon you can use upon your first investment business with S. Please let us know if you have problem connecting your bank account with the S app." While I linked one of my debit cards to an investment account with the S app, it then verified my bank card by my ID number—the number on my Chinese ID card (*shenfenzheng*). In the last step, I simply clicked the "top up" icon and entered the amount that I wanted to transfer for digital investment. I was

never required to provide more than two pieces of information for each step, and the interfaces of these steps mostly required me to click an icon or check a box rather than typing in text. In the step that the app was most likely to lose users (or in the PM's language, with the lowest customer conversion rate), customer service reps intervened by calling and encouraging users to move to the next step: bonding debit cards.

These norms, philosophies, and techniques influenced the product managers' decisions in mapping rules, iteration, and interface modifications. In addition, they often conducted ad hoc user surveys to find specific tactics for improving the customer conversion rate. "Sometimes, if budget allows, and we are working on a big product (a more complicated software or app), we will hire marketing research firms to do focus group interviews. But in most cases, we provide A and B versions to a group of users for trial use and find out which one works better," Liu explained.

Cultures of Rapid Iterations

The previous section describes the organizational, technological, and normative factors embedded in the product-manager-centered process of app-making. Unlike a non-digital commodity, for which the production process terminates when the commodity moves from the factory to the sales channel, a digital app is in a perpetual design process until it is terminated by the product manager or replaced by another app. The production process continues while an app is updated from one version to another. As Liu explained, "a software is different with a hardware. If you find something wrong on a hardware, you will have to abandon it and remake it from scratch. But if you find a 'bug' on a software, you just need to fix this bug and provide a new version of the software." For digital apps,

the workflow of iteration (as shown in Figure 13) repeats itself rapidly by using the outcome of prior rounds of design as a starting point for the next round.

In recent years, *rapid iteration* has become a trend promoted by product managers and favored by an increasing number of fin-tech corporations. It is considered a core component of the innovation-driven development model desired by Chinese business owners and executives in various business sectors. The idea of rapid iteration emphasizes that the time between two trials is becoming shorter and shorter. A 2018 Mckinsey & Company report shows that the average iteration cycle has shortened from 3-4 months to 2-3 weeks in only 5 years. (Mckinsey & Company, 2018). “It is like shorter and faster steps lead to a more efficient stride,” said Chun, a senior product manager working on fin-tech business solutions for an international consulting firm. He then elaborated the specific ways of rapid iteration,

Using a very small cost, we (product managers) do a rapid trial, rapidly (and partially) fail and get the data which helps us to identify the error. Based on these data we rapidly adjust and put up another trial. Nowadays, developing a new product (app) costs *very little*. That’s why we have been able to do continuous trial and error-data collection. In many cases, we did a small test (with a trial user group) and found out the bad app functions, and then we took off these functions even before the app was put out online and becoming accessible for investors. To survive in Chinese fin-tech industries, you must focus on the users’ experiences, thus must be swift, flexible, and have the capacity of rapid reactions to (market and users’) changes.

The term “shorter-and-faster steps” (*xiaobu kuaipao*) was coined by Lei Jun, founder and CEO of Xiaomi, a consumer electronics company that designs, develops, and sells smartphones, mobile apps, and laptops. The company launched its first product, the Xiaomi smartphone, in August 2011, and rapidly gained market share, becoming China's largest smartphone company in 2014. In 2017, Xiaomi was the world's 5th largest smartphone company (idc.com, July 2017). In Lei Jun’s words, “you need to run fast and

faster to win out of the competition and the tactic is to run small steps. Small steps are good because you receive users' feedback faster and you are able to revise and reflect your revision faster" (Shirky, 2015). As Chun told me, "nowadays, it (the strategy of shorter-and-faster steps) has become a common knowledge in the Internet industries."

In fin-tech industries, the idea of rapid iterations has also been widely accepted, executed, and circulated among product managers. It constitutes but also is a corollary of a new logic of production featuring three closely linked key elements: user participation, speed, and modulization. To beat the competition, fin-tech companies often need to increase the level of user participation in order to identify "bugs" as quickly as possible. In addition to offline interactions with trial users (for example, focus group interviews, or investors' monthly salons mentioned in previous sections), fin-tech companies also get feedback from investors through online communication. Once users are registered and invest with a fin-tech company, customer service may invite them to a WeChat group. Investors can also contact customer service through WeChat. Ye described a situation he had experienced when interacting with fin-tech users.

In the WeChat group, I asked them how they wanted the app to be improved and some of them responded with their advice. I thought those were very helpful comments and very quickly revised the app. Then I announced in the WeChat group that the app had been revised accordingly. They were so excited because they felt they could decide how the product looked like. It was really a sense of achievement. They became very loyal to your product and would often sent you some comments and suggestions. This kind of communication between product managers and users also helps the company to run faster. Ultimately, it is about how you manage the production-usage interactions. So long as you integrate the users in your communication loop, you will get on the fast track.

In addition to user participation, fin-tech companies need to fix bugs very quickly so that they provide secure investment platforms. Normally, a work week consists of five

eight-hour days, but in some extreme cases, product managers may require a six-day week working nine or even 12 hours daily. The idea of modulization is what makes rapid iteration universally possible. A term commonly used in computer science, “module” refers to a set of programs organized together to solve a specific problem (Vince, 2015). “A programmer writes codes and builds up a program, whereas a product manager decides how to put different programs together thus generate a product.” Tian went on to clarify why modulization is pivotal for speedy productions:

The whole system is composed of multiple individual modules and you can assemble the modules according to different requirements. Each module is developed by a development team, and each team decides how to allocate the (human) resources and arrange the schedules. Getting feedbacks from users, a product manager should know which specific module needs to be fixed (rather than the entire product). It is all about efficiency. Internet companies very much care about efficiency.

In this way, modulization helps product managers to identify and repair errors and implement improvements to digital apps much more easily, and ultimately contributes to the rapid iteration in digital apps. In the production of digital apps, it is crucial for product managers to determine the most cost-efficient way to either fix the problem or launch an updated product.

However, many fin-tech companies also find such a speed culture problematic for the development of financial businesses. It is particularly challenging due to their dual identity, with one foot in the financial industry and the other in IT. Compared to product managers in other IT sectors such as video games and e-commerce, fin-tech product managers often need to adopt an alternative set of norms to define and evaluate efficiency. Ye described a mistake he made many years ago, when he first entered the fin-tech industry from a social media company:

My software testing engineer told me there might be a problem if we published the app without fixing that specific problem. But I decided to publish anyway since it would take another week to fix the bug. I wanted the app online as soon as possible. Also, I could foresee the risks but I thought the risk would be very small and affordable. I was still in the “Internet thinking.” So, we went ahead putting the app online. It ran smoothly until six months later a client lost lots of money when he transferred through our app. It was a painful lesson to me.

The “Internet thinking” (*hulianwang siwei*) that Ye mentions has much to do with rapid iteration and the speed production cycle. More importantly, it relates to how quality and risk are evaluated in two different contexts. To a social media company, dissent among a small number of app users would *not* influence the app design or revision. Pony Ma, founder of the multinational investment holding conglomerate Tencent, is widely cited as saying don’t let your work on one percent users’ experiences slow down your work on the other 99 percent users’ experience. In contrast, for a fin-tech company, the experience of one percent of its users is hugely relevant for digital financial app-making. Digital investors care about every penny they invest using digital financial apps. Any loss from a digital investor may signify the insecurity of the app he/she is using, thus undermining the trustworthiness of the app and the linked fin-tech company.

Tian has a friend who works for Ant, the largest fin-tech company in China. “The apps provided by Ant are well-known for being user-friendly and hassle free. Ant typically consider themselves an IT company rather than a financial company. Now, the regulators wanted them to add lots of functions and questionnaires on their app. Ant argued that these add-ons would be detrimental for users’ experience. But the regulators responded, ‘I don’t care about users’ experiences, I want to prevent my country from suffering systematic financial risks.’”

From these two perspectives, risks have been defined by different actors in distinctive ways. More importantly, how product managers comprehend risks influences their decisions on app-making, which then affects financial security at the individual, organizational, or national level. Regulators want to secure the national financial system and pay extra attention to the systematic risks in the overall financial industries which however, might be initiated by the fraud or malfunction of a single company. The central bank and the affiliated China Banking Regulatory Commission (CBRC) stress the significance of financial stability over any other priority. In this vein, many regulations may appear too conservative, especially from the perspective of a fin-tech company. Some product managers I spoke with shared a dilemma they encountered in their daily work. According to Tian, who worked in software and e-commerce for many years before joining a fin-tech company as the Vice President in Products, “On one hand, we are an internet company thus we have to be fast. Sometimes, I also have kind of inertia to ‘run’ fast. On the other hand, we are a financial company and we have to run steady. It is really hard to make a perfect balance.” He then continued commenting on the dilemma that many fin-tech product managers have encountered:

You (a fin-tech company) could skip those regulations and keep focusing on users experiences only. You did very well in rapid iteration and launched new products very quickly. Then you will find yourself at the dead-end of a very narrow road—a road that has been shut off by the regulators. Along this way, the faster you run, the more mistakes you made. For example, some regulative rules seem just not feasible for Internet companies—they will make the app-making too slow and waste too much business opportunities. Yet, all the financial companies follow such rules. So, you will have to find out whether you want to lean toward Internet industry or run like a financial company. Many fin-tech companies are still exploring and self-defining. “Shorter and faster steps” has been a motto for Internet companies but it may not work well for us (fin-tech companies).

In 2015, the central bank implemented regulatory control on fin-tech sector and officially defined fin-tech companies as *financial* companies. Before this distinction, fin-tech companies were able to register as IT companies as opposed to financial entities. This meant that some companies took a very aggressive approach, with the notion of rapid iteration embodied in their management structures and everyday operations, whereas other companies followed the traditional financial companies and struggled with slow business development. As Tian observed, “We (the fin-tech industries) are quite polarized and a company's choice really comes from the management structure.”

Tian's observation and the experiences of other informants bring us back to the organizational and normative factors underpinning the fin-tech making processes. Based on my interviews and observations, I categorize these institutional factors by four dimensions, listed in the comparison table below. Fin-tech companies that chose to merge in the culture of rapid iteration (“rapid style companies”) differ significantly in these four aspects compared to those that operated as stable financial companies (“traditional style companies”). The rapid style companies are usually run by Chief Executive Officers (CEOs) with IT backgrounds, whereas managers in the traditional style companies tend to have decades of experience in financial industries, particularly banks and insurance. The former prefers the two-layered management system in which product managers supervise all departments on a horizontal line, but the latter prefers multi-level vertical management dominated by general managers (GMs). All decisions, big or small, have to be approved by GMs. It is not surprising that rapid style companies normally have a higher level of user satisfaction, since they pay extra attention to the User Experience (UE) and react swiftly to user demands. In contrast, traditional style companies may be

very slow to address concerns, since every decision requires the approval of multiple levels of decision makers, but usually excel at the level of regulatory compliance.

	Rapid style companies	Traditional style companies
CEO's background	IT	finance
Management system	Product Manager Responsibility System	General Manager Responsibility System
Users experiences	High level of satisfaction	Low level of satisfaction
Compliance level	Low	High

Table 1. Comparison of two types of fin-tech companies

Fin-tech Giants as Platforms

In addition to the new logics of organization, production, and accumulation that have been widely adopted by the entire fin-tech industries, many fin-tech giants grow based on the model of platformization (van Dijck et. al., forthcoming). In this vein, a fin-tech platform is not only an investment app through which fin-tech users could borrow or lend money. It is also a hub enabling a multi-sided market (Evans & Schmalensee, 2016) for all kinds of money-related businesses and practices. Among these oligopoly companies, Ant Financial has been the largest fin-tech platform providing digital payment, consumer loans, digital investment services, and lately developed as a fin-tech hub for other small fin-tech businesses to sell their product and services.

In 1999, Jack Ma founded Alibaba.com in Hangzhou, China. The e-commerce site had focused on facilitating online transactions between companies (so called B2B businesses). In 2003, Alibaba company established Taobao.com and embarked on the

consumer-to-consumer (C2C) commerce. When the world-largest e-commerce corporation, eBay, entered the Chinese market in 2005, Alibaba started to spare technological and human resources from its B2B sector to develop Taobao (China Net Investor, 2005; You, 2017). In three years, Taobao completely defeated eBay thanks to the “glocal strategies” (Ou & Davidson, 2009). eBay quit its C2C market in China and shut down its China site (Vara & Chao, 2006), whereas Taobao continued growing its market share by learning the global e-commerce standards and adapting them to local preferences (for example, no transaction fees, and embedding an Instant Messenger in the C2C platform to enable pre-transactional buyer-seller communication) (Ou & Davidson, 2009). By 2005, Taobao topped China C2C sites and the total transaction volume, accounted 70% of the e-commerce market share in the consumers sector (China Net Investor, 2006). The new entrants in 2005 such as Tencent and Dangdang only developed their niche markets and could hardly compete with Taobao in the early years (Li et. al. 2008).

In October 2003, Taobao got its first payment through the digital escrow service, Alipay, that allowed buyers to wire money from their bank accounts to Alibaba. This method was perceived by many Chinese customers as an effective means to reduce the settlement risk; it ensured payments between sellers and buyers after goods were delivered. By 2005, more than 70% deals on Taobao were through Alipay, which had been a key driver for Taobao’s exponential growth (Shim& Shin, 2016).

Alipay was founded as a service organ for Taobao but very soon ran as an independent business in the digital payment market. In December 2004, Alipay was separated from Taobao and registered as a company providing third-party-payment (TPP)

services through digital technologies. Unlike the traditional escrow services provided by banks or underwriting companies, TPP mostly are provided by technology companies through digital instruments and focus on minute but frequent transactions. In 2005, the central bank identified TPP as a new category of financial services that non-banking companies provide, including payment, clearance, and settlement services based in collaborations with banks.

From the year 2005 to 2014, Alipay had sustained itself as one of the oligopolies in the Chinese digital payment market through three key strategies: convergence with existing financial networks; boosting active users; and being vigilant to regulatory shifts. Digital payment was in its infant stage around the year 2000 and Alipay had to set up its technological infrastructure that could adapt to the existing systems at the mainstream banks. Since 2005, Alipay has been working with the Industrial and Commercial Bank of China and China Construction Bank for express payment services and authentication procedures. As the current Alipay CTO recalled, it was an extremely painstaking but also rewarding process which took Alipay two years to develop the new digital infrastructure connected with the mainstream banks' operational systems (You, 2017). Since all the Chinese commercial banks had been networked and committed to the same set of transaction codes (Wang, 2018), the convergence between Alipay and the two mainstream banks allowed Alipay to be a universal TPP provider for Chinese consumers no matter which banks they were using.

In addition, Alipay has stressed boosting the number of active users through the “free service” strategies. Assuring their users that Alipay is convenient, the company also does not charge any transaction fees. Compared to the traditional payment services from

the banks, or credit card services from Visa or Masters, Alipay's free services have been very attractive. The rapidly growing user group has helped Alipay to build up an expanding database. By 2011, it had accumulated a platform of more than 600 million users and constructed a database with all these users' demographic information, bank accounts, and the purchase records. The data have been fundamental for Alipay to create and customize financial services (such as consumer loans) or investment products (such as money market fund). The borrowers or investors could also conveniently manage their payoffs or investment returns since their Alipay accounts have been connected with their bank accounts.

In June 2013, Alibaba launched the investment application, Yu'ebao. At the promotional stage, it offered much higher return (usually 6-8%) than most of other ordinary investment products provided by banks. Further, while banks have a threshold for minimum investment (usually above US \$800), Yu'ebao users could start from just one Chinese yuan (about 15 cents). In less than a year, Yu'ebao has attracted more than 200 million Chinese people of all social strata who enjoyed being lay investors without technical or financial constraints. In a year and half, Yu'ebao became the largest single fund, exceeding the total size of assets under management of any other fund in China. In the same year, Alibaba initiated its "All-in-Wireless" strategy and made all its financial products and services available on mobile Internet.

My interviews show that the Chinese users preferred these digital financial technologies over the traditional bank services because they provide more flexibility and convenience, as well as higher investment returns. Many interviewees used to check stocks market and manage other financial products on personal computers. However,

most of them now have migrated to using mobile as part of the shifting lifestyle, in addition to the workplace rules that forbid financial software on computers. Using their smartphones and without any professional assistance, they could transfer cash from their bank accounts to investment accounts. They could also search for third-party information, rather than only relying on financial advisors' opinions. Overall, they consider such digital and mobile investment experiences better than what they had at banks.

In 2014, Jack Ma integrated Alipay and Yu'eobao and formally registered Ant Financial, a Chinese domestic corporation fully controlled by Jack Ma and his kernel executives. Ant Financial is a technology company that uses digital technologies to collect data from the more than 800 million users; a financial giant that provides investment products, loans, online banking, and wealth management services to small-and-medium enterprises (SMEs), Chinese small investors, and the enlarging e-consumers. In June 2017, Ant Financial Services announced that it will allow third-party financial institutions to set up virtual shops through an indigenous app, just like when Amazon introduced its Marketplace (Galloway, 2017). More than a business development strategy, this announcement indicates that re-platformization is not limited to Alibaba, but also converging with other smaller digital platforms.

In the Ant Financial case, harnessing the existing database to expand to other businesses to offer additional (i.e., financial) products therefore seems the next logical step for platforms businesses within and beyond Alibaba. The construction of a credible, convenient e-commerce platform has been fundamental. Then, the payment platform effectively commutes e-consumers between the purchase platform and investment platform. The three platforms collectively form a new digital financial domain in which

the state, corporations, and online public interact with each other and engendered a set of new socio-economic and political relations in Chinese society.

A Virtuous Cycle? or A Vicious One?

The cultures of rapid iteration have enabled the rise of Chinese digital economy and generated values that allow Chinese fin-tech companies to lead the global innovation. Yet, the financial application of digital technologies has to balance between speed development and potential financial risks. This practical but also theoretical conflict demonstrates that digital technologies could lead to a virtuous cycle between speed development and rapid innovation, but also could engender a vicious cycle between rapid iteration and higher levels of financial volatilities. This chapter has analyzed the social and economic implications of digital financial technologies from both the micro and macro perspectives. The micro view allows us to understand how technological resources have been organized by product managers, an emerging labor category centering the new logic of production and accumulation in Chinese digital economy. The fast-changing market forces digital productions to focus on users' experiences more than anything else. In this context, a product manager must be a person who is manually gifted and theoretically versatile, able to diagnose and to act swiftly and also afford the long working hours. In addition, the making processes of digital apps have to be extremely flexible, which requires an acceleration of product (in the fin-tech case, the different versions of apps) turnover and corresponding shifts in modes of production. The new logic of production reflects the new logic of accumulation in the making of digital apps. Profitability rests on the capacity to manufacture variety of digital apps, with shortened lives, low-cost and in small batches. These new socio-economic formations have

engendered the cultures of rapid iteration which has become increasingly prominent in the past decade.

In the financial context, cultures of rapid iteration have been reflected as a set of organizational standards, management techniques, and normative metrics widely accepted by Chinese fin-tech companies. The making of fin-tech apps are organized by projects and planned end-to-end. The project-end directly face the demand-end—requests and challenges from investors, competitors, or regulators, and product manager takes full responsibility for a particular app. In addition, an app maker often needs to play multiple roles in order to expedite the app-making or updating process. To enhance the efficiency, product managers have developed the techniques of modulization. They tend to make the key functions of fin-tech apps into several modules and assemble the modules into a digital app. When the app needs to be updated, software developers only need to slightly revise the module rather than re-making the entire app from scratch. Modulization also allows the production team to flexibly deal with contingencies embedded in the shifting market and policy changes. At the normative level, product managers and their teams have accepted several modes of rationalization. They often evaluate the quality of fin-tech apps with quantified metrics (for instance, customer conversion rate). To many of them, speed production is the key to win out of the competition, and rapid iteration has become a “stimulus progression” (Jones & Schumarcher, 1992) relocating the product managers' attention from risk management to inducing the app users' participation in financial investment.

From the macro perspective, the major fin-tech companies in China chose to develop platforms on which the users' financial investment have been connected to other

money-related practices. In this way, fin-tech companies, particularly the oligopoly ones are also a multi-sided market place that provides a portal for the third-party to sell product and services to the fin-tech users. To these platforms, rapid iteration also plays a pivotal role. Product managers and the teams need to deal with multi-facets demand efficiently.

Largely influenced by the cultures of speed production, professionals and executives in fin-tech industries mostly advocate the pro-Internet and pro-innovation ideology and pay very little attention to the pitfalls of financial risks. Such an ideological competition has led to the unsettled self-identification of fin-tech companies. Most fin-tech companies consider themselves as IT companies as opposed to financial companies although the new regulations and policies have classified them as financial companies. Although some fin-tech companies commit to the stability rules defined by the traditional banking industries, most of fin-tech industries in China still prioritize profitability over financial risks.

While the regulators and most fin-tech companies do not pay equal attention to financial risks, a larger issue is these two groups of actors did not understand risks through the same approach. In the regulatory reign, financial risks have been defined and evaluated according to the economics or corporate financial terms such as “cash pooling” – the holding and transferring of money between companies within a group “leverage ratio”, “money laundry” – the concealment of illegal money, etc. The ultimate purpose of regulatory agency is to prevent *systemic risks*. In other words, the government wants to minimize the impact of a potential default or failure of a financial company on the whole financial system. The central bank and its regulatory agency, such as CBRC,

together with the banking industries have adhered to these risk-proven standards for decades. In contrast, most fin-tech companies have framed risks in an alternative way when marketing and promoting their “risk-proven” technologies. The primary selling point is “we will keep your money safe” (Alipay.com), meaning the users account information are doubly encrypted and will go through two-step verification before any transactions.

Also, the investors' sense of safety has been connected with the “flexibilities” of investment apps and “availabilities” of digital consumer loans. “You can transfer in or transfer out your money whenever you want” and “we have quite a hassle-free” process for the approval of a consumer loan.” According to the “Operation Report of Payment System in 2015,” Ant Financial has issued a total of more than 700 billion RMB (or more than US\$100 billion) in loans to small and medium enterprises (SMEs) in the past five years. These loans are without guarantee or collateral and boast a “310” experience; it takes three minutes to apply, one second to receive the money, and zero personnel to interfere. While managing financial risks has been a norm inscribed in the banking professional's everyday practices, most fin-tech companies seldom realized the risk dimension during the early design and development of financial apps (You, 2017). In line with the fin-tech companies' frames of risks that have been analyzed in the previous sector, the users' understandings towards risks are also quite opportunistic. In the Yu'eobao case, the digital investors have seldom lost money in digital investment, although the returns have been decreasing in the last two years (JRJ.com, 2018). This seemingly rigid trend has made the digital investors—particularly the small lay investors with low financial literacy—believe that digital investment generally is risk-proven.

The divergence of the political, technological, and public discourses of risks could be intrinsic to the development of digital finance in China. The professionally trained financial elites and the high-level Party officials are in charge of regulatory policy-making. To them, risk management is primarily for the stability of the *overall* financial system in China. This systemic view essentially contradicts with the partial view advocated by digital financial companies for innovative businesses or by public investors for opportunistic returns. Chinese financial market featured the millions of enthusiastic small lay investors (as opposed to institutional actors in the Western financial market) who have been seeking the rags-to-riches opportunities through financial investment. Higher returns and technical flexibilities often attract them to take a risk with or without knowing its existence. It is against such a risk-driven and opportunistic background that most Chinese fin-tech companies aggressively promote rapid iteration and speed production of fin-tech apps, which has enlarged the persistent gap between the political and public understandings of financial risks.

In Chinese fin-tech development, the accelerated digital production is supported by larger investment of capital and the engagement of competitive product managers. At the same time, the oligopoly companies with stronger capital, technological, and professional backgrounds are more likely to “run” faster. The development of Ant Financial embodies the process of re-platformization in which digital technologies have been embraced to re-consolidate the data resources generated from existing platform businesses and re-utilized for the creation and expansion of new platform businesses. Re-platformization aims at an all-inclusive business regime providing a wide variety of products and services. Algorithms and data-driven technologies are employed to turn an

Internet company into a monopolizing corporation. For example, Ant Financial and its affiliates cover wealth management, credit reporting, private bank, payments and cloud computing. Its business value was estimated at a whopping \$75 billion in 2016. Ant Financial tops the list of the most anticipated IPOs (Bajipai, 2017).

While the growing re-platformization in China's financial sector have challenged the existing financial policies and regulations, the Chinese government chose to give adequate space for the early development of digital finance, particularly to the oligopoly Internet corporations, such as Alibaba, Tencent, and Baidu. At the macro level, such a supportive tendency is in line with the Party's supply-side reform inscribed in the 13th Five-Year Plan for Economic and Social Development—resource allocations and policy supports should lean to the industries and companies which utilize technologies, innovation, and high-efficiency productions to increase the quality of supplies (Xu, 2017). However, it is noteworthy that the interactions between corporative actor and regulatory agencies is an on-going process and may have reached a critical point. As indicated in the announcement from the Fifth Conference of National Financial Work in 2017, the Party has imposed an increasingly stringent control on digital finance to avoid systematic financial risks. The next chapter discusses the Chinese government's shifting attitudes toward fin-tech companies and what are the Party's major considerations in promoting or regulating the financial applications of digital technologies.

Chapter Four

From Fin-techs to Reg-techs: Digital Technologies and China's Financial Reform

“The State Council will set up the Financial Stability and Development Committee. We must strengthen the Party’s leadership over the financial work.”

–President Xi Jinping on the 2017 National Financial Work Conference

“According to the Committees’ framework, there should be nothing beyond the regulatory coverage.”

–Sun Guofeng, the Director of Financial Studies Institute at the central bank of China

At the opening ceremony of China's first online-only bank, WeBank in Shenzhen in January 2015, Chinese Premier Li Keqiang commented that supporting digital finance would lead to a *deep* reform in the *traditional* financial sector.⁵ He then specified that the government would support fin-tech companies (like WeBank) in order to explore the development of alternative financial businesses, including small loans to small and micro enterprises (SMEs), rural finance, micro banks, and other endeavors. SMEs had been vital to China’s economic growth and had generated a lot of demand for loan services. However, the mainstream banks did not want to touch these alternative finance businesses since the traditional information system do not have enough information to evaluate the credit records of these SME businesses, and have labeled them as high-risk borrowers. To activate the alternative market, Chinese banks had to re-develop the credit evaluation system, business development models, and possibly even their recommended management schemes—as part of a sweeping institutional reform, or in Premier Li's words, “a deep reform” —in the finance sector. In contrast to the cumbersome strategies of the

⁵ People’s Daily 2015, January.

Chinese banks, fin-tech companies are much more advanced in collecting and evaluating the credit information of these small and micro businesses using digital algorithms.

Moreover, through the Internet as opposed to the bank tellers, fin-tech companies are also able to provide banking services more efficiently. As such, fin-tech companies were recognized as the official harbingers of China's financial innovation and are expected to contribute to the “deep reform” in China’s financial sector.

Prior to the Premier's WeBank speech, the term “deep reform” had been used in many financial work conferences to refer to institutional changes such as commercialization of Chinese banks (e.g., turning the four major banks from government subsidies into commercial banks) and ownership reform (e.g., the shareholding system reform at Industrial and Commercial Bank of China). These reforms are considered extremely profound since they had enabled structural changes, turning the Chinese banks from the subjects of political orders to market entities. Similarly, supporting the fin-tech growth is a structural reform since the government's pro-technology tendency has legitimized the Internet companies to run financial businesses and included the private companies in the financial sector. Between the year 2011 and 2014, more than two thousand IT companies received financial business licenses from the central bank. During these four years, they attracted and managed more than a billion dollars beyond the traditional banking system.⁶

However, the government's supportive tendency did not last very long. “It is always like a pendulum swinging between support and control” summarized Chang, a senior officer with more than 36 years of executive experience in Chinese banks. In July

⁶ China Internet Finance Report (2014) Xinhua News 2014 August.

2015, the central bank announced the *Guidance on Promoting the Healthy Development of Internet Finance* (also known as the *hujin ershi tiao*, or 20 rules for Internet finance) and started limiting the amount of money that could be handled in an individual transaction. In November 2017, the State Council established the Financial Stability and Development Committee which instantiated Xi Jinping's resolution that “the Party must strengthen the leadership over the financial work (*dang guan jinrong*).” As Sun Guofeng, the Director of the Financial Studies Institute at the Central Bank elaborated, “according to the Committee's framework, nothing could be exempted from the regulatory control.”⁷

The “20 rules” proclamation announced in 2015 has been considered a watershed between two types of policy tendencies: from supportive to restrictive,⁸ or from permissive to balanced.⁹ In the pre-digital era, the integration of information and communication technologies (ICTs) such as satellite, the Intra-net, and computers had been a significant component of financial institutions (Guo & Zhu, 2008; Zhou, 2015; Wang, 2018b). The question to consider now is how has digital finance reshaped the governing mechanisms in financial sector? Taking fin-tech policy changes as a lens to understanding the politics of digital finance, a larger question is how has the Chinese state attempted to justify its right to rule after introducing and promoting institutional practices that potentially de-legitimate its authority?

To answer these questions, this article analyzes both the “hard” and “soft” aspects of digital financial governance. The hard aspect refers to the new regulatory schemes. Specifically, as governance moved from the cage-free stage to the tight-control stage, to

⁷ Chen 2017.

⁸ Lee 2015.

⁹ Zhou et. al. 2018.

what extent have the major actors changed in the network of policy-makers, and how have regulatory boundaries been redefined? The soft aspect refers to the controlling apparatus, tactics, or institutional systems beyond hard policies and regulations. Specifically, it is institutional elements that include ideological control, normative rules, and cultural-cognitive influences. The two aspects—reflected in the collected policies and in my interviews with fin-tech executives—collectively constitute *a regulatory movement* since the year 2015 which swept across a wide variety of institutional agencies and constructed new ruling mechanisms in both the technological and financial domains in China. Answers to these questions demonstrate the ways in which digital technologies interact with institutional reforms, embodying a new governing paradigm in post-socialist China.

Institutional Reform in China's Finance Sector

Institutional theory provides a broad avenue to studying governance. It identifies institutions both as concrete terms of formal organizations *and* a set of formal or informal policies, routines, norms, rules, or behavior guidelines (Jepperson, 1991; Djelic, 2010). The idea of *tizhi*, the Chinese term for institutions, is equally elastic and could refer to either organizations or policies. In addition, compared to its English-language counterpart, *tizhi* carries an extra layer of meaning—ruling powers forming a cohesive set that is fundamental, structural, and defining for political or organizational governance. For example, in his *Exhortation to Study* (1898), Zhang Zhidong, the Grand Secretariat in the late Qing dynasty who advocated controlled reforms for China's self-strengthening, argues that Chinese learning should be taken as *ti* and followed as the essence of a subject, whereas western learning is *yong* or its practical application (Yin, 2015). Encouraging

young students to learn western science and technologies, Zhang also reiterates the authoritarian role of the feudal ruling class and subscribes to a conservative Confucian worldview. As such, *tizhi* has been a concept that is crucial to understanding the political system and power relations among the actors involved in the Chinese context. In recent years, institutional reform (*tizhi gaige*) has drawn increasing attention from scholars who try to interpret or predict the Chinese government's political or economic reforms (e.g., Guo, 2014; Li, 2015; Perry, 2011; Zheng, 2010).

With the world's largest population and fourth largest territory, China's size makes it difficult to govern, especially regarding the execution and enforcement of policies made by the central government in Beijing. In this context, *tizhi* serves as *an institutional system* that the central government has deployed both historically and today in efforts to govern China's centrifugal localities (Chung, 2015). While research on China's institutional reform unfolds the meaning of *tizhi* from a wide variety of perspectives, these perspectives can be divided into three large categories: policy paradigms, organizational mechanisms, and management discourses. Specifically, *tizhi* refers to particular policy paradigms that the central government has utilized to govern local or regional officials (Beeson & Li, 2015). In addition, *tizhi* embodies in the ways in which Chinese workers are organized. For instance, the work unit or so-called *danwei* system has acted effectively as the state's control of agents (Chen, 2018). Workers are tied to their work unit for life since it provides them medical care, childcare services and many other forms of *danwei*-bound benefits in addition to their salaries. Such a life-long tie tethers each individual to a huge infrastructure at the center of which is the Communist Party. The third dimension of *tizhi*, a management discourse, has become increasingly

significant in sustaining the central government's power. Given the commercialization of the state-owned work unit since the 1990s (Chen, 2018; Creemers, 2018), the usual policy and organizational approaches have encountered challenges. Nevertheless, the Chinese public remains committed to the discourses surrounding the one-party rule and the question of legitimacy (Schubert, 2008). Even though many sectors of the economy have been marketized, the Chinese Communist Party has retained its role as the sole authority and part of a rhetorical discourse of legitimacy (Li et. al. 2018).

This three-dimension institutional system has been part of the finance sector since the early 1950s (Wang, 2018b). The majority of financial industries are state-owned or state-controlled with a revolving administrative and policy paradigm defined by the central bank and the state council. In addition, since the establishment of the People's Bank of China in 1948, the state-controlled financial system has been part of China's planned economy and served the highly centralized financial and economic work of the Administration Council (later the State Council). Deng Xiaoping's "reform and opening-up" policies in the 1980s provided a backdrop for financial reform, but the substantive transformation was still governed from the top down. ICTs (information and communication technology) were promoted for the construction of a central-bank dominated transactional network connecting the regional banks and their branches. For decades, the Party has been the sole designer of Chinese financial reform at the administrative, political, and ideological levels (Guo & Zhu, 2008).

Despite the Party's authority over financial reform, the prevalent application of digital technologies in the past two decades appear to have challenged its traditional controlling mechanisms. For instance, economically strong online platforms and their

big-data-based business models bypass institutional controls to some extent, due at least in part because the Party has not clearly defined the policy boundaries (Just, 2018) or regulatory schemes (An, et. al. 2015; Wang, et. al. 2016). In the last five years, Internet companies such as Alibaba and Tencent have reached the market, providing financial services to small and micro enterprises that the traditional banking sector was not able to cover because of higher costs and risks (Keshetri, 2016). These new entries into the market have also threatened the dominance of state-owned banks in the settlement and clearance businesses (Wang, 2018a). Fin-tech companies are regarded as a digital revolution in the finance sector and have undermined top-down institutional control by the central bank. Unlike the one-to-many relations between the central government and individual banks in the traditional institutional patterns, the digital finance sector privileges interactions among networked actors (Shim & Shin, 2016). At the same time, fin-tech companies advocate the idea of using digital technologies to enhance liquidity (Chen, Ibbotson & Hu, 2010; Meister, 2016), which weighed down the conservative discourse of state-steered control of financial risks.

In the Chinese fin-tech context, the interaction between the ramifications of digital technologies and policy changes has highlighted three major issues for communication studies and Chinese law and policy research. Most importantly, the role and consequences of digital technologies need to be understood within a large institutional context. The meanings of institutions vary over historical stages and the objectives of institutional reforms can change with shifting economic and political missions. In addition, the rise of digital technologies has engaged with a wider variety of policy actors. Chinese financial reform is no longer limited to the transformation *within*

tizhi—the state-centered formal financial system. Corporative actors and their technological agency from *outside* the system have now become part of institutional reform. Finally, digital finance has transformed the essence of institutional control in Chinese financial industries in a way that financial policies are also info-tech policies, and financial regulations are also regulatory efforts enacted on digital technologies. Situating the emerging fin-techs phenomena in the larger context of financial reform in the past two decades helps us to understand state-corporate interactions in financial contexts. This systematic approach is also useful to comprehend how the Chinese government achieves balance between the support of financial innovation and the overall control of the growing financial economy.

Digital Finance as Game Changers

The financial industries in China embarked on informatization and networking strategies in the early 1990s (Zhang, 2004). Since then, information and communication technologies (ICTs) have become a vital element in rebuilding the financial infrastructure nationwide. Communication satellites, Integrated Circuit (IC) cards (also known as Smart Cards), and computers have been utilized to promote the protocols, technical standards, and management rules among individual banks and the larger financial industry (Wang, 2018b). Yet, technology-facilitated organizational reforms were only limited to the formal financial system, that is, the traditional financial sector constituted by the state-owned banks or government-invested security agencies and insurance companies. Although the financial applications of ICTs had significantly enhanced efficiency and thus contributed to financial marketization—the goal set by the central bank in the 1997 National Financial Work Conference, the role of ICTs had been instrumental rather than

reformative, mainly because the marketization initiated and supervised by the central bank was very limited.

Chang, the President of a major digital lending company, worked in one of China's largest banks for 36 years before she turned to the digital finance sector. In my interview with Chang, she told the story of her career development from working as a teller to becoming the President of the Private Banking Department:

In those thirty some years, I had witnessed the substantial reform of Chinese banks. The pivotal point is the commercialization that took place in the early 1990s. Before that, Chinese banks were mostly policy banks. Everything had to align with the state's orders. Commercialization, particularly the ownership reforms beginning from 2006 really turned Chinese banks into *market entities*. All the major banks increased their budgets on information technologies for faster transactions. It took only five minutes to get money wired from a bank to another which enabled an efficient use of funds.

However, Sun, another informant on this topic pointed out that commercialization did *not* equal marketization for Chinese banking industries, “marketization had never really happened.” I interviewed Sun in her office high in the Pudong Financial Square, a landmark building in the new financial district in Shanghai Lujiazui. After working in one of the Chinese major banks for more than 20 years, Sun joined a private bank as the President looking after the overall operations. She said,

It is not marketization. Even if it is, it is a conditional one and you have to see, what is the premise of financial marketization? For example, the interest rate used to be assigned by the central bank as a political order. Now the central bank only provides the benchmark interest rate (as a reference) and it seems the banks are able to determine their interest rates according to their market performance. So, is this really marketization? Let's see how the individual banks come up with their interest rates. The (decision-makers of) central bank and other major banks sit together for a breakfast and come to an agreement about the benchmark rate according to their experiences. Then the individual banks can decide their rates within a 50 percent range below or above the benchmark rate.

In Sun's analyses, financial marketization in China would be very limited if it took place *within* the formal financial system. The relations among institutions have largely been determined by the power relations between the central bank and each individual bank. Further, the existing institutional system determines how the financial market is defined. In this way, a substantial break-through could only happen if the actors outside the system were included and played the role of game-changers.

In 2010, the central bank granted TPP (Third-Party-Payment) licenses to 27 IT companies, including Alibaba and Tencent. These IT companies provided payment services through online or mobile technologies, such as Alipay and WeChat Wallet. Since then, the annual growth of online payment through these TPP companies and their mobile apps has been more than 30 percent. Until January 2017, among the 731 million Internet users in China, 67.5 percent have used TPP to pay online and 50.3 percent of them have paid through TPP when they shopped in brick-and-mortar stores (CNNIC, 2017, January). The more than 490 million Chinese e-shoppers have created an increasing flow of financial capital beyond the traditional banking system. This and other formal policy changes expanded opportunities for IT corporations to identify new markets and prospects for financial businesses. At the same time, the regulations on TPP licenses have also brought non-bank payment services officially under the government's regulatory regime (Shim & Shin, 2016).

Contributing to this friendlier environment is big data, which has been an enabler lowering informational opacity (Stiglitz & Weiss, 1981) between borrowers and banks, allowing small and medium businesses to access financial loans. Digital technologies have helped to bring in new actors and establish new operational rules, facilitating

structural changes in Chinese financial industries (Kshetri, 2016). Meanwhile, Internet finance development alters the sensitivity of deposit growth ratios to some banks' risk measures (Hou, Gao, & Wang, 2016). In 2013, the State Council announced that it would allow private companies to establish banks on a trial basis, and designated 10 companies, including Alibaba and Tencent to receive banking licenses (Techcrunch, 2015). In June 2013, Alibaba launched an online app, Yu'eobao which allows people to transfer their PayPal balance or bank savings to an investment account and start investing with as little as one yuan (about 15 cents). Alibaba doesn't charge transaction fees, and the investment app is very user-friendly. In less than a year, Yu'eobao attracted more than 65 billion dollars from Chinese people who enjoyed being lay investors without technical or financial constraints. While more than 300 million online investors are using Yu'eobao as of 2016, Internet finance has become a buzz word in the media. Innovation became the major framework guiding the social perception of digital technologies and finance (Wang, 2017).

During this time, financial policy changes on payment and money market businesses have centered on utilizing ICTs to further marketize China's financial sector. The proliferation of ICT-mediated TPP and money market business has allowed IT corporations to create a fin-tech market co-existing with the mainstream financial market. Although the latter remains the primary sector, the former seems increasingly threatening due to its technological advantages and its huge market base. For example, Ant Financial, the subsidiary of Alibaba and provider of Alipay services has developed its own digital financial technologies for fraud risk control. The big-data-based CTU (counter-terrorists-unit) takes the level of fraud loss down to less than 0.0001% and allows Alipay to serve

millions of users and their transactions at one time (Chen et al., 2015). The technological strength of fin-tech companies underscores their market competencies and potentials. Very quickly, the rapid growth of fin-tech companies has triggered another round of ICT diffusion among traditional financial industries. To add to their electronic networks in the 1990s and digitization in the early 2000s, Chinese major banks have sought the help of big data, increasingly critical since the fin-tech companies have taken more than 60 percent of the credit or debit card users (Wildau, 2017).

Aiming at a higher level of “financial modernization” (Wei, 2017), the Chinese government has promoted the design, use, and diffusion of digital finance both within and beyond the formal institutional system. In this process, the alteration of technology policies in the financial sector had two foci. One was the informatization of business operations by using the Internet and digital technologies, and the other was the inclusion of non-banking companies in the financial arena. This two-layered strategy was not only reflected in supportive policies during this time, but also led to the new governance mechanism—the technology-enabled co-existence of the traditional banking sector and the alternative finance sector designed and managed by the IT companies. In this way, digital technology was not only an instrument enhancing market efficiency within the existing institutional frame but also a catalyst for the structural reform that brought new actors to Chinese finance and complicated the meanings of financial markets and institutions in China.

Year 2015: A Turning Point toward Strengthened Regulatory Control

On July 18, 2015, the central bank announced the publication of *Guidance on Promoting the Healthy Development of Internet Finance*, a document which signified the

government's formal intervention in the development of ICT-mediated financial businesses. The China Banking Regulatory Commission (CBRC) issued multiple regulations governing P2P lending after several online lending platforms were discovered offering financial fraud schemes (Yang, 2014; Wang, Shen, & Huang, 2016). Since then, a wider variety of business categories have been covered under regulatory control.

Taking the year 2015 as a turning point, this section analyzes policy changes in the financial sector by comparing the shifting regulation strength, policy focus, and policy makers in two time periods: the growth spurt from 2012–2014, and the clampdown from 2015 to March 2018. I first collected all the fin-tech regulations using a keyword search from two types of sources: 1) baidu.com, the largest search engine in China (Jiang, 2014); and 2) the official website of the People's Bank of China. Then I identified and coded two items from the collected policies: the policy makers and the fin-tech business categories that a specific regulation aims to cover. The issue date of all the collected policies were also recorded. The comparison aims to reflect the interactions between the growing application of digital technologies and regulatory policy-making in financial contexts.

Chinese fin-techs had their heyday between 2013 and 2015, before the “20 Rules” was announced. Mainstream business and financial news outlets devoted increased their space allocation to “Internet finance,” the initial term coined by a group of financial reformists for fin-tech industries (Xie, et. al. 2012). Fin-techs had been framed as the new frontier for advent of wealth and business opportunities (Wang, 2017), and many major Internet companies started to develop financial businesses in the year 2013. As I mentioned earlier, since 2013, Yu'eobao has made digital investment a popular activity

among Chinese people of all social strata. In the same year, Tencent started WeChat Wallet before Jingdong joined the competition in year 2014. In addition to these national IT giants, many other IT companies started local fin-tech businesses during these two years. Chang saw this as a dangerous time in China's financial history, "in those early days of Internet finance, you can do it as long as you register as an IT service company." The low regulatory threshold enabled the exponential growth of digital finance but simultaneously failed to control financial fraud. Many fin-tech companies took advantages of lay investors' enthusiasm for digital finance without effectively managing financial compliance, legal risks, and professional ethics. "Let me show you an example," Chang continued her critiques:

I wouldn't believe it's true if I didn't see it in person. I was invited to a March 15 Conference for Consumers' Rights¹⁰ and gave a talk about basic financial safety. One of the audience members, a woman in her late forties told me during the conference break that she lost more than 7 million yuan by investing digital financial products. The scheme was like this: it asked you to invest 200 thousand and gave you a 15% return. Then if you doubled your investment, the company would give you 25% return. After the first two rounds of investment, the women felt this is the best way to make a fortune since she made more than 130 thousand yuan in less than six months. Then she collected all her savings and her parents' savings, sold a property and invested more than 7 million expecting a 25% return in six months. However, this time she didn't get any return and lost her money on the Internet.

In the stage of rampant growth, many fraudulent deals were carried out under the banner of the Internet and targeted the lay investors who were enraptured with the idea of an "Internet economy." Another informant who worked for the Compliance Chapter for the China Internet Finance Association told me:

From 2013 to 2015, it was the best time (for Internet finance) but also the most chaotic time. Do you know who were doing fin-techs during that time? I had been hiring fin-tech people for my company and interviewed so many applicants

¹⁰ March 15 is the annual Consumer Rights Day assigned by the Chinese government.

who were working or wanted to work in fin-techs. Some of them had banking experiences in a particular department but lacked a systematic view of the workflow between different departments. Some candidates had very good IT experience, mostly from the e-commerce area but knew nothing about risk evaluation and risk pricing. However, the most terrible thing were those wealth management companies that called themselves Internet finance companies and did illegal fundraising. Promising “digital finance with much higher returns,” these companies actually collected money from lay investors, mostly retirees, through off-line promotions. Sadly, this older generation of lay investors were very easily led by word-of-mouth.

After Ezubao, an online peer-to-peer lending service, scammed more than 7.6 billion dollars from nearly one million Chinese investors in a Ponzi scheme in 2014, Internet finance suddenly became a dangerous business that contained potential risks, and people urged the state to tighten controls (Gough, 2016). Sustaining social stability has always been the Chinese government's foremost imperative (Chung, 2016). The rampant growth of fin-tech industries had not only threatened financial securities at the regional level (Ng & Kwak, 2017), but also seemed to be a red flag indicating the instability of the financial domain. My interviewees in Shanghai witnessed multiple protests in 2015, including sit-in protests in front of the Shanghai Municipal Government and the occupation by some lay investors' groups of the grand lobby of Lujiazui Century Financial Square. To these retirees and housewives, the government and the financial center respectively represented the regulator and the major promoter of digital finance, and the investors wanted them to take actions. In this context, regulating fin-techs is more than punishing fraudulent companies and establishing new laws. It is also a campaign aiming to rein in the seemingly uncontrollable digital technologies and sustain the legitimacy and dominance of the central government in the growing financial regime.

Reflected in the policy-making regime, the government aggressively enlarged the regulatory coverage after year 2015. As shown in Appendix I, between 2012 and 2014,

only six categories were defined and regulated through 24 policy items, but since 2015 more than 20 business categories were regulated with more than 60 policy and regulation items. Also, among all the categories, P2P became the most regulated business. Although the integration of digital technologies was proceeding rapidly prior to year 2015, only seven business categories were clearly identified as Internet finance. Many other digital financial products and services were simply registered as IT services and considered *providers of financial information and digital apps* rather than financial products, and thus not subject to financial regulations. In the digital context, the line between financial companies and IT companies was indistinct given that service users could transfer money online or through mobile apps. For example, the Internet has been used as an information platform connecting borrowers and lenders apart from traditional banking systems. Such a platform is fundamental for peer-to-peer (P2P) lending. In practice, Chinese P2P platforms not only provide information about available loans but also process these loans using digital payment technologies. The permeable division between financial services and IT services challenged the existing laws and regulations established by the central bank based on their understanding of neatly categorized traditional financial businesses.

Since 2015, many unregulated IT companies were redefined and supervised by way of more specified policies. For example, P2P platforms had been considered information agents as opposed to financial service providers, but then were subject to regulation by the China Banking Regulation Commission per their announcement of the *Interim Measures for the Administration of the Online Lending Information Intermediary Institutions* in December 2015. As increasingly more technologies were adopted in finance, the government had to expand its supervision horizon accordingly. For example,

big data, blockchain, and initial bitcoin offerings (ICO) have been put under the regulatory regime since 2015. Also, the central bank found it difficult to differentiate two closely related fin-tech businesses, the related policy-making tended to be business-specific. For example, P2P overlaps with private lending in fin-tech practice but is essentially different in terms of how the two hedge financial risks. The government responded by employing different sets of regulations for the two categories. In addition to the examination of specific technological genres and business categories, the government has also strengthened its control on the overall fin-tech business. Only three regulations were made for Internet finance in general before 2015, whereas rules applied to the industry increased to 15 in the clampdown stage. Moreover, in the second stage, linked businesses such as fin-tech advertisements and fin-tech statistical systems were also included in the regulative spectrum. Thus, the policy-making process has also been a process for the regulators to recognize, understand, and define the emerging applications of digital technologies in the finance sector.

As fin-tech regulations have become more specified and comprehensive, a greater variety of political and regulatory actors joined in the policy-making processes. Appendix II compares policy-makers before and after 2015 by listing the numbers of policies that a specific department or admission has made or co-made with other policy organs. In the first stage, digital finance was supervised primarily by financial institutions with only minor engagement by non-financial institutions. The central bank was the major policy maker while the three commissions CBRC (China Banking Regulatory Commission),

CIRC (China Insurance Regulatory Commission)¹¹, and CSRC (China Securities Regulatory Commission) took care of policy executions. The Ministry of Industry and Information Technology (MIIT) as the major supervising organ of the Internet infrastructure, played quite a minor role in policy-making (it appears only once in the analyzed policies) even though the development of digital finance has always been highly reliant upon Internet usage. In the second stage, a group of non-financial institutions with diversified institutional backgrounds collectively replaced the central role of the People's Bank of China and its three Commissions in fin-tech policy-making. These non-financial organizations can be divided into four categories according to their institutional attributes: political institutions (labeled with P in the table below), specialized associations (S), information and technology institutions (IT), economic institutions (E) and legal institutions (L). Among these four groups of institutions, political departments had the highest level of engagement, participating in the making of 56 (out of the total 64) policies and regulations during this period. These departments include those working on social stabilities (e.g., the General Office of National Stability Leading Group, the Ministry of Public Security, the State Bureau for Letters and Calls), the departments on overall planning work (for example, the Development and Reform Commission and the Ministry of Housing and Urban & Rural Development), departments of personnel work and human resources management (the Ministry of Human Resources and Social Security; the Ministry of Education).

¹¹ In April 2018, the CBRC were merged to CIRC to form the China Banking and Insurance Regulatory Commission. Xinhua News, April 9, 2018. News Reports can be found here, <http://topics.caixin.com/2018-03-13/101220360.html>

The diversity of the engaged political actors signifies that fin-techs have been pervasive in a wide range of social and political domains. Fin-techs usage by organizational and individual actors beyond the financial domain have challenged existing policy systems and thus catalyzed a re-evaluation of financial technologies in terms of its social and political influence. For example, the Ministry of Education participated with other policy-makers on *The Notice on Further Strengthening the Management of Campus Loan Regulations* in May 2017. In 2016, media reports shed light on many “loan sharks 2.0” cases in which Chinese female university students who borrowed money through popular online peer-to-peer (P2P) lending platforms were being coerced into providing nude photos of themselves to secure high-interest loans (Loubere, 2016). When the borrowers were unable to repay their debts, the lenders threatened to send the photos to their friends and families. As Wan, the Secretary-General of the China Internet Finance Association elaborated “we have to collaborate with these non-financial institutions in regulations-making. We need their reflections about the practical issues related to digital loans on college campuses. Also, we need their collaboration to execute and enforce the regulations.”

The new regulations on digital financial technologies usually involve multiple stakeholders at once. *The Implementation Plan for the Special Risk Management Work on Internet Finance Advertisement and the Financial Activities in the Name of Investment and Wealth management* may have experienced the most complicated deliberation process. Before the announcement of the plan in April 2016, 17 state institutions joined in the policy-making process, reflecting the collaboration among at least five governmental sectors. In addition to the financial regulators (including the central bank and the three

commissions), legal institutions (such as the Legislative Affairs Office of the State Council, the Supreme People's Court of the People's Republic of China, and the Supreme People's Procuratorate of the People's Republic of China), IT regulators (such as MIIT and the Cyberspace Administration of China), social stability and security institutions (such as the General Office of National Stability Leading Group) and media and publicity regulators (such as the Administration for Industry and Commerce and the Publicity Department of the Communist Party of China) were involved. The collaboration of these regulators has left the typical Internet finance business no unattended regulatory space, from its marketing, to selling, financing, and client servicing.

The policymaking processes in the clampdown stage after 2015 have demonstrated a new mode of financial governance developed by the Chinese party-state. In the policy-making process, the state's political organs have many more seats than its financial or economic institutions. In this way, the governance of fin-tech development is not only about the development of particular business categories. It has become a political issue which affects social stabilities, systematic financial risks, and ultimately the Party's legitimacy in supervising the financial system. Compared to the tendency from 2012 to 2014 to favor innovation and technocracy, the Party's control has become the primary consideration in the development of digital finance. If this policy paradigm can be taken as the Party's “hard” approach to fin-tech governance, the following section shows how the Party has utilized its “soft” power to legitimize and sustain its ruling position.

Beyond Regulations: Alternative Institutional Control

Digital finance is not a revolutionary idea that excludes the traditional banking industries from business innovation. Prior to the rise of Internet finance, information technologies were widely promoted within the traditional banking system (Wang, 2017). Since 2012, nearly all of the major commercial banks started constructing big databases in order to enhance their competency (Kshetri, 2016; Wildau, 2017). Unlike the government's tendency to clamp down on the private financial sector, the ICT adoptions and diffusions in traditional finance have never sparked the government's concern over systematic risks. There were no regulations or specialized policies on digital finance before it became pervasive in the private financial sector. If taking the traditional financial industries in China as *a formal institutional system* designed by the central bank and the State Council on behalf of the Party, digital finance growing *within* the system has been a mind-easing innovation that contributes to financial modernization without threatening the stability of the system. What kinds of institutional factors assure the government in promoting digital technologies within such a system, and why are these factors invalid beyond the system?

Focusing on organization studies, Scott (2008) considers institutions as organizational or super-organizational forces that influence the performance of organizations. He categorizes such forces into three groups: regulative, normative, and cultural-cognitive (p.51). Regulative institutions refer to regulatory elements such as rule-setting processes and sanctioning activities, and normative elements include social values and norms guiding the realization of organizational goals. The cultural-cognitive dimension refers to shared interpretive frames and conceptions of reality based on which shared meaning and knowledge are created and disseminated. In addition to these three

categories, the organizing logics also prove to be a significant dimension for both new and old institutionalists (Abrutyn & Turner, 2011). Based on interviews with executives in Chinese banking industries, the table below displays the organizing logics and normative and cultural-cognitive factors that have constituted the institutional schemes in the financial arena.

Organizing logics	Workers are also the members of the Communist Party.
	Jobs and career development are assigned and determined by the Party.
	Workers must follow a code of conduct + systematic control which is set by the Party
	The head of a bank must be a Party member.
	IT software has been required for systematic control since the 1990s.
	Digital technologies, such as big data are necessary for systematic control.
Normative elements	Workers are subject to the Party's organizational principles.
Cultural-cognitive discourses	The Party advocates stability and discourages aggressiveness.
	To that end, workers must have ideological as well as job training.

When I asked Chang about her understanding of “tizhi,” the institutional system in China, she recalled how she had been built into the system and then chose to leave it after working within it for more than thirty years:

My current boss “chased” after me for about eight years. They approached to me in year 2004 and hoped I could help them to develop their financial business.

However, the headquarter bank did not agree to let me go. If you are a person beyond the system, you are a free man. But (if you are) within the system, you are led by the Communist Party. As a party member, I am subject to the (the Party's) organizational principles and normally would not do anything against the organizational principles.

By the time of the interview, Chang had worked in the private sector for more than six years. She ran her business very successfully and had adapted well to organizational culture beyond the government system even though her ideological tie with the Party remained very strong. She considered her new career in a private company a “relocation” enabled by the Party. In addition, Chang was proud of the traditional bank she had worked for decades in terms of their systems for risk control. “During the 2008 Global Financial Crisis, my bank did not suffer from the crisis but had become the world’s most profitable bank. That was because we have been very stable in management and operations. *Being steady is something built in our blood* regardless of the regulatory environment.” At the same time, Chang also appreciated the quality training the state-controlled financial system had given her:

The state had invested a lot of public resources within the system, and we had been trained for so many years (on systematic control). (For example,) my bank started using Enterprise Resource Planning (ERP) software in the 1990s, but the private sector only started to use ERP in 2012. As a person from within the system who went to a company out of the system, I have capabilities and qualifications that surely could help the company to develop a controlling system.

Lately, I have also integrated big data technologies provided by a vender in Hangzhou into our systems which have worked very well.

Without a doubt, Chang has been a very steady executive and has brought her management style and strategies to her new company. Since 2012, she has been leading the construction of risk control systems and performance evaluation systems through which every business in the company could be measured. More than one staff member working under Chang told me she had a very stable mood and often used the evaluation system to assess the workers' performances or make decisions. "System" or *xitong* was her most often mentioned term in our dialogue. To Chang, the systems approach is the most powerful strategy to enforce compliance with organizational rules and regulations.

Sun, another informant who turned to the private sector after working in one of the Chinese major banks for more than two decades, also discussed party-manipulated systematic control. She stressed, "the heads of all the banks and traditional financial companies are all Party members. They are in charge of how the overall system is going to develop. Technological innovation is just a small part of such a development." She pointed out that in addition to the bureaucracy, the highly centralized management system also urges all the banks adhere to the same set of capital management and technological standards.

Although they are accustomed to and comfortable with the Party system, both informants were clearly aware of the drawbacks of the stringent controlling system dominated by the Party. As Sun commented on the mechanism of accountability or in Chinese called *wenzezhi*,

A very important controlling mechanism is accountability. The top-down accountability rule forces you to do everything very carefully. You don't want to do anything too aggressive. If you can make a big difference but may take risk, you don't want to do that. For example, there were many things I could have done to the Teller System Reform. But the state-controlled system would not let you do them. If you did it but it did not work as you expected, you had to be responsible for that (mistake).

The other side of the coin may explain why Chang and Sun left the party-controlled regime despite having been very successful within the system. Also, the rapid growth of alternative finance and the state's stricter regulations have created positions perfectly suited for executives having experience within the system. To be sure, they had spent most of their career within the system and their normative and cultural-cognitive foundations had been constructed by the system. Against the backdrop of regulating fin-techs and developing controllable alternative finance, they will transplant Party-style institutional apparatus to the new digital arena that the state tends to integrate into its overall control over finance.

Conclusion: Commanded by the Party

In the digital age, the application of big data, new algorithms, and cloud computing will change the nature of work and the structure of the economy. Regardless, the exact form of that change will be determined by the social, political, and business choices the government, corporations, and the public make (Kenny & Zysman, 2016). In Chinese financial contexts, digital technology has been an engine for innovation. It helps to create new products and services that benefit a larger and more diversified social group

(Chen, 2017). But at the same time, it has also been a “trouble-maker,” annoying the existing regulators. The neatly defined business categories and the corresponding regulations have been inapplicable to emerging fin-tech products and services. In other words, the financial application of digital technologies has the potential to change the ways in which finance and technologies should be and could be governed.

This paper examines how the Chinese government responded to the digitization of finance by analyzing the Chinese fin-tech policies since 2010. It also situates policy analyses within a large institutional structure which includes not just formal rules and order but also informal norms, ideologies, and discourses. In addition to informing the specific policy changes in a rising business field that has taken half of the global market (*The Economist*, February 2017), this essay also aims to demonstrate the stakes that underlie the Chinese party-state's dominance in digital governance. As the shifting fin-tech policies demonstrate, the Chinese Communist Party has to secure its overall control in the financial field. Under this premise, digital technologies can be used to develop new sub-fields that extend the existing field. For instance, the enlarging fin-tech business is a form of alternative finance but is nevertheless part of finance in general. Prior to 2015, the Chinese government strongly supported the early development of digital finance by identifying it as more of a technological category than a financial category. Positioned within the larger discourse of developing the Chinese Internet economy, digital finance has actually blurred the line between IT and financial companies in terms of which group of policies are applicable to this emerging business category.

Meanwhile, digital technologies can be used by the state to govern risks—the systematic financial risks and also the perils threatening political cohesiveness. The

former relates to China's financial securities. The rapid growth of the fin-tech companies has diverted an incredibly large amount of financial capital to a circulation system beyond the traditional banking system, a situation that it is impossible for the central bank to ignore, given the systematic financial risk. In 2015, the state started to re-define the blurred line between IT companies and financial companies. After this turning point, many fin-tech companies had to take off their technological hat and submit to being regulated as financial companies. Moreover, although the chaotic year of 2014 triggered public dissent against the government, the Party never wants the people to doubt its power and legitimacy in managing the Chinese financial market as a whole. Against this complicated financial, social, and political background, the National Financial Work Conference for the first time in the history inscribed a plan that financial work must be supervised by the Party. Prior to this announcement, finance was regulated by the State Council through the central bank of China.

On top of the policy changes, the Party's control has been fulfilled through a set of indirect institutional dynamics including the re-arrangement of human resources and the reframing of management discourses. Party members with a long-term background in the state-controlled financial sector have now been assigned to the private fin-tech sector to duplicate the Party's systematic control. Using the Internet, computer technologies, and big data, the Party is attempting to put every transaction of fin-tech businesses under systematic surveillance. Even so, compared to the techno-based administrative mechanisms, the ideological dynamics inherent in this situation are much more powerful. Like Chang, Sun, and many other informants, professionals and executives in the financial domain consider fin-techs non-mainstream, informal, and risky, necessitating

their subordination to traditional finance, formal institutions, and the Party's regulatory control. This contradicts the pro-innovation and pro-Internet discourses that had been pervasive in the early development of Internet finance. From the tendency of “promoting the healthy development of Internet finance” announced in 2014, to “establishing a comprehensive regulation system” in 2018, the social and political perceptions of digital finance have experienced dramatic changes.

In addition to direct political control and indirect institutional coercion, the government also started reinforcing its financial hegemony through collaboration with the oligopoly Internet corporations. To maintain control, the government knows it has to keep the top tech companies well interwoven within the governmental operations. Simultaneously, these tech companies are voicing support for the state in order to secure their legitimacy in digital and financial businesses (Banjo, 2018). Since year 2010, the major Chinese banks have collaborated with Alibaba, Tencent, Baidu, and Jingdong,¹² the Internet giants who have controlled the major technological resources and financial capital and attracted the most competitive technical engineers in the Chinese Internet industry. In the co-construction of the new fin-tech fields, the IT corporations provide digital technologies, whereas the banks provide their financial management experiences and client resources. This digital technology-based co-operation has blurred the line between the traditional and alternative finance and between the formal and informal institutions. As finance and technology have become the two major wings of China's economic growth, the convergence between these two domains has been and will continue to be a focus of institutional reforms in China.

¹² A detailed table of collaboration schedule can be found here, http://www.sohu.com/a/151033000_104992

Lastly, fin-tech governance in China demonstrates a very different set of institutional paradigms compared to its counterpart in the West. While the core governing mechanisms of fin-techs in the US and Europe emphasize industry self-regulation and internal control by fin-tech companies (Gov.uk. February 24, 2016; Ferracane & Lee-Makiyama, 2017), Chinese fin-techs have experienced very strong intervention from the party-state, although one can hardly call such interventions external since the finance sector in China, in its traditional form in the post-Mao era has always been an indispensable component of the Party-led construction of the Chinese socialist market economy.

Chapter Five

Fin-Techs in New Media: Advertising and the Digital Investors' Culture in China

The 'bandage' works great!

—Marketing guru in Beijing on the new advertising form— “bandage”— created for the fin-tech company, Ni Wo Dai

Digital finance went viral in Chinese society largely because fin-tech companies have promoted this new business category both off and on mostly digital media. The prior chapters discuss the off-media communication that recommends fin-tech products or services through social networks. Many of my informants were drawn to the digital financial practices through inter-personal communication such as promotional seminars, word-of-mouth, and family or friends' recommendations. At the same time, fin-tech promotions also appear in the media through formal advertisements. After I came back from fieldwork in Beijing, I received a WeChat message from one of my informants, Ting, a heavy user of digital consumer loans. She was very upset that she saw the commercials for Ni Wo Dai, a major digital lending company on a popular talent show called *Idol Producer* broadcast on

iQiyi, the largest online video platform in China. Most of the followers of this show are teenagers, and Ting complained, “How could Ni Wo Dai try to induce the teenagers to



Figure 18, A new advertising form: “bandage” used by Ni Wo Dai/screenshot from iQiyi

take out digital loans? They don't even know if the kids will have money to pay off the loans!" Ting's complaints triggered my curiosity, and I searched online trying to find more criticisms toward this set of commercials. Ironically, I found the most robust discussion online was about how the company had successfully invented a new advertising form—the “bandage” (*chuang ke tie*). Coined by Chinese marketing gurus, a “bandage” refers to the way that a brand or company image is “pasted” onto a dominant position on the screen. As shown in the above Figure 18, the orange rectangle with Ni Wo Dai's logo was made using computer-generated imagery (CGI) and placed beside the idol. Even though the program and character did not mention the advertising brand, bandage still took a lot of audience' attention—it situated in the screen center and was in orange color that contradicting its light-blue background.

It is hard to measure how many (young) audience members have been attracted by the bandage commercials. There are many dimensions to evaluate the correlations between advertising forms and “effectiveness” (Danaher, 2017). Yet, the Ni Wo Dai commercials and many other mediated promotions of fin-tech products and services have been useful sites to examine how fin-techs have been introduced to the public by the fin-tech companies via popular media in China. This chapter examines such media representations and analyzes the cultural, social, and regulatory factors that influence the media portrayals of fin-techs and their socio-cultural implications. I chose seven major fin-tech brands/products including Alipay, Yu'eobao, Renren Dai, Dianrong, Finup Group, Ni Wo Dai, and Tuan Dai to look at their major media campaigns between 2015 and 2017. These seven companies were selected according to two criteria: 1) my informants who are fin-tech executives in charge of marketing and business development mentioned

and considered these companies as the most active promoters on popular media; 2) these companies were also the most often discussed by Chinese marketing professionals on marketing portal websites since January 2017. The selected companies and the promoted products/services are listed below (Table 6). In addition, based on the information provided by those marketing portal websites, I also list their media campaign timeframes in the below table.

Table 6, *The six major fin-tech companies and their promoted products/brands*

Companies	Products/Services	Media Campaign Time
Ant Financial	Alipay	February 2016-August, 2017
	Yu'eobao	2014
Dianrong	Dianrong	2015-2017
Finup Group	Aiqianjin	July-October, 2016
Jiayin Fin-tech	Ni Wo Dai	2015-March, 2018
Ren Ren Dai	Renren Dai	June 2016-April 2018
Tuandai	Tuan Dai	December 2016-March 2018

The advertising analyses showcase a new genre of consumer culture in China—a set of ideas and lifestyles popularized among young people, particularly the post-80s' generation urban youth (or millennials). To attract the potential fin-tech users from this consumer group, the fin-tech companies relentlessly associate their brands and products with this new popular culture. If modernization and globalization have been two major dynamics for the development of Chinese advertising industries and the formation of Chinese consumer culture (Li, 2016), the promotional cases analyzed in this chapter demonstrate a highly “glocalized” culture (Jin, 2016) and post-modernity and that features the pastiche of un-related cultural symbols picked up both from the global and the local, a celebration of materialistic desire, and a normalization of risk. In addition, targeting the young people in Chinese urban areas, the majority of these fin-tech

companies chose popular online video platforms such as iQiyi and Youku for media exposure. Traditional commercials were used, but many of the companies developed alternative forms such as the placement of commercial information on Zhihu, a Chinese question-and-answer website managed by the community of its users. Finally, the advertisements prioritize the alignment with the fashions and cultural elements popularized among the targeted audience far more than the introductions of product details. Information about risks was omitted in all these advertisements, which led to regulatory interventions since year 2016. Yet, the new regulations and policies rendered new advertising forms which attempt to bypass the regulatory coverage and engendered new issues that needs to be disciplined by policy-makers. The interactions between fin-tech advertisers and the shifting regulatory controls deserve continuous and close observations.

Advertising as Social and Cultural Production

In this bandage story and many other fin-tech marketing campaigns, advertising provides a rich site for the study of visual culture, consumer culture, and political economy of media regulations. Situated in the booming digital economy and proliferation of new media in the finance sector, fin-tech advertising not only embodies the symbols and forms reflecting digital investors' culture in China but also surfaces the political economic dilemma that the Chinese government wants to overcome in the dual process of media management and financial governance.

In his groundbreaking work *Captains of Consciousness: Advertising and the Social Roots* (1976), Stuart Ewen takes advertising as a dynamic *producing* the consumer cultures which in turn drive the consumption and then production of commodities. Many

scholars challenge this simplified point-to-point link between advertising and consumer culture since it leaves out the consumers' autonomy (Turow, 2009) and ignores the advertising audiences' individual perceptions. However, advertisements and promotional artifacts have always been used as research sites *reflecting* the mediated consumer cultures and as representations of the ideologies that companies want to promote among targeted consumers (Schudson, 2009).

In the Chinese context, the contemporary consumer cultures shift according to the socio-economic changes, especially with regard to class. From the opening-up and reform in the 1980s to the early 2000s, the middle class had been the major consumer power and thus the primary target of mass marketing (Li, 2016). The Chinese middle class has not shown a strong predisposition to be a driving force in leading political and social changes but is more concerned with social and economic status. Because of its increasing purchasing power, the middle class is reshaping China's urban consumer and popular culture. In addition, they work hard for conspicuous consumption such as housing, home furnishings, art, and leisurely activities, thus aiding a boom in advertising these sectors (Wang, 2015).

Moreover, the advertising in China reflect the dominant cultural values that are unique to the counterparts in the U.S. These values include community, popular, ornamental, status, and health (Cheong et. al. 2010). Researchers also found these values are related to the long-standing beliefs in a more collectivist culture. As Liang & He (2012) observed, the need for conformity is particularly outstanding in the East Asian context. East Asian people are more likely than Westerners to purchase a brand presented as a best-seller given that East Asians tend to have a higher need for conformity and

Westerners tend to have a higher need for individuality. Parallel to the formation of middle-class-based consumer culture in search for modernity with Chinese characteristics, the Chinese advertising industries have pursued modernized commercial culture and globalization in their management rules, development norms, and utilization of media outlets (Li, 2016). Marketing professionals employ the media strategies made by global corporations in search for the integration into the global market.

Yet, Chinese consumer culture is hardly monolithic due to the socio-economic changes and shifts of political cultures in the past decade. Growing economic disparity has made visible social inequality in many areas, which becomes central to understanding not only marketplace behaviors, but also in drawing connections between markets and cultural logics of daily life. The post-80s generation has grown up to shape the major cultural and ideological layers of Chinese society (Kang, 2010). A sense of differentiation is desired by these young consumers who have been situated in different positions within urban China's social hierarchy (Hanser, 2010). Differentiated class positions in urban China are expressed through the practicalities of daily consumer practices. In addition, the fragmentation of the state, the intellectual elite, and the grassroots population in terms of cultural expressions and values has unsettled regulative policies (Kang, 2012). In China there is a lot of controversy about which cultures and values should be publicized and promoted and which should be kept in check.

In advertising practices, agencies and marketers have also turned to alternative media and non-traditional advertising forms to reach the highly fragmented market. Integrated marketing and communication (IMC) has been considered the inevitable course for Chinese advertising practitioners (Schultz, et al., 2015). The complexity of

integrated media channels and a variety of advertising forms have rendered the regulatory issues that the Chinese government had not expected and was inexperienced to deal with. The gap between the lag-behind development of the regulatory systems and the emerging marketing forms has challenged the current policy institutions and linked to multiple social issues.

The Celebrated Hodgepodge: Symbols, Forms and Channels

Reflected in media representations, the new Chinese consumer culture embodies post-modern elements and the glocalized symbolic practices which have been communicated with Chinese consumers through a multi-media channel integrating traditional TV and new digital media platforms. This sector showcases the new complex of mediated communication surrounding the new consumer culture by analyzing the symbols, advertising forms, and the medium combinations adopted by fin-tech advertisers and marketers in China.

In the studies of visual culture, post-modern is almost the synonym of de-construction (Mirzoeff, 2009 [1999]). Postmodernism is distinguished by a questioning of the master narratives that were embraced during the modern period. It rejects the mainstream knowledge or aesthetics and promote the alternative, and the temporary. In interpreting popular cultural products, many media representations are identified as post-modern because they add non-conformative elements to the traditional art forms. Pastiche, for example, imitates and adds two genres together in order to form a new genre. The purpose of pastiche is less about making meaning of the subject. It is to attract the audience' eyeballs by making-no-sense.

As shown in this screenshot from *The Mystic Nine* (*Laojiumen*), a drama broadcast on the most popular online video platform iQiyi, the leading character's portrait replaced the lion in the center of the MGM (Metro-Goldwyn-Mayer company) logo and formed an imitated logo for the show. At the same time, such a pastiche is a combination of the global and the local. The story of *The Mystic Nine* takes place in Changsha in the early 1930s. It was made by Chinese production teams and investment from local capital. There is no connection between this local show and the global cultural production at all, but the titling logo of the show was coined using the symbolic elements that Chinese audience all know as global.



Figure 19 A pastiche used in Chinese drama *The Mystic Nine*/screenshot from iQiyi

called Finup Group for a digital lending product called Aiqianjin. In the first screen, the character says “Aiqianjin is based on big data” while a smartphone with “aiqianjin” app pops up beside her. Then two other characters follow the scene, and one of them (the boyfriend of the character in the first scene) mentored the other, “Date your girlfriend using investment returns!” In the third scene he continued selling the app to the fourth character, “You can track where your investment goes.” In the last scene, the fourth character, a man who works in a Piaohao, a form of financial institutions says, “Your

identity information is valid and effective.” In the second and fourth scene, Chinese traditional calligraphy works appear in the background announcing the name of the digital app.



Figure 20 A “creative insert” advertisement used in *The Mystic Nine*/screenshot from IQiyi

If the often-used product-placement has been popular for its seamless integrity with the drama plots or the settings of the variety shows, bandage waves itself into the show in completely different ways. It attracts the audience’s eyeballs by placing the surprising and incongruous elements into the drama based on absurd connections between commercial and drama plots. In *Laojiumen* the characters are involved in money-related endeavors and struggles. These narrative elements, as well as the calligraphy all have been utilized by the inserted advertisement to create a mini drama selling the Aiqianjin apps and the digital investment/lending services. The injection of promotional information into a cultural production has been legitimized and celebrated in the name of creativity. How does a clan story set in the 1930s China connect to a digital

app for peer-to-peer lending? Such an inquiry is hollow among fin-tech promoters, to whom the more valid question is how to place the promotional information into a drama that attracts the targeted audience—the digital millennia who value the sense of absurdity and try to make sense of the digital financial technologies using a new set of symbolic language.

Among all the popular shows, webcasting drama is the most powerful category reaching the largest audience. And since 2017, the historical drama has been the most highly ranked webcasting genre of programs according to the viewership data provided by Guduo Media.¹³ Below attached screenshots (Figure 21) are from another top-ranked



Figure 21 A “creative insert” advertisement used in *The Advisors Alliance*/screenshot from Youku

¹³ Guduo provides an open viewership database for webcasting programs. Data can be tracked here <https://d.guduo-media.com/>

historical drama about the story of Sima Yi, a government official and military general who lived in the late Eastern Han dynasty and Three Kingdoms period of China (220-280 CE). The 15-second insert was placed after a scene when Sima Yi was meeting with his warriors the day before the beginning of the war. The narrative of this episode was about how Sima Yi discussed his plans and strategies to be taken into the battlefield. Following the meeting, the commander-commandee relations were turned into mentor-mentee relations in which “Sima Yi” recommended that his warriors use a digital app for peer-to-peer lending called Ren Ren Dai. The character’s lines are taken from the advertising slogan as he says, “I have been using Ren Ren Dai for seven years and it is on a triple A (AAA) level of credit rating, hassle free, and reliable.” Although the commercial was made to be a seamless connection between drama plots and the sponsored information, it is still quite absurd for the serious followers of the drama.

The “creative insert” was first used in 2013 in *Longmen Express*, a historical drama show broadcast on multiple TV networks. The new advertising form was immediately considered very successful by marketing and advertising companies. It was a novel form and attracted sponsors who had always been looking for “innovative” forms of sponsorship. It also cost much less than the traditional TV advertisement because it uses the cast from the drama rather than searching and hiring new actors or actresses. Moreover, it is favored by the advertisers because they are included as part of the drama production, thus they have more chances to determine how the promotional information could be integrated into the drama. Before shooting the “insert,” the production team has to discuss which plotline it will be integrated into. For all these reasons, the “creative insert” has become an extremely popular sponsorship form and attracted a wide variety of

products and brands to invest in. Between 2013 and 2015, the rate of a 15-second “insert” had by 13 times (*Beijing News*, July 2017).

To reach young audiences, fin-tech companies have chosen multi-media channels to disseminate promotional information. Yet, digital media dominate the media complex and traditional media were only selected by a few companies. As shown in the below table, only Dian Rong and Finup included traditional media, such as newspapers and lightboxes in subway stations in its media combination. The majority of analyzed fin-tech companies focused on digital media. In addition, digital marketers in China have developed a wide variety of advertising forms using digital technologies, broadening the scope of the category.

Specifically, online video platforms are highly favored by fin-tech advertisers.

Youku and iQiyi are the two dominant sites that attract big fin-tech corporations. Below, Table 7 also shows that fin-tech companies have invested in individual-user-based apps, such as a tourist app (e.g., Mafengwo) and a payment app (Alipay). They have also placed banner advertisements on social media apps such as WeChat and Weibo.



Figure 22 An over-the-top (OTT) advertisement of Dianrong on Xiaomi cellphone

Moreover, digital media is not only about software (apps) but also can be hardware. For instance, Dian Rong placed its cartoon images (as shown in the figure 22) on smartphone home-screens through the over-the-top (OTT) services provided by Xiaomi, the largest consumer electronics company in China.

Despite the various advertising forms on digital media, the analyzed media and advertising campaigns demonstrated a highly unified feature—most fin-tech companies adopted the *all-in-mobile* strategy—everything has to be playable on smartphones. The major online video platforms such as Youku and iQiyi have more than 80 percent audience members who watch videos on their mobile phones, and more than 50 percent of them are between 20 to 39 years old.¹⁴ The most invested apps and social media are also mostly used on smartphones. The fin-tech advertisers' choice largely reflected the “all-in-wireless” trend followed by the Chinese Internet users. According to the 41st China's Internet Use Statistic Report provided by the Office of China Cyberspace Affairs Commission in January 2018, by December 2017, more than 753 million Chinese people have access to the Internet through their mobile phones and they accounted for 97.5 percent of the entire Internet population. The mobile data consumed by this “mobile” group has experienced a three-year double-growth between year 2014 and 2018.¹⁵

¹⁴ For the data report, see <https://www.jianshu.com/p/80046928726b>

¹⁵ Data report can be accessed from here, http://www.cac.gov.cn/2018-01/31/c_1122346138.htm

Table 7 *The major fin-tech advertisers and their media choices*

Company	Product/Brand	Medium	Media/platforms
Alibaba	Alipay	online video platform	Youku
		tourist apps	Mafengwo
		payment app	Alipay
		social media	Quanzi
		microblogging website	Weibo
		Over-the-top (OTT)	Xiaomi
	Yu'eobao	online video platform	Youku
Ren Ren Dai	Ren Ren Dai	online video platform	Youku
		online video platform	Tencent
		microblogging website	Weibo
Dian Rong	Dian Rong Net	Over-the-top (OTT)	Xiaomi
		Newspaper	Beijing News
		transportation service app	Uber
		TV networks	Dragon TV, HunanTV, Beijing TV
		metro lightbox	Beijing subway stations
Jiayin Fintech	Ni Wo Dai	online video platform	IQiyi
		social media	WeChat
		metro lightbox	Beijing subway stations
Tuan Dai	Tuan Dai Net	online video platform	Tencent
		Q&A website	Zhihu

Making a Scenario: The Vision-Based Financial Cultures

While fin-tech companies and the marketers prefer a particular set of symbolic patterns and communication channels, there are some shared meanings embedded in the analyzed fin-tech commercials. Among the 23 analyzed ads, 15 of them were designed to tell a story about “real” people who fulfilled a concrete goal by investing in or using fin-tech products. Such a story is often followed by a vision-based advertising slogan depicting what can be fulfilled after using the fin-tech apps. The story and the slogan then depict a scenario, or in Chinese called

“*chang jing*,” in which fin-tech products and services are often the driving forces in making the main characters’ dreams come true. The two examples below were selected from Ant Financial’s advertising campaign aimed at cultivating an affect that attracts and keeps young audience digital financial services (the first case for business loans and the second for mobile payment). Both advertisements base their affect-making on specific scenarios, although they take different approaches—the former tells a “real” story and the latter uses “real” numbers. If the story and the statistics are hard facts that speak to the dilemma that the young audiences have encountered in real

福建漳州平和县

90后新农人陈贺返乡创业成功后，又带动村民一起发展柚子园。他的小伙伴一起，通过网商银行帮助200位村民申请了近1000万元经营性贷款，3分钟完成申请，1秒钟到账，全过程0人工干预。小本经营，唯快不破。



蚂蚁为服务小微而生，早在2007年的支付宝时代，我们就有了第一件小额贷款领域的发明专利。11年间，在人工智能、大计算、风险识别等领域，上百项技术创新的实验和投用，都是为了那「1秒钟」的安全和便捷。

Figure 23 A scenario advertisement for Ant Financial’s micro-loans service

life, the envisioned entrepreneurship and uplifted socio-economic status are the incentives that have deeply touched and inspired the audience to integrate Alipay as part of their daily life.

Specifically, the picture with a young man holding two pomelos is one of the scenarios created by Ant Financial for its micro-loan services. The ad tells a story about Chen He, a post-90s¹⁶ went back to his home village in Fujian to start a pomelo business. The line above Chen He's picture says, "Chen and his business partners in the village got a 10 million-yuan business loan in one second after a three-minute application process." The scenario exemplifies the four "W"s—who, where, when, what (consequence) that compose a typical deal of digital loans. As indicated on Ant Financial's official WeChat account, the company had hired the marketing firms to promote more than 2000 such "scenarios" from December 2017 to May 2018.¹⁷

The mini-story is then followed by the advertising slogan, "Being fast is the key to the success of small businesses." Below the picture is the description of Ant Financial's technological advancement in Artificial Intelligence, big data algorithms, and risk identifications. The point is that Ant Financial's efforts aims at facilitating the small and micro enterprises (SMEs) to be "faster" and beat the competition. In the traditional financial system run by Chinese banks, SMEs are often essentially barred from lending services because they lack credit records or collateral assets. Banks are unwilling to take care of SMEs' loan demands as they are considered high-risk profiles (Wang, 2018; Chen, 2017). Even if they have the opportunity to apply for business loans from the banks, it

¹⁶ A term referring to someone who was born after the year 1990 and before 2000.

¹⁷ Data can be accessed here, https://mp.weixin.qq.com/s/k3zPZWdIQS3Y3vI9ZM_S0A

takes much longer for SMES to get their applications approved compared to medium and large companies considered low-risk customers. “Being fast” becomes an ideal that not only drives technological and research development of fin-techs but is also a kind of affect that becomes part of the SME owners’ entrepreneurial identity, both have been fulfilled through Ant Financial’s products and services.

In my interview with Wen, a junior employee working in the Corporate Communications at Ant Financial, she explained to me, “It is quite hard to attract young people if you include information that requires professional knowledge to understand. They may also feel that kind of information is quite boring and obscure. However, they like something easy to follow, lively, and visual, like a specific scenario.” Unlike the traditional financial products that often include professional terms and conditions in their advertisements, fin-tech products and services, as demonstrated in this Ant Financial case, have turned to a story-telling style which prioritizes specificity and results far more than details of the financial product. Moreover, while the above micro-loan advertisement has woven concrete “4w” information into the ad, it also integrates an affective sentiment in its slogan. There is a mutual support between “the concrete” and “the abstract”—the story exemplifies the vision and the vision may lead to multiple stories alike.

To make concrete scenarios, fin-tech promoters also like to employ numbers to envision the investment outcomes. For example, to attract mobile payment users to Alipay services, Ant Financial started to offer cash rebates in 2014. The rebate was promoted on multiple media forms but all focused on a specific group of audience who use Alipay for small but extremely frequent



Figure 24 A scenario advertisement for Ant Financial's Alipay services

transactions. It says, “By spending 865591.05 yuan, you can get 6,155 yuan cash rebate.” The below pentagon shape shows how this spending would help the users to increase their credit scores. Then, the next screen shows what would happen if the user keeps spending on Alipay. In ten years, the accumulative rebates that the user obtains through miscellaneous spending such as the payment for a meal would help him/her to buy an apartment. The gap between a meal cost and the down payment for an apartment seems unbridgeable. Yet, the marketers want the audience to realize the power of accumulation—the accumulated rebate by paying through Alipay add up to the fulfillment of the dream. To young audience, this ad looks like a math video game and attracts them to go through the maze, which starts at “the cost of a meal” and ends with “the value for an apartment.” The calculation of the rebate also serves as a bridge connecting the reality of today and

the dream that could be realized in ten years. At the end of the ad, the advertising slogan appears: “In the future, your credit will turn into your fortune.”

The Reconfigured Advertising Landscape: Regulations and the Consequences

Targeting young consumers and investing in digital and mobile media have been pivotal tactics in fin-tech companies’ promotion of digital financial services in digital media. The corporate actors’ choices, representing market forces, have been a major dynamic that determines how fin-techs are introduced to the public. Yet, the mediated communication about this emerging category of financial services is also defined by the interactions between the regulators and the fin-tech companies. Fin-tech advertisers and marketing professionals have been gaming the new advertising regulations since October 2015 when the State Council identified advertising as an important information channel that plays a double-sided role in the development of digital finance in Chinese society.

In *The Opinions about the Further Development of Works on Preventing and Disposing Illegal Fundraising*, the State Council points out that advertising media are useful instruments through which to educate the public about emerging financial services provided by non-banking institutions. Item 16 of the “Opinion” says, “The local government... shall fully use TV, radio, newspaper, the Internet, telecommunication, public transportation and many other forms of media and medium... to publicize and educate the people widely, specifically, and effectively.” At the same time, these communicative instruments shall be strictly regulated through new policies and regulations. Compared to the traditional financial services provided by Chinese banks, the emerging digital finance is much harder to control. It is much easier for the

government to put its hands on the publicity of traditional finance since the state-owned central bank directly controls all the mainstream banks.

In contrast, digital finance is operated mostly by private Internet companies beyond the existing controlling mechanism. For this reason, the “Opinion” has stressed in Item 16 that, “[The local government]... shall strengthen advertising monitoring and speculation, increase media companies’ responsibilities of self-discipline, block the information that might lead to illegal fundraising, and purify the public opinion environment.” After the State Council, the highest administrative organ of the Party setting the tone through the “Opinions,” the specific regulation-making in the subsequent years has followed this dual track—leaving a space for fin-tech advertisement to stay and grow in the media but increasing the efforts to monitor and regulate what and how services and products can be publicized. In response to the changing regulatory regime, fin-tech companies and marketers have developed new media combinations and new forms of advertisements that allow them to reach the largest audience without attracting the regulatory eye of the government.

In August 2016, the Chinese government announced the *Interim Measures for the Management of Business Activities of Internet Lending Information Intermediaries*¹⁸ which was collectively made by the Central Bank, the Ministry of Industry and Information Technology, the Ministry of Public Security, and the Cyberspace Administration Office. Focusing on digital lending, one of the major categories of digital financial services, the “Measures,” dictates that any off-the-media promotion is illegal and digital lending companies can *only* publicize their financing programs through

¹⁸ For the full text of the measures, see <http://www.miit.gov.cn/n1146295/n1146557/n1146624/c5218617/content.html>

electronic channels such as the Internet, landline telephones, and mobile phones (Item 10.4). This regulation aims to protect vulnerable investors, mostly seniors and retirees who are less financially literate and more apt to be exploited. After the Ezubao, a dynamo of online peer-to-peer lending service devoured more than \$7.6 billion from almost one million Chinese investors in a Ponzi scheme in 2014, it became clear that Internet finance was a dangerous business containing potential risks and necessitating the state's control (Gough, 2016). Sustaining social stability has always been the Chinese government's foremost imperative (Chung, 2016). Retirees and housewives who lost their money in these cases protested in front of Shanghai Municipal Government and some lay investors groups occupied the grand lobby of Lujiazui Century Financial Square. In this context, regulating fin-tech advertising is more than setting laws on media representations. It is also a campaign aiming to rein in the seemingly uncontrollable digital financial technologies, and thus to sustain the legitimacy and dominance of the central government in the growing financial industry.

Prior to the announcement of this policy, many digital lending companies developed their businesses through offline seminars—a gathering of potential lenders and borrowers in a real space in which fin-tech companies demonstrate how the digital lending platform worked and what kind of investment return the lenders could expected. These seminars had been favored by digital lending companies since they were often followed by word-of-mouth recommendations and multi-level marketing among families and friends. It worked particularly well among housewives and retirees who managed to increase the value of their savings and pensions but have little Internet access. After the announcement of the “Measures,” fin-tech companies had to cancel all the seminars and

relocate off-media marketing budgets to advertisings on various media platforms. In addition, while the “Measures” assured the legitimacy of “electronic channels” in marketing fin-tech services, advertisers and marketers have considered digital and mobile media “safer” channels to invest in. Responding to the new regulations, fin-tech companies had to re-define their target consumers and focused on the younger generation which lives on digital and mobile media. They also had to adjust their advertising strategies accordingly to abide to regulative forces.

Two months after the announcement of the “Measures,” the State Administration for Industry and Commerce (SAIC) published the *Special Rectification Work and Implementation Plan for Internet Finance Advertising and Financial Activities in the Name of Investment and Wealth Management*.¹⁹ The “Plan” is also widely referred to as the “Nine Prohibitions” (*jiu buzhun*) by fin-tech industries and the marketers. Since October 2016, the “Nine Prohibitions” has reset the landscape of fin-tech advertising by defining what *cannot* be advertised. For example, the Item Four says, “(fin-tech companies cannot employ academic institutions, industry associations, professionals, and the people who benefit from investment as spokespersons to promote fin-tech services.” In addition, as defined in Item Seven, commercials “cannot use unreal or inaccurate data and research as references.” Similarly, Item Two defines that “(fin-tech advertisements) shall not mention, predict or guarantee the future return, express or imply a lost-proven investment of any kind.” And according to Item Nine, many digital loan products relating to mortgage services have also been forbidden from advertising to the public.

¹⁹ For the full text of the plan, see http://www.gov.cn/xinwen/2016-10/13/content_5118616.htm

As a result, the “Nine Prohibitions” has washed out some categories of fin-tech advertisers, including digital mortgage providers and peer-to-peer lending companies. In addition, it also reconfigured the promotional patterns that used to be fin-tech companies’ favorite, for instance, hiring professional experts as endorsers. Moreover, ads using numbers-based persuasion were no longer used by advertisers after the execution of “Nine Prohibitions.” It is tricky to prove the accuracy of the data quoted in an advertisement. To bypass the risk of being taken off media platforms, most advertisers avoid quoting data of any kind in their advertising plans.

All these regulatory changes have constituted the political-economic background of how fin-techs are represented in the media to the public. When some advertising forms are forbidden, fin-tech industries advertising budget flows to remaining legitimized forms or to “innovative” forms. The interactions between the strengthened regulatory control and the growing marketing demand of Chinese fin-tech industries define what is accessible for the targeted digital investors and the public at large. While the regulators focus on controlling financial risks and maintain social stabilities, the industries are mostly business interest-driven. There is no consumer protection entity which takes on the responsibilities of elaborating the nitty-gritty of fin-techs to the potential investors or the media audience in general.

Conclusion

This chapter analyzes the media representations of fin-tech products and services by analyzing the symbols, advertising forms, and media combinations adopted and created by mainstream fin-tech companies and the associated marketing firms. As reflected in their advertising and media strategies, Chinese Fin-tech companies choose to

target the younger generation, particularly the post-80s youth as their potential users. Advertisements are designed to fit the cultural trends of this generation, in particular the post-modernity embedded in the youth culture in contemporary China. Further, the affect-driven customer loyalty has been particularly desired by the mainstream fin-tech companies, and thus has been a central theme of many advertising creatives. Although most analyzed advertisements have detailed appeals, almost none of them tries to educate the audience about the technological and financial complexity of fin-tech products. In addition, financial risks or borrowers' responsibilities are seldom mentioned in those advertisements.

The ownership structure of the fin-tech industries has been the major force defining the above frames and omissions. Since the government recognized "Internet finance" in 2012, fin-tech industries have been primarily composed of private companies. When fin-tech was introduced to the lay investors and digital payment users, it needed very detailed explanation about its financial and technological mechanisms in order to make it part of public knowledge and improve the ordinary people's financial literacy in the digital age. However, since the primary actor in the early development of fin-techs were private IT companies who focused on profit-making and rapid expansion more than anything else, media representations of fin-techs have been designed to induce the potential users rather than educate the public. Very few advertisers have offered detailed explanation of their products and services or mentioned risks issues because it seems non-compatible with the assumed taste of the digital generation.

Since October 2015, regulators started to intervene in fin-tech advertising and marketing. On the one hand, the government announced that media shall carry the

educational role in publicizing fin-techs. On the other hand, the regulators want to limit the exposure of fin-techs on or off the media platforms with the consideration of financial-risk-control. Off-media promotions have been forbidden and mediated promotions are limited to e-channels. The fewer promotional channels fin-techs have, the less likely that the financially illiterate individuals could be attracted to participate in fin-tech practices. Similarly, it is easier for the state to prevent systematic financial risks triggered by illegal fund-raising or Ponzi schemes. The oppressive tendency in regulating fin-tech advertisement is becoming more obvious since August 2016 when the Central Bank announced the *Measures* and *Nine Prohibitions* that have been executed by a collective of non-financial regulators, including the Central Leading Group Office for Social Stability, the Ministry of Public Security, and the State Administration for Industry and Commerce.

Market forces and the regulatory actors collectively shaped the patterns and symbols through which fin-techs are represented on media channels. Targeting the young investing public, fin-tech companies and their promotional agencies have focused on digital media, particularly online video platforms. Print media has almost been abandoned since it has a very low readership among young consumers. In choosing digital media, fin-tech advertisers have paid full attention to traffic, the key index evaluating the viewership of a website or an online video program. Based on traffic and their advertising budget, fin-tech companies seek the most popular program and then deliberate their affiliation with the program. For example, in the Ren Ren Dai case, the digital loan services company created a plot and inserted in the historical drama about General Sima Yi in East Han Dynasty. By no means, the product would match the genre

of the drama. The Ren Ren Dai company, however still chose the drama because of its high traffic and popularity among the desired audience group. It is also problematic that traffic becomes the central metric when the traffic numbers are provided by platform itself. In the 23 analyzed media campaigns, only one of them worked with a media and marketing research company to evaluate their media choices. Most companies relied on the traffic data generated and provided by the media platforms as opposed to the third-party monitoring firms. Yet, in 2017, the State Administration of Radio and Television investigated and disclosed multiple cases that online video platforms manipulated the traffic data in order to attract advertisers.²⁰

Encountering regulatory interventions, fin-tech companies have strived to be creative in making new advertising forms, such as the “bandage” and the “creative insert.” However, creativity, in this context means to twist the fin-techs information toward the most popular cultural products and to place promotional information on the most popular media. Creativity has been used to serve pragmatic goals committed by the corporate actors—to make seamless connections between cultural production and promotional information. Although the government has urged fin-tech advertisers to include educational information in their marketing campaigns, very few advertisers have offered details of their products and services or mentioned risks involved. Many of them even chose to omit such information which has been considered detrimental in the process of attracting more audience and potential users. The representations of fin-techs on Chinese advertising media embody the new consumer culture in China but also reflect the socio-political issues that have drawn increasing regulatory attention.

²⁰ Forfull text of the investigated cases, see <http://www.sapprft.gov.cn/sapprft/contents/7691/331290.shtml>

Conclusion: Financial Selves in Digital China

“Yu'ebao got the best timing for fin-techs when China's traditional finance is transforming to the modern finance. The modern finance is smartphone plus the marketized interest rates.”

– Sun, the Vice President of SR Bank, one of the first five private bank in China

In February 2017, I started to plan my interviews in China with the fin-tech executives in Beijing, Shanghai and Hangzhou. Making appointments was a very tricky thing since the staff turnover in fin-tech industries had been very fast. I interviewed the Vice General Manager of company A last December and found him the General Manager of company B when I reached him on WeChat in February. Human resource mobility at the technician level was even higher compared to that at the managerial level. However, coincidentally, I ran into many of the Chinese fin-tech executives that I had been eager to meet in midtown Manhattan! On March 3rd and 4th, the Fifth Fin-tech Summit took place in Javits Center, the largest convention center in New York City and the busiest one in the U.S. I went there for my maiden voyage in the fascinating building and to get some knowledge about Fin-techs in the US. Surprisingly, I found the Chinese fin-tech companies were on a big show this year while the prior four years' exhibitions were dominated by start-ups from Silicon



Figure 25 A giant billboard for Dianrong at the main entrance of Javits Center, Manhattan, New York.

Valley. All the major Chinese fin-tech companies, such as Dianrong, Yirendai, Lufax, had booths there, in addition to giant billboards or banner advertisements. It was in this year that the mainstream media in the U.S. started consistent reports on China's fin-tech industries, with a focus on how digital financial technologies had enabled the Chinese Internet corporations to take a lead in the global arena. In the same vein, newspapers and magazines repeatedly highlighted how captivating those fin-tech apps are and how the Chinese masses have been engaged in using these apps.

However, these fin-tech apps and the surrounding activities (both technological and financial) are just part of the large structure underpinning the socio-economic reform in China in the past decade. To be sure, technological advancement has generated values that have allowed China to change its position in the world. But technology does not function independently and their social consequences are determined by who are the users and how they have used the technologies. As elaborated in this dissertation, the rapid-growing fin-tech market in China has been constituted by four groups of actors: the lay investors with a wide variety of backgrounds but all choose to use digital technologies to adapt to the volatility and contingency embedded in the contemporary financial economy; the fin-tech product managers and programmers who are juggling multiple tasks assigned by the oligopoly Internet corporations and financial regulators; the policy-makers who have been utilizing digital technologies to fulfill their political goals, particularly the institutional reforms in the financial sector; last but not the least, the fin-tech companies and the affiliated promotional media making digital finance rampantly viral among the young generation in Chinese society. The interactions between these actors are organized by the financial implications of digital technologies and have

rendered the increasing financial power of the Party-state and the Internet giants, reshaped the production logics of the Internet industries, challenged the existing regulatory and enforcement orders in the financial industries, and formed a new mode of financial culture in China.

The prior chapters tell us the stories of people and organizations designing, using, and regulating these technologies, with each chapter focusing on a particular part of the entire market. This concluding chapter links these stories together with a pivotal line—the large-scale transformation within which all the above individual or organizational actors are situated. In other words, what are the major stakes surrounding and interacting with the Chinese fin-tech market and making it socially, politically, and culturally meaningful? A short answer is the co-occurring financialization of Chinese Internet companies and the digitization of China's finance sector. Moreover, the two processes have been increasingly intertwined and hardly distinct from each other due to the hybridized nature of fin-techs industries – they are financial companies but also digital technology companies.

Moreover, this chapter summarizes how the combination of, and interplays between digital technologies and finance have generated the new investing public in China. This social group corresponds to the financial self-help groups in many other neoliberal contexts, such as the U.S. and Argentina (Fridman, 2017), Australia (Greenfield & Williams, 2007), and South Korea (Kim, 2017). Yet, they are very unique in terms of their perception, usage, and dissemination of communication technologies. A very brief history of how Chinese lay investors interact with communication technologies in everyday financial practices helps us to understand the shifting roles of

communications in the formation of the digital investing public who constitute the largest fin-tech market in the world.

Financialization of Chinese Internet Companies

Chinese Internet companies, the ancestors of fin-tech companies have encountered the unprecedented financialization in China since the early 2000s. In my interview with a Chinese economist, also a member of the government think-tank on finance and economics, I tried to find some clue for my research and asked, “Would you recommend some Chinese scholarly works on financialization in China?” The professor who has thousands of fans and followers for his insights on Chinese economic trends responded to me in no time, “Who dares to talk about ‘financialization’ when the stock market looks like a terrible mess?!” This conversation took place in summer 2016 when the more than 50 million Chinese stock investors all speculated on the next alchemy—financial technologies, or so called fin-techs—after their disastrous lost in the 2015 stock plunge; and I interviewed the professor in San Francisco when he came here with a dozen Chinese financial executives coming to the Silicon Valley to find out how “fintech” has rejuvenated the US financial industries after Wall Street committed the notorious “crime” in 2008.

My humble pursuit of a short bibliography failed after the professor’s resolute answer. I even felt humiliated for a second because of his decisive but maybe arbitrary response. However, several months after this fin-tech trip in San Francisco, when I tried to put together the scattered notes that I have done for this dissertation, I realized that the professor’s very brief answer failed to show me the academic work on “financialization in China” which might not exist at all, but had successfully unveiled the dilemma that the

Chinese state has been facing in the last two decades in reforming the finance sector—often considered the lifeblood of other industries and even the overall economy. Since the First National Financial Work Conference in 1997, Chinese government has been expediting the marketization and informationalization processes to boost the financial sector. Yet, each boom in the financial market seemed followed with unintended social consequences that upset the top officials, concerned the global financial industries, and scared the three-million retail investors. The regulation commissions have had tough days tackling the major volatilities and their solutions never substantively solved the issues (Chan, 2016). Financialization was considered a panacea to energize Chinese economy, but now a taboo too perplexing for Chinese regulators, practitioners and scholars to unfold.

In his invited talk to a group of Chinese financial executives who came to the Wall Street”for professional training, a professor of Finance at Columbia University “showed off“ to the audience that he could speak quite a couple of financial terms in Chinese. I was amazed just as other audiences were and wanted to figure out what made this native American who had never taught outside of the US but be able to speak those professional terms in perfect Chinese. He told me that more than half of his graduate students at Columbia are from China, and they often asked him questions about how to imply those financial models invented in the US to solve the real issues in China. While these questions were always hard ones, he found out that knowing the Chinese translations and the culturally specific connotations of those technical terms extremely helpful for himself to understand what on earth were those questions about.

In less than ten years, these Chinese students trained with the Western financial theories and models will be the “spine” of the Chinese financial industries, and they came to the U.S. to take a financial degree mostly because the financial sector in China has been so “hot” for career development and an international degree is much desired by the Chinese employers. From 2005 to 2010, the employment by the finance sector in China has more than doubled (Zhang, 2015). According to the data from National Bureau of Statistics in 2014, more than 5.6 million Chinese people work for finance industries, and you will find 5 to 6 “*gaojinrong de*” (people do finance) in every 100 employed, whereas the percentage of financial employment was less than 2% in 2004. Such a large demand for financial professionals is due to the vigorous growth of Chinese financial industries. In 2015, the contribution of the finance sector to the overall GDP has grown from 1.5 to 5.9 percent, and non-financial industries have increased their profits by almost twenty percent from financial channels as opposed to three percent ten years ago. Further, China's top 500 manufacturing companies registered a profit rate of 2.7 percent in 2014, far lower than the world average. Such a low return rate induces investment capital to flow to the more lucrative financial industries and switch the economic gravity towards the financial sector (Zhang, 2015).

The expansion of financial capital is not limited to financial industries. In the past decade, financial capital has increasingly controlled multiple areas of the domestic economy, including state asset management (Wang, 2015), goods and commodities (Zhang et. al. 2014), agricultural land (Gao, 2015), and home ownership (Forrest, 2015). The majority of these capitals are state-owned with the specific numbers varying across industries (Wang, 2015). At the same time, China's non-financial industries have also

raked in more profits from financial channels, with an increase from 3.3 to 19.6 percent in terms of their net profit level accounting for their entire profit in the last 10 years (Zhang, 2015). That means, almost 20 percent of the overall profit of those manufactures, agriculture producers, and real estate and property companies are from financial investment!

The liberalization and expansion of financial market and the discourses of financial powerfulness have influenced the development of Chinese Internet companies. In my conversation with several Internet entrepreneurs in Beijing and Shanxi, “*laiqiankuai*” (getting profits faster) precisely reflected the mystery power of finance for these businessmen who often regretted that they did not touch financial business earlier. “I didn't have to work that hard in the past years if I had known how finance works”. Financing or getting venture capital is the fastest way to obtain funding to support their technological progress and then business expansion. Since the early 2000s, waves of Chinese Internet companies have gone public and increasingly relied on and competed in the global capital market to fund their expansion (Jia & Winseck, 2018; Jia, 2018). The zealous worship towards finance is also reflected in the motto of “*shangshi*” (listing in stock markets, or so-called IPO, initial public offerings). Listing in the stock market has been a tempting approach to accumulating capital, whereas putting efforts into products and services is perceived as very inefficient. Such a worship has been supported by the state’s deregulation tendency in listing approvals, the promotion by investment banks, and a fashion of listing overseas welcomed by stock exchanges in the U.S. and Hongkong. In 2015, the China Securities Regulatory Commission significantly shortened the documents list for the approval of listing by removing 27 items from the 68-item list

announced in 2012 when Xi-Li Administration²¹ just debuted. In this context, investment bankers relentlessly seek for domestic companies and promote the idea of making a fortune through listing and provide technical and financial support to the prospect companies. The promotion by these institutional investors is for their own interests, since injecting capital in a company is conditioned upon getting returns when the company is listed. Lastly, while loosening the stranglehold on domestic listing, the state has opened up the avenue for Chinese companies to list in overseas markets. According to the 2016 statistics from Deloitte, Chinese enterprises have accounted for 23% of the global public offering, which makes China the largest country owning capital from the global stock market. Chinese Internet companies have taken the primary portion of these public offerings (Jia, 2018).

In a nutshell, following the pro-financialization trend, Chinese Internet companies, particularly those oligopoly ones, have chosen a financialized mode of development—focusing on fin-tech businesses or expanding through financial acquisitions. The Chinese Internet companies, foreign and domestic investment capital, and the millions of IT and financial professionals collectively constitute a promotional class driving the exuberance of Chinese fin-tech market that has led to an ideological shift among the major policy makers and business executives in Internet industries. It has been widely accepted that finance—the way to fasten the flow of capital—is an effective approach to more technological and professional resources which are fundamental for the development of Internet companies and then the rise of digital economy in China.

Digitization of China's Finance Sector

²¹ This is the abbreviation for the Administration by President Xi Jinping and Premiere Li Keqiang.

Since the late 1990s, the state council has put digital technology in the center of economic reform and initiated the national plan of boosting digital economy (Hong, 2017). In the finance sector, digitization has been grown in two areas: the state-owned traditional financial industries and the alternative finance in the private sector. In the traditional sector, utilizing information and communication technologies have been an effective in financial marketization and governance since the 1990s (Wang, 2018b). In the private sector, digital technologies have been used to develop a larger financial network centrally controlled by the state since the early 2000s. In 2010, the central bank granted TPP licenses to 27 IT companies including Alibaba and Tencent. These IT companies started to provide payment services through online or mobile technologies, such as Alipay and WeChat Wallet. Since then, the annual growth of online payment through these TPP companies and their mobile apps has been more than 30 percent. Until January 2017, among the 731 million Internet users in China, 67.5 percent have used TPP to pay online and 50.3 percent of them have paid through TPP when they shopped in brick-and-mortar stores (CNNIC, 2017, January). The formal policy changes thus expand opportunities for IT corporations to identify new markets and prospects for financial businesses. At the same time, the regulations on TPP licenses have also brought the non-bank payment services officially under the government's regulatory regime (Shim & Shin, 2016).

In addition, big data has been an enabler lowering informational opacity (Stiglitz & Weiss, 1981) between borrowers and banks, thus allowing small and medium businesses to access financial loans. Digital technologies have helped to bring in new actors and establish new operational rules, therefore facilitate the structural changes in

Chinese financial industries (Kshetri, 2016). Meanwhile, Internet finance development alters the sensitivity of deposit growth ratios to some banks' risk measures (Hou, Gao, & Wang, 2016). In 2013, the State Council announced that it would allow private companies to establish banks on a trial basis, and designated 10 companies, including Alibaba and Tencent (Techcrunch, 2015) with banking licenses.

Moreover, the Chinese government has put increasing efforts into developing “alternative finance” (*lingleijinrong*) to offset the economic slowdown. In Chinese language, the term of “alternative” has the connotation of being non-mainstream, but also being innovative or promising. For instance, national financial policy-making has been centered on liberalizing the financial industries and promoting “inclusive finance” (*puhuijinrong*) (Xie et. al. 2012), which means enhancing access to financial services and capital for individuals and small enterprises who used to be locked out of the conventional banking system due to their low income or high risk of default. “Finance going to the rural” (*jinrongxiangxiang*), announced in 2015, signifies that the rural area has been assigned as the next market to popularize the lending and investment business. Lending businesses targeting small and micro business owners in urban or rural areas are the most popular financial services that have been legitimized by the state and promoted by the Internet technology companies.

Digital technologies are considered to have exceptional strengths to expedite the growth of alternative finance, and I have witnessed the “super efficiency” (*chaoji xiaolv*) in my fin-tech trip in Silicon Valley with the Chinese delegations from the fin-tech industries. During a two-hour dinner at an Italian restaurant in east San Francisco, the table of eight delegations cheered twice and each was for the approval of a lending case. I

was amazed and asked the Business Development Manager how much time he would need to review and approve a financing application. He replied resentfully that he had spent extra time on those two cases due to the applicants' complicated situation. "These are two hard cases, so took me about two days. "Two days?!" "Yes, usually, it should be one day". Then, he proudly told me that he actually saved a day because of time differences between Shanghai and San Francisco, so the clients still got the money the next day. He received the applicant's online application packages through his companies' electronic platform and worked early in the morning (night time for the applicants in Shanghai) before our business visiting during the day and replied to ask for more documentations. He then reviewed them on the way to the restaurant and approved the case on his smartphone during the dinner.

If the above digitizing process was enabled by the policy reforms, a more essential condition for the digitization of finance is the increasing demand of financial services from the digital generation—the young generation in their 18 to early thirties living on digital gadgets and apps on daily basis. Diaosi is a term that originally "calls to mind a young graduate working a dead-end job, with little prospect of saving enough to buy a house and a car – basic trappings of middle-class life that are widely seen as essential prerequisites to finding a girlfriend and marriage." (Cohen, 2013). Although the exact meaning of diaosi cannot be easily pinned down, there seems to be a consensus that diaosi refers to some sense of an underdog or underprivileged identity. Such an identity was soon embraced by the more than 500 million netizens to express their dissent towards the political and socio-economic hierarchies (Yang, et. Al. 2014). Since year 2012, diaosi had become a symbol adopted by the Chinese young generation

due to the economic and cultural meanings embodied in it. The large hip, young, and wired group has provided an emerging consumer base for e-businesses, and the virality of diaosi discourse underpins the new consumer culture in China (Zhang & Barreda, 2013).

My informant, Tian reviewed his more than ten-year experiences in e-commerce area and sighed, “(prior to fin-techs) this group have never had access to finance!” Xu, a bank

branch manager whom I

knew in 2013 for a non-

fintech project and later

became my friend proved

Tian’s statement: “these

people have little money, no

stable income, and less settled

(unmarried). These are high risk

profiles and take us more time and energy to get or maintain them. Bankers like the 'high

net value' (gao jingzhi) clients—they

have lots of discretionary income or

assets that can be invested.” Fin-tech

companies, however favored this

consumer group and turned them into a

“long-tail market” (Anderson, 2006)

which is composed of a large group of

investors with each of them contributing

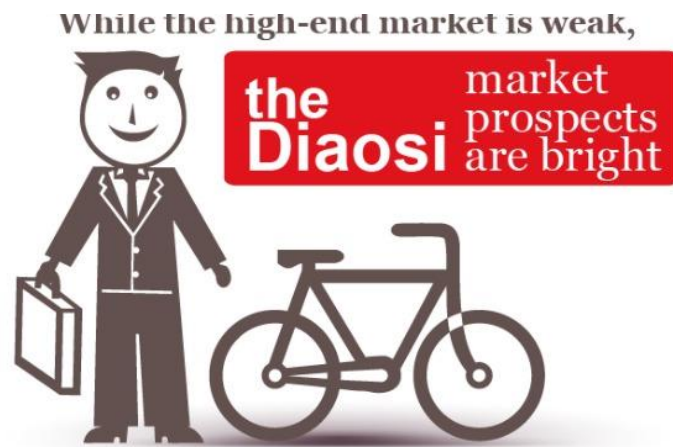


Figure 26 A caricature of the Diaosi economy in China, by David M. Barreda/*Sohu Business*



Figure 27 A Diaosi image on the advertising banner of Yirendai in the 5th Fin-tech Summit at the Javits Center, New York

a small amount of investment (Wang, 2018a).

This digital consumer base has reset the rules of financial games in the past decade since the venture capitalists (VC) started to favor it. Tian continued his comments on fin-techs:

Many Internet companies develop fin-tech businesses because they aim at VCs. To put it in simple, they have a large user base which can be easily turned in digital investors. Although these are the money-have-less people, but their potentials (of purchase) are huge and they are very active. VCs like numbers. The large number of users group you have, the more data you could accumulate, and then the more chances you will get invested!

By now, I found the answer to a question that occurred to me upon my visit at the Fin-tech Summit. If the fin-tech services, as most of the exhibitors claimed, are designed to serve the financial demand from the under-represented group, why did they show up at the Javits Center, a high-end convention center charging \$180 for the summit admission? Who, then, were they exhibiting to? Fin-tech companies, the pragmatic combination of digital technology and finance has been designed and promoted to attract venture capital, the most interest-driven financial power in the global capitalist system. In line with the complexity of the overall ecosystem for fin-tech companies, the ambiguity of this kind of fin-tech summit reflects the dynamics of fin-tech industries world-wide: the financialization of Internet companies and the digitization of financial industries.

The Evolving Investing Public in Digital China

According to the TGI China data²² in 2005, 9.23% of Chinese urban population had various forms of investment in the financial market, such as stocks, funds, and bonds,

²²TGI (Target Group Index) China is a single-source syndicated continuous study of consumer usage habits, lifestyles, media exposure and attitudes in China. It is part of the Global TGI 70-country network, established over 40 years ago. TGI provides continuous data of 60 Chinese tier 1 to 4 cities, representing 130 million Chinese residents nationwide.

and this percentage increased to 25.49% in 2010 after five years of continuous growth.

The features of investing people in China may challenge all the existing categories that we feel handy to draw on from sociological or financial studies. They cut across all social strata, cover all occupation categories, come from urban or



Figure 28, A group of old-fashioned stock people (laogumin) in Shanghai are viewing stock changes on a street screen.

rural. These people are not professional investors but can hardly be identified as being “lay.” Many of

them are proficient in analyzing the investment strategies by George Soros or Warren Buffet. These people may or may not have formal jobs, have or have no properties. Most of them are not the parasitic “rentiers” (Marx, [1844], 2007), and many live on modest income from their office or factory jobs. The big players of the investment class have millions of liquid assets, whereas the small players diligently engage in clipping coupons. After all, this group of people is significant to communication scholars is because their ubiquity and prevalence in Chinese society and global wide are closely linked to their perception and use of communication technologies.

Perhaps to look at how this group has evolved in the past two decades makes better sense of why the investing crowd in China is a unique social group, yet also part of the universal financial self-help group. During the 1980s when the finance sector was just opened up, stock (gupiao) was the only form of financial investment publicly available, and the 300,000 “stock people” (gumin) were limited to developed coastal areas (Hertz,

1998), and they gathered in the bucket shop or trading halls in local communities for business news, experience sharing, gossips, as well as complains and dissents (Shao, 2008). In thirty years, the total active stock accounts of individual investors have exceeded 54 million (Jiang, et. al. 2016) and the title of “gumin” became outdated while the increasing lay investors’ financial practices reached far beyond the stock market to a wide variety of investment products provided by domestic or international institutions. They invest in funds, bonds, gold, artworks, antiques-anything that might increase the value of the investors’ savings. Among the numerous forms of investments, *licai* (managing savings) perhaps was the most popular one among small individual investors, particularly after the stock plunge in 2008. Unlike the low-interest (usually around 0.3%) but flexible bank savings, *licai* products offer much higher interest rate (around 4%) but require a minimum deposit (usually above RMB 50,000 or USD 8000) and a fixed deposit term (usually more than 3 months). In 2010, all the major banks in China started their relentless promotion of *licai* products and services. According to Fitch Ratings report in July 2013, the total wealth management products offered has tripled compared to the supply in 2010 and amounted to more than 12 trillion RMB²³.

The past five years featured the spectacular growth of the Internet finance, and the expansion of online investors. In the online financial space, there are many old-fashioned stock people (*laogumin*) who just use the Internet as a convenient access to information updates. For them, online viewing and searching stock information is part of their traditional stock investment practices. Since the state endorsed “Internet finance” in 2012 (Wang, 2016), an emerging investment group using their dormant cash from their online

²³Source: Kate Allen and Simon Rabinovith, Financial Times, 7/15/2013

payment account to invest the fund market, or lending money through online P2P platforms. In June 2013, China's largest e-commerce company Alibaba launched an online application, Yu'eobao which allows the e-purchasers to transfer their dormant cash from their payment account on Alipay to an investment account. The e-consumers of Alibaba, also the e-payers using Alipay, were turned into online investors after Alibaba's promotion of Yu'eobao.

WeChat takes a similar strategy formulating and scaling its platforms. In 2011, Tencent launched WeChat, a messaging app and the young generation welcomed it as a more convenient and cool social media against QQ, MSN, and other online communication tools. Six years later, WeChat is well known as "one app for all." More than 600 million active users pay for daily groceries through WeChat Wallet, and more than 100 million of them invest with Tencent using their dormant cash in their WeChat Wallet.

If the Internet has provided more information sources for the investors to engage with, mobile phones and other digital technologies have helped to integrate mobility in their everyday life (Doulet & Dan, 2009). A fluid financiality has been formed and reflected in the daily schedule of a *licai ren* (a people who manages his/her wealth). 9:30 in the morning is a special moment that you will find many people started to look at their cell phones. Chinese stock markets open at 9:15 am and trading often become the most frequent of the day in the first fifteen minutes. At the end of day, many of these investors take a look at Yu'eobao or WeChat Wallet on their cellphones to see how much return they've earned and calculate how much should they transfer in or out of these investment apps. Facilitated by the Internet and mobile technologies, the spatially dispersed,

demographically and occupationally diversified individual investors have formed an online finance colossus sourcing the flow of financial capital running within and beyond Chinese financial market.

In the past two decades, the investing crowd has grown into a group including traditional stock people, wealth management group, stock traders using online apps, as well as those invested in internet-mediated peer to peer lending or other money market funds. Although they are internally diversified in terms of social status, occupations, property ownerships, this social group shares the relations to the means of production—wealth management—a way to accumulate money capital for business, for living, or for reforming self-identity.

“Wealth management” (Chorafas, 2006) is not a new concept in developed economies. As a specific category of financial services provided for bank managers, it primarily targets the “one percent”—those families or individuals who have high-net-worth which in US normally refers to one million dollars of liquid financial assets. As a socialized concept, wealth management mostly applies to middle-class families who have stable income and fixed expenses such as mortgage, education cost for children. If the core component of “wealth management” activities in the US is “wealth” (or the clients of such services being wealthy), the pivot of “wealth management” practices in China is “management”—it does not matter how much money you have, it matters whether you manage them and how. In this context, communication technologies have played a vital role to enhance their management capabilities. Such technologies not only help them to get information faster, but also allow them to work on minute savings, which to them could also be turned into investment.

Just as highlighted in the Yu'eobao commercials— “a PayPal that can make money for you!”—managing the dormant cash in your online payment account can also make money for you. In Chinese language, “yu’e” means remnant money, and “bao” means something people cherish but not necessarily expensive. By activating the cash parking in the bank accounts or online payment accounts (no matter how small amount it is), you can also make a difference. In this context, wealth management has little to do with social strata, occupations, or scales of assets. It represents a socialized financial activity motivated by a desire to raise economic status through a self-help approach.

While the nature of the changing social stratification in China and its consequences for the large political economy are far from clear (Goodman, 2014), the transforming investment crowd has vividly reflected how the small-scale interactions between technology, power and capital become translated into large-scale pattern, and that these in turn feedback into small groups. In the past decade, the Chinese state's digital reform and the financialization of Chinese Internet corporations have collectively produced an investing public who uses the Internet and mobile apps to manage their everyday money-related practices including payment, loans, investment, gift-exchange etc.. More importantly, digital finance has also been an important instrument for this group of people to manage their assets, re-define their socio-economic identities, to govern their emotions, and to adapt to the contingency and volatility embedded in the contemporary financial economy. For the future research, this dissertation is a preliminary effort to answer a larger question runs through all these chapters: how would the financialized economy and everyday life in China, a socialist market setting rising on its digital reform encounter the intensification of inequality and precarity? Answers to

this question will articulate with multiple research areas including but not limited to the social studies of digital technologies, Internet governance, sociology of finance, and China studies.

Appendix I: Consent Form

Interview Consent Form **with Audio/Visual Recording**

I am Jing Wang, a PhD Candidate in the department of Journalism and Media Studies at Rutgers University, and I am conducting interviews for my doctoral dissertation. The purpose of this research is to understand how individual investors in urban China use the Internet and communication technologies in their daily financial investment. The overall study will randomly select and interview around 16 people.

During this study, you will be asked to answer some questions as to how often you use the Internet and mobile apps to participate financial activities. This interview was designed to be approximately a half hour or forty minutes in length. However, please feel free to expand on the topic or talk about related ideas. Also, if there are any questions you would rather not answer or that you do not feel comfortable answering, please say so and we will stop the interview or move on to the next question, whichever you prefer.

This research is confidential. Confidential means that the research records will include some information about you, but all these information are anonymous and not identifiable. Some of the information collected about you includes the types of your current or ex-employers. Please note that we will keep this information confidential by limiting individual's access to the research data and keeping it in a secure location. The recorded information will be saved in my password-protected computer.

The research team and the Institutional Review Board at Rutgers University are the only parties that will be allowed to see the data, except as may be required by law. If a report of this study is published, or the results are presented at a professional conference, only group results will be stated. All study data will be destroyed upon publication of study results. Per Federal Regulations it must be at least three years.

You are aware that your participation in this interview is voluntary. You understand the intent and purpose of this research. If, for any reason, at any time, you wish to stop the interview, you may do so without having to give an explanation.

There are no foreseeable risks to participants in this study, and you may receive no direct benefit from taking part in this study. However, this study may lead to an increased understanding of the role of information technologies both from instrumental and critical perspectives. Such understandings will benefit the studied social group by suggesting them proper use of communication technologies in their economic lives.

No women or minorities will be excluded from participating this study, and participation in this study is voluntary. Upon your consent, the interview will be audio-recorded, and the recording(s) will be used only for analysis by the research team. The research results can be provided upon your requests.

The recording(s) will not include your name or any other identifier. If you say anything that you believe at a later point may be hurtful and/or damage your reputation, then you can ask the interviewer to rewind the recording and record over such information OR you can ask that certain text be removed from the

dataset/transcripts.

The recording(s) will be stored in a locked file cabinet with no link to subjects' identity. The recordings will be destroyed upon publication of study results.

If you have any questions about the study or study procedures, you may contact myself at 917-783-3080, or jw751@rutgers.edu, or you can contact my advisor Professor Phil Napoli at 848-932-7568 or

phil.napoli@rutgers.edu, 4 Huntington St, New Brunswick, NJ.

If you have any questions about your rights as a research participant, you can contact the Institutional Review Board at Rutgers (which is a committee that reviews research studies in order to protect research participants).

Institutional Review Board
Rutgers University, the State University of New Jersey

Liberty Plaza / Suite 3200

335 George Street, 3rd Floor

New Brunswick, NJ 08901

Phone: 732-235-9806

Email: humansubjects@orsp.rutgers.edu

You will be offered a copy of this consent form that you may keep for your own reference.

Once you have read the above form and, with the understanding that you can withdraw at any time and for whatever reason, you need to let me know your decision to participate in today's interview.

Your signature on this form grants the investigator named above permission to record you as described above during participation in the above-referenced study. The investigator will not use the recording(s) for any other reason than that/those stated in the consent form without your written permission.

Subject (Print) _____

Subject Signature _____ Date _____

Principal Investigator Signature _____ Date _____

You will be given a copy of this consent form for your records. By participating in the above stated procedures, then you agree to participation in this study.

Translated Consent Form

受访者同意书

我是美国罗格斯大学新闻与媒介研究学系的博士研究生，我叫王菁。目前，我正为我的博士论文收集资料，做访问。这项研究的目的在于了解中国城市里个人投资者如何在他们的日常投资理财过程中使用互联网和其他通信技术。整个研究将随机选择并访问大约 16 位被访者。

在访问期间，我会问您一些问题，比如您使用互联网或者手机上网去投资理财的频率如何？访问会持续半小时到 40 分钟。不过，如果您愿意，也欢迎您无限畅谈您希望多谈的话题。此外，如果有任何问题您不愿意回答，或者回答会给您带来不便，请随时告知我，我会停止问这个题并继续进行您希望回答的问题。

这项研究是保密的。保密意味着该研究将记录一些关于您的信息，比如您在什么类型的单位工作，但这些信息都是匿名的。请注意，我们将通过限制其他人获取这些信息的手段对所有这些信息保密。所有信息将会保存在一个安全的地方。记录的信息将被保存在我的密码保护的计算机。

我和我的导师以及罗格斯大学审批委员会可以看到我在访问中收集到的信息，除此之外，除非法律允许，任何其他他人不得获取这些信息。在这项研究的报告发表后，或学术会议上报告的时候，我只会提到整个被调研群体的情况。所有访问收集到的信息将会在研究结果出版发表后被销毁。根据美国联邦法律，这个时间至少是三年。

您参与这次访问完全是自愿的，而且您已经了解这项研究的意图和目的。如果因任何原因，在任何时候，您想停止访问，都可以这样做而不必给予解释。

在这项研究中，没有可以预见到的风险，您也不会因为参与这项研究而获得任何直接的利益。不过，这项研究可能会使我们更加了解使用信息技术在金融理财当中的利弊。这样的理解会帮助个人投资者更好地在他们地经济生活中更好地使用互联网和通信技术。

我们不排除妇女或少数民族参与这项研究。获得您的同意之后，访问将被录音，而录音只由研究小组用来分析和做学术研究。如果您需要，我们也可以向您提供我们地研究成果。

访问记录将不包括您的姓名或其任何可以识别您身份的信息。如果您认为您所说的可能会在以后伤害和/或损坏你的声誉，那么你可以要求我重新录制相关内容，或者删除您希望删除的内容。访问记录将被贮存在带锁的文件柜，文件柜上不会有任何可以识别受访者身份的信息。所有记录将在研究成果发布之后被销毁。

如果您关于研究程序有任何疑问，您拨打 917-783-3080，或发邮件给 jw751@rutgers.edu 联系到我本人，或者您可以拨打 848-932-7568，或者发邮件给 phil.napoli@rutgers.edu 联系我的导师菲尔那不勒斯教授。我们的通信地址是 4 Huntington St, New Brunswick, NJ, 邮编 08901。

如果您对您作为访问参与者的权利有任何疑问，您可以联系罗格斯机构审批委员会（这是审查学术调查研究，以保护研究参与者的委员会）。

机构审批委员会
罗格斯—新泽西州立大学
Liberty Plaza / Suite 3200

335 George Street, 3rd Floor

New Brunswick, NJ 08901

Phone: 732-235-9806

Email: humansubjects@orsp.rutgers.edu

这份受访同意书，我们会为您提供一份副本，以便参考。

一旦你看了上面的受访同意书，并了解您可以在任何时间以任何理由退出访问，请告知我您是否愿意参加今天的访谈。

如果您同意参与这次访谈，并同意我按上述描述的要求来记录我们的访谈，请您在下面的横线上签字。未经您的书面许可，我不会在上述同意书描述的范围之外使用访谈记录。

被访者姓名（拼音）_____

被访者签名_____日期_____

研究者签字_____日期_____

您将获得本同意书的副本作为记录。通过参与上述程序，您将同意参与这项研究。

Appendix II: Correspondence with Chinese Contacts

I have attached four emails and WeChat correspondence (with translations) here. They were for my fieldwork in summer 2017.

Email Correspondence with the Communication Bank of China (Shanghai)

from: 苗俊华 <miaojh@bankcomm.com>reply-to: miaojh@bankcomm.com

to: Jing Wang <jw751@rutgers.edu>

cc: 徐玉芳 <xuyf@bankcomm.com>,

陈煜明 <chen_yuming@bankcomm.com>,

xumin <xumin@bankcomm.com>

date: Tue, May 3, 2016 at 6:24 AM

subject:调研安排:Important mainly because of the words in the message.

王小姐：

您好！关于您在我行下属分行调研采访一事，具体安排如下。

根据您的调研需求，我们已经安排与下属浦东分行进行沟通。具体事宜，您可与我行浦东分行徐敏副行长联系（13621892729，02158883276），她会为您具体安排。

如有任何问题，请随时与我联系，我的电话如下所示。我们会做好相关安排协调工作。

祝顺利！

交通银行上海市分行 人力资源部 苗俊华

苗俊华

交通银行上海市分行 人力资源部

电话：（86）021-53856227，（86）021-63111000-3691

地址：上海市中山南路 99 号（200010）

Translation

Dear Ms. Wang,

Greetings! Regarding your academic research at the branches of the Communication Bank of China, please see below for detail arrangements.

Further to the review of your research plan, we have contacted the Pudong Area Branch for your fieldwork. For your visits and interviews, you can reach Ms. Xu Min, the Vice Director of Pudong Area via 13621892729, or 021-58883276. Ms Xu will be supporting your detailed survey plans.

Should you have any question, please contact me at any time through below email or phone number. I will be coordinating your project as you need.

Hope everything goes smooth!

Miao, Junhua

Bank of Communications, Shanghai Municipal Branch, Human Resources Department

Tel : (86) 021-53856227, (86) 021-63111000-3691

Add : 99 Zhong Shan Nan Road, Shanghai, 200010

Email Correspondence with Investone Corporation²⁴ (Shanghai)

From: 仲夏 zhongx@investone.com

To: Jing Wang jw751@rutgers.edu

Date: Thu, Jul 28, 2016 at 11:13 PM

subject: Fw:RE: Re:RE: REPLY OF YOUR VISIT

mailed-by: invstone.com:Important mainly because of the people in the conversation.

您好，关于您明年来我公司下属及时雨小贷公司做调研事宜。我们非常欢迎您的到

来。关于所需的支持和细节，请您随时联系我。以下为我的手机和电话。

Best Wishes

仲 夏

董事长助理

石投金融，实投（上海）互联网金融信息服务有限公司

地址：上海市静安区石门一路 211 号旺旺大厦 901 室

Moblie: 18721361412

Tel: 021 63811638

²⁴ Investone Corp. is the head company of Jishiyu where I plan to conduct in-depth interview and participatory observation.

Translation

Hello! Regarding your requests of doing research at Jishiyu, our subsidiary company in Shanghai. You are more than welcomed. Please feel free to contact me regarding the details and the supports you will need. Please see below for my cell phone and office phone numbers.

Best wishes,

Zhong, Xia

Assistant to Chairman

Investone (Shanghai) Internet Financial Information Service Ltd.

Address: 901 Wangwang Business Tower

Shimen 1st Rd, Jingan Qu, Shanghai Shi, China, 200041

Moblie: 18721361412

Tel: 021 63811638

Email Correspondence with the Central University of Finance and Economics²⁵

From: “jianping99@vip.sina.com” <jianping99@vip.sina.com>

To: Phil Zhang <philzhanghui@yahoo.com>

Sent: Monday, October 10, 2016 10:30 PM

Subject: 回复：

张晖，你好！

关于你爱人明年夏天回中国做调研的事，我可以介绍几位互联网金融方面的教授给她认识。我们也可以搞一个小型的座谈会，也希望你爱人可以介绍一些美国互联网金融的发展情况。图书馆查资料的事，届时我会安排。

史建平

Translation

Dear Zhang Hui,

Regarding your wife's fieldwork in China next summer, I can introduce her some professors working on Internet finance. They can have a small workshop, and your wife is welcome to introduce the development of fintech in the U.S..I will also arrange her access to our library upon her arrival.

Shi Jianping

²⁵ Mr. Shi is the Vice President of CUF and also a friend of my husband.

WeChat Correspondence with Hengtong on Friday, October 21, 2016



Translation:

Jing Wang: General Manager
Song, I plan to go back to China next May to do fieldwork for my doctoral dissertation. I want to do some interview at your company and perhaps other Internet finance companies. Can you arrange?

Song: Yes. Welcome.

Jing: Great, thanks very much!
Will be in touch for more details a month before the field work.

Appendix III, semi-open questionnaire to the fin-tech users

亲爱的被访者，

非常感谢您接收此次访问！访问结果完全用于我本人的学术研究项目，并按当地法律以及学术评议委员会（Rutgers, IRB）双重条件保护您的个人隐私。

单位：_____职业：_____

出生年份：_____性别：_____目前常住城市：_____

平均月收入：_____（不是必填项）

- 1, 您哪一年开始使用智能手机？
- 2, 哪一年开始使用移动互联网支付或者转账（特指不经过银行渠道的支付或者转账）？
- 3, 哪一年开始使用移动互联网平台上提供的金融产品或服务（包括借贷，分期付款等）？
- 4, 具体使用过以下哪种产品和服务？
 - A、 蚂蚁花呗
 - B、 借贷宝
 - C、 京东白条
 - D、 分期乐
 - E、 名校贷
 - F、 卡卡贷
 - G、 唯品花
 - H、 趣店
 - I、 乐趣分
 - J、 其他
- 5, 您从什么渠道获知这种产品和服务？

- A、 朋友推荐
- B、 亲人推荐
- C、 银行推荐
- D、 APP 广告推荐
- E、 网络广告浏览
- F、 媒体报道
- G、 其他

5.1, 您是否有向朋友, 同学, 同事或亲戚推荐过上述您使用过的产品和服务?

- A, 有 B, 没有

5.2, 您是否和朋友, 同学, 同事或亲戚讨论过上述您使用过的产品和服务?

- A, 有 B, 没有

6, 您使用这种产品和服务的频率如何?

7, 您网络信贷的主要用途是?

- A、 日常生活用品购买
- B、 科技电子产品购买 (如手机)
- C、 教育相关产品
- D、 买衣服, 美容、美发
- E、 社交需要 (吃饭、唱 KTV 等)
- F、 奢侈品购买
- G、 汽车, 房贷等
- H、 其他

8, 平均每次借贷额度如何?

9.一般借款多久后还款?

10, 每 5 次借款中, 有多少次需要偿还利息?

10.1, 一般利息率是多少?

10, 有否有在银行尝试申请, 或成功申请过类似的产品和服务?

A, 有 B, 没有

11, 您是否曾经有其他理财行为, 比如股票, 基金, 购买理财产品等?

A, 有 B, 没有

12, 您现在是否拥有上述的理财产品?

A, 有 B, 没有

13, 请用一句话(或一个词)来形容您对"理财"的理解。

14, 请您演示一下您如何使用移动互联网平台上提供的金融产品和服务(最好是您最经常用的那种产品或服务)?

Appendix IV, The comparison of regulated fin-tech categories in two stages

	2012-2014		2015-2018. Mar.
assets management	1	assets management	2
		big data	1
		blockchain	2
		consumer loan	1
		credit insurance	1
		credit system	1
crowd-funding	1	crowd-funding	1
		digital loan sharks	2
digital payment	8	digital payment	6
		financial trial	1
		fin-tech advertisement	1
		fin-tech statistical system	1
General	3	general	15
ICO	1	ICO	4
		illegal fund raising	2
		inclusive finance	2
insurance	9	insurance	4
		P2P	10
		private lending	4
		public offerings	1
Securities	1	securities	2
Total	24		64

Appendix V, The comparison of policy makers in two stages

	2012-2014		2015-2018. Mar.	Attributes
Asset Management Association	1			
CBRC	2	CBRC	11	F
CIRC	10	CIRC	5	F
		CPPCC	1	P
CSRC	2	CSRC	3	F
		Cyberspace Administration of China	8	IT
		Development and Reform Commission	5	E
		General Office of Internet Finance Specific Rectification Work	2	IT
		General Office of National Stability Leading Group	5	P
		General Office of P2P Specific Rectification Work	2	S
		General Office of the China Securities Regulatory Commission	1	F
		General Office of the Ministry of Education	2	S
		Insurance Association of China	1	S
		Legislative Affairs Office of the State Council	6	L
MIIT	1	MIIT	11	IT
		Ministry of Finance	6	F
		Ministry of Human Resources and Social Security	1	P
		Ministry of Public security	7	P
		MOHURD	5	S
		National Internet Finance Association of China	14	S
		NPC	2	P
Payment & Clearing Association	1	Payment & Clearing Association of China	1	S
PBC	6	PBC	12	F
		Publicity Department of the Communist Party of China	5	P
SAC	1	SAC	2	P
SAFE	1	SAIC	10	E

		State Bureau for Letters and Calls	5	P
		Supreme People's Procuratorate of China	5	L
		the Central Committee of the Communist Party of China	1	P
State Council	3	State Council	8	P
		Supreme People's Court of the People's Republic of China	7	L

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