

Real Estate Crowdfunding in China

by

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Submitted to the Program in Real Estate Development in Conjunction with the Center for Real Estate in Partial
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ABSTRACT

As FinTech and online alternative finance has become a disrupter for the world, one of their subcategories, crowdfunding has a considerable potential to change the real estate industry. The study was to examine the real estate crowdfunding (short for RECF) in China and understand the present status of the industry, challenges, opportunities, and trends. The data mainly came from the Chinese crowdfunding websites, industry reports, and the RECF platforms; the methodology included fundamental data analysis, case study and comparison with the RECF in other regions such as US, UK, and Europe. The study started with an introduction of real estate FinTech, crowdfunding, and theoretical framework about RECF as well as the global RECF market to get a better understanding of the RECF in China. Then the research examined the history, and current status about the platform models, players, and characteristics of the RECF in China; the two representative cases (Duocaitou and Kaishiba) were analyzed in detail to interpret the drivers under their successes and problems in general. The study found out the possible challenges for the RECF industry in China, including the blurred regulatory environment, low diversification in types and locations of properties and immature platforms as well as low desire to expand globally. Finally, the research attempted to seek for potentials and recommendations that will ultimately lead to the successful future development of this industry. The study was subject to the limitations on accessibility to the database and timeliness of data in such a changing industry. However, its findings and suggestions can be useful to players who are supposed to engage in the RECF ecosystem and intend to involve in the RECF in China such as regulators, real estate developers, institutional or retail investors, and RECF startups. Future researches are necessary to understand the effectiveness of risk management systems on the RECF platforms, the ways that the institutional players can involve in the industry, the globalization of the Chinese RECF, and mechanism of RECF ecosystem.

Thesis Supervisor: David Geltner

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CHAPTER 1: INTRODUCTION

1.1 Background

The global financial crisis from 2007 to 2008, which blocked ways for SMEs to finance, created many disruptors in the FinTech industry.¹ FinTech, short for finance and technology, is defined as “the use of technology and innovative business models in financial services” in the 2015 World Economic Forum report, becoming an ignorable trend.² From 2008 to 2014, it was a golden time for the growth of FinTech globally: the number of FinTech companies increased by approximately 275%, from 178 to 668;³ The equity investment almost quadrupled from \$4 billion to more than \$12 billion.⁴ The expansion slowed down in the next three years, but the FinTech industry continues to bring innovative business models as a game-changer for both SMEs and traditional institutional players. The boundary between FinTech and online alternative finance seems blurred: FinTech provides enterprises and retail investors with non-traditional methods to finance;⁵ Alternative finance refers to financial channels, processes, and instruments which complement the traditional finance system like banks or capital markets,⁶ while online alternative finance refers to those vehicles using the internet and mobile technology.

Crowdfunding is one sub-category of FinTech and online alternative finance. As a shared economy model, crowdfunding, especially equity crowdfunding, attracted a plethora of attention from researchers, ventures, various industries, and entrepreneurs. The current empirical literature is not limited to crowdfunding success, contribution behavior, crowdfunding design, the impact of crowdfunding, privacy in crowdfunding, venture capital financing and viability of

¹ Global Agenda Council on the Future of Financing & Capital. 2015. World Economic Forum: The Future of FinTech: A Paradigm Shift in Small Business Finance. <https://www.weforum.org/reports/future-fintech-paradigm-shift-small-business-finance>. 3.

² GAC 2015, 7.

³ Deloitte. 2017. Fintech by the numbers: Incumbents, startups, investors, adapt to maturing ecosystem. <https://www2.deloitte.com/tr/en/pages/financial-services/articles/fintech-by-the-numbers.html>. 3.

⁴ GAC 2015, 7.

⁵ Danny Busch, Emiliós Avgouleas, and Guido Ferrarini. 2018. Capital Markets Union in Europe. Oxford Scholarship Online. Oxford, United Kingdom. <https://www.oxfordscholarship.com/view/10.1093/oso/9780198813392.001.0001/oso-9780198813392-chapter-10>.

⁶ Wikipedia. “Alternative finance”. Accessed July 22, 2019, https://en.wikipedia.org/wiki/Alternative_finance.

crowdfunding;⁷ Legal system and regulation are also a popular topic. The classification and model of crowdfunding vary. For example, the database, Statista classifies crowdfunding into crowdfunding (equity-based crowdfunding), crowdfunding lending (lending-based crowdfunding) and crowdfunding (reward-based crowdfunding) in its market directory. In Crowddatacenter's explanation, crowdfunding exists in four primary forms: equity, lending, donation, and rewards.⁸ However, three basic rules are evident in all the classifications: equity, debt, and appreciation.⁹ In 2019, the transaction value in the equity-based crowdfunding (crowdfunding) segments approximately amounts to \$480 billion,¹⁰ and that in the debt-based crowdfunding segment (crowdlending) amounts to \$180 billion,¹¹ while in the reward-based segment, the transaction value is about \$7 billion.¹²

As an online alternative finance tool, crowdfunding is an innovation that will benefit the mass. Real-estate crowdfunding (short for RECF), referred to as the crowdfunding in the real estate vertical, enables retail investors to engage in the typical capital-intensive industry. RECF might revolute the real estate industry that is conservative and illiquid with a high barrier to enter due to capital requirement since it can solute the financing problems for less financially capable buyers, and enlarge the funding pool by increasing the investor base with a much smaller minimum investment requirement.¹³ For example, only in the Americas, RECF raised \$1.87 billion in 2017, accounting for 64% of the market volume of the regional crowdfunding and 4.2% of the regional online alternative finance.¹⁴ Even for those fundraisers with a strong capability to get financed from the traditional channels like banks or their money partners, RECF has its unique

⁷ Beaulieu Tanya, Sarker Suprateek, and Sarker Saonee. 2015. "A Conceptual Framework for Understanding Crowdfunding". Communications of the Association for Information Systems 37(1). <http://aisel.aisnet.org/cais/vol37/iss1/1>.

⁸ Accessed by July 25, 2019, <https://www.thecrowdfundingcenter.com/data/>.

⁹ Tanya 2015.

¹⁰ Statista. "Crowdfunding (Worldwide)". Statista. Accessed by July 22, 2019, <https://www.statista.com/outlook/377/100/crowdfunding/worldwide>.

¹¹ Statista. "Crowdlending (Worldwide)". Statista. Accessed by July 22, 2019, <https://www.statista.com/outlook/334/100/crowdlending--business-/worldwide>.

¹² Statista. "Crowdfunding (Worldwide)". Statista. Accessed by July 22, 2019, <https://www.statista.com/outlook/335/100/crowdfunding/worldwide>.

¹³ Baum Andrew. 2017. PropTech 3.0: the future of real estate. Oxford, United Kingdom. <http://eureka.sbs.ox.ac.uk/6485/>

¹⁴ Cambridge Centre for Alternative Finance. Reaching new heights: The 3rd Americas Alternative Finance Industry Report, 2018. <https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/reaching-new-heights/#.XTYryKH25jw>. 26.

advantages regard its convenience and speed. As RECF has been accepted more widely in developed countries, various RECF models have emerged and further increase the level of public participation.

As one of the largest economies in the world, China entered the crowdfunding industry late in 2013 but has become the largest market in the field quickly in terms of the transaction volume in all the segments of crowdfunding (\$1.021 billion in the equity-based segment; \$163.965 billion in the debt-based segment; \$5.576 billion in the reward-based segment).¹⁵ The arm of real estate in the Chinese crowdfunding, RECF, has flourished in the following year: the market volume reached \$590 million (3.2) in 2017 with a high potential to keep the prosperity. However, the RECF in China with the significant market volume is a slow walker from many perspectives considering its blurred regulatory environment, the high death rate of platforms, few players after 2015, and low diversification of assets. There are not many pieces of research on the RECF in China, while only a few studies about regulations, structure models and status-quo are not updated enough to understand the present status of the industry. For instance, most typical RECF platforms that ever flourished in 2015 were shut down before 2019, and there is no exception for any platform on the “TOP 10 Chinese RECF platforms” list.¹⁶ It is necessary to examine the industry to interpret the RECF in China, the problems and challenges as well as future possibilities.

1.2 Purpose and Research Questions

The study was to understand the present state of the RECF industry in China, explore the possible problems and challenges, and evaluate its future theoretically, hopefully contributing to the development of the China RECF.

In order to conduct the study more logically, the research will try to answer the following four questions throughout the thesis:

¹⁵ Statista, Crowdfunding/Crowdlending/Crowdfunding.

¹⁶ “TOP 10 Chinese RECF platforms”. Accessed by July 25, 2019, Touzi.com. <https://www.touzi.com/news/46560.html>.

Question 1: What is the current state of the RECF in China in terms of history, market size, structure model, and players?

Question 2: What are the successful cases in terms of platforms, and what are the factors that affect them?

Question 3: What are the main challenges and risks of RECF in China?

Question 4: Are there potentials or opportunities to develop RECF in China? What are the underlying drivers, and what might be the future?

The first question is aimed to shed light on the overall image of the RECF in China and identify its attributes compared to the RECF in other regions such as the US or UK. As to the second question, the two platforms with different business strategies and operation models used as the case studies will be helpful to interpret the RECF in China in a direct and detailed way. The answer to the third question explains farther the challenges and underlying reasons that probably lead to the present state and impede the development of the RECF in China. For the last question, the study attempts to know the opportunities or potentials in the RECF in China based on the analysis of drivers such as demand and supply, experience in other regions and academic research, while predicting the expectation and growth of the RECF in China.

1.3 Data, Delimitations and Methodology

1.3.1 Data and Information

The data came from the Online research, academic literature review, and institutional reports. RECF is an essential part of real estate FinTech and online alternative finance, and there are various data and information about crowdfunding markets and RECF platforms.

Websites such as CB Insights and Statista have statistics across the worldwide crowdfunding industry. Some academic institutions establish their online alternative finance, FinTech labs or

research centers such as Judge Business School in the University of Cambridge. Consulting firms like Deloitte have their research arm on FinTech or real estate FinTech. There are also associations or affiliations of crowdfunding or RECF in some countries established by governments or leading companies. These organizations launch periodic global or regional reports about data or statistic on RECF. The database of startups such as Crunchbase, Angellist, and Venture Scanner has detailed information about RECF from a corporate perspective: launched time, funding type, and capital source are listed. The attributes of the specific RECF platforms mainly come from their official websites and some online tools that can introduce RECF platforms or allow investors to compare different RECF platforms such as Investorjunkie and Valuechampion. Though China does not have a specific database for ECF, zhouchouzhijia.com reports the general status of China crowdfunding monthly from 2016, and Yingcan Consulting launched annual China crowdfunding reports from 2015 to 2017.

The territory of the study focuses on China, while the “other” regions used to compare with China refer to the US, UK, Europe, and some areas in Asia. The period for the research primarily starts from 2014 to 2019.

1.3.2 Methodology

The research methods for this study are qualitative containing literature reviews, the data analysis, case study, and comparison. The academic literature is used to set up a theoretical framework of the global RECF systematically, including definition, classification, model, benefit, and risk. This initial overview is beneficial for getting a better understanding of the RECF in China. All the data and information collected from the other sources mentioned in 1.3.1 are analyzed both to complete the framework further and to answer the questions in 1.2. The case studies will be used to explain the present state of the RECF in China, problems and the drivers that influence the success of the platforms and campaigns, and the risks from the RECF platforms perspective. The research compares the RECF in China with that in other regions to comprehend the characteristics of the former one, and also to obtain experience helpful to the future development of the RECF in China.

CHAPTER 2: OVERVIEW OF RECF

2.1 Introduction of FinTech and Real Estate FinTech

2.1.1 Definition and Classification of FinTech

Broadly, FinTech (financial technology) can describe any finance service through technology not limited to the internet, mobile devices, software, cloud service, and blockchain. The 2015 World Economic Forum report defined FinTech as “the use of technology and innovative business models in financial services.” (1.1) A more academic definition might be “a new financial industry that applies technology to improve financial activities,” including new application, products, business models and processes.¹⁷ However, the lines of the terms are blurring: the term itself can refer to startups, technology companies, or legacy providers.¹⁸ As its definition, there is no authoritative classification or categorization of FinTech. CB Insights suggests the classification system in its Global FinTech Report Q1 2019 as Table 1:

Table 1: Classification of FinTech

Category	Explanation	Example
Lending Tech	<i>Marketplace lending & alternative underwriting platforms</i>	SALT Lending: the first crypto lending platform for Bitcoin, Ethereum, Litecoin, Dogecoin & DASH cash loans
Blockchain/Crypto	<i>Companies leveraging blockchain technologies for financial services</i>	Coinbase: a digital currency exchange
Regtech	<i>Audit, risk, and regulatory compliance software</i>	BEAM: API-based platform conducts transaction monitoring with the data
Personal Finance	<i>Tools to manage bills and track personal and/or credit accounts</i>	Credit Karma: free credit scores, reports and insights

¹⁷ Schueffel, Patrick. 2017. "Taming the Beast: A Scientific Definition of Fintech". Journal of Innovation Management 4 (4): 32–54. ISSN 2183-0606.

¹⁸ Pwc. 2016. Q&A: What is FinTech? <https://www.pwc.com/us/en/industries/financial-services/library/qa-what-is-fintech.html>.

Payments/ Billing	<i>Payments processing, card developers, & subscription billing software tools</i>	Fiserv: <i>card-based solutions for banks and non-bank issuers</i>
Insurance	<i>Companies selling insurance digitally or providing data analytics and software for (re)insurers</i>	Clover: <i>Tech-enabled health insurance carrier</i>
Capital Markets	<i>Sales & trading, analysis, and infrastructure tools for financial institutions</i>	Carta: <i>financial management startup</i>
Wealth Management	<i>Investment and wealth management platforms and analytics tools</i>	Raisin: <i>wealth management marketplace</i>
Money Transfer/ Remittances	<i>International money transfer and tracking software</i>	WorldRemit: <i>an online money transfer service</i>
Mortgage/Real Estate	<i>Mortgage lending, digitization, and financing platforms</i>	Fundrise: <i>real estate crowdfunding funding platform</i>

(Sources: CB Insights. 2019. Global FinTech Report Q1 2019. <https://www.cbinsights.com/research/report/FinTech-trends-q1-2019/>)

2.1.2 Definition, Market size, and Classification of Real Estate FinTech

Most or all of the FinTech mentioned above is relevant to the real estate industry, and some of them can be applied to the real estate field. From this perspective, the FinTech mainly focusing on the real estate sector can be referred to as “real estate FinTech” (RE FinTech for short), as one of the subsets in FinTech. RE FinTech provides solutions such as transaction services, lending platforms for construction, and online investment.¹⁹ According to PropTech 3.0, the definition for RE FinTech is technology-based platforms which facilitate the trading of real estate asset (property, shares or funds, equity or debt) ownership.²⁰ From 2008 to 2017, the number of RE FinTech startups soared from 246 to 1372, increasing 18% globally; The investment increased from \$2.2 billion to \$31.3 billion (see more numerical details in Figure 1).²¹ In the list of 2019

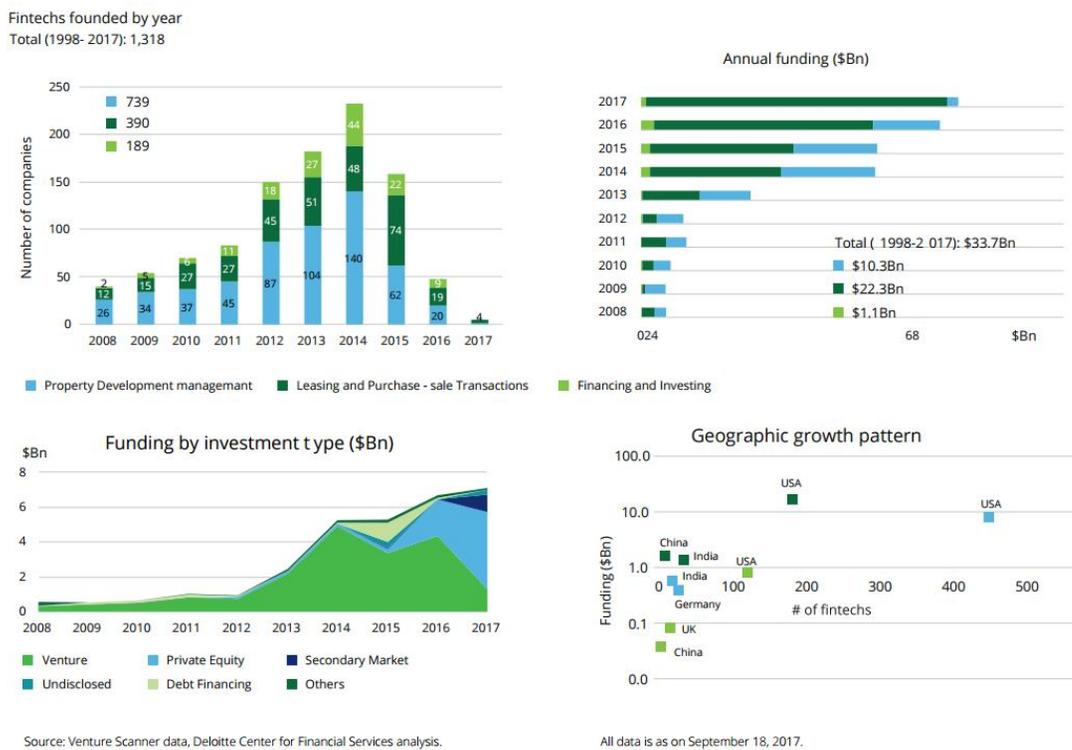
¹⁹ Deloitte. 2018. 2018 Real Estate Outlook: Why should companies focus on Real Estate fintech startups? <https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Real%20Estate/deloitte-au-dre-companies-focus-real-estate-fintech-start-ups-220218.pdf>.

²⁰ Andrew 2017. 8.

²¹ Deloitte 2018. 2018 Real Estate Outlook.

FinTech 50, there are six from real estate sector (6 out of 50), including lending platform Blend and Lendinghome, crowdfunding platform Fundrise, investment platform Cadre, Home-selling platform Opendoor and Roofstock.²² The reason for RE FinTech’s prosperity partly lies in that it provides solutions to enhance liquidity and reduce the ineffectiveness of trading in the real estate market, benefiting both individual and institutional investors. The classification of RE FinTech is not uncontroversial as well, but mainly include real estate transaction platforms (leasing and letting), digital lending platforms (debt and mortgage platforms), crowdfunding platforms and investment and portfolio management platforms or tools.

Figure 1: RE FinTechs by the Number



(Sources: Deloitte. 2018. 2018 Real Estate Outlook: Why should companies focus on Real Estate FinTech startups?)

²² Forbes. 2019. "The List: 2019 FinTech 50". Accessed by July 25, 2019, <https://www.forbes.com/fintech/2019/#335512942b4c>.

2.2 Theoretical framework of RECF

2.2.1 Definition

RECF is a subcategory of RE FinTech. In the Oxford Dictionary, crowdfunding is “the practice of funding a project or venture by raising many small amounts of money from a large number of people, typically via the Internet.”²³ Crowdfunding has a long history and was used for book publications in the past, and it becomes popular in art and music industry on the Internet. The ArtistShare (the first crowdfunding website for music) was the first company which operated the business model. Then more crowdfunding sites emerge as the business model gets recognized by the public such as Kiva, IndieGoGo, Kickstarter, GoFundMe, Microventures, and YouCaring.²⁴ Today, the number of crowdfunding websites is more than 600.²⁵ Kickstarter, a crowdfunding platform for creative projects or products such as movies, music, and art, has raised about \$44.4 billion for 167,148 projects.²⁶ RECF, crowdfunding in the real estate vertical, connects fundraisers and funders, creating a pool of capital for deals or projects in the real estate industry. The first RECF platform emerged in 2010,²⁷ and similar players have entered the industry since then. Just in the US, there are more than 100 RECF platforms.²⁸

2.2.2 Model

There are several types of classification of crowdfunding, while Equity, debt, and appreciation are widely accepted:

- Equity: the investors gain shares of a company or a project in exchange for money.
- Debt: the investors gain the principal with interest at the end of the investment.
- Appreciation: investors give capital to the startups to support the companies or projects without requirements for repayment or equity shares.

²³ Lexico. Accessed by July 25, 2019, <https://www.lexico.com/en/definition/crowdfunding>.

²⁴ Wikipedia. “Crowdfunding”. Accessed by July 25, 2019, <https://en.wikipedia.org/wiki/Crowdfunding>.

²⁵ Lysette Sandoval. “Crowdfunding trends for 2019”. Accessed by July 25, 2019, <https://www.thrinacia.com/blog/post/crowdfunding-trends-for-2019>.

²⁶ Kickstarter. Accessed by July 25, 2019, <https://www.kickstarter.com/about?ref=global-footer>

²⁷ Dr. Brenna O’Roarty. 2016. Real Estate Crowdfunding: Gimmick or Game Changer? <https://www.ipf.org.uk/resourceLibrary/real-estate-crowdfunding-gimmick-or-game-changer-november-2016-report.html>. 12.

²⁸ Financial Samurai. “Real Estate Crowdfunding Trends for 2019”. Accessed by July 25, 2019, <https://www.financialsamurai.com/real-estate-crowdfunding-trends-for-2018/>.

Based on the basic three models, more subcategories were created considering the exchange, shown in Table 2. To clarify, P2P was excluded from the scope of crowdfunding because it is an individual class in many pieces of literature, reports, and database such as the series of Alternative Finance Industry Report launched by the University of Cambridge; Besides, crowdfunding for investment is the main target for discussion. In the real estate vertical, equity-based crowdfunding and debt-based crowdfunding are two popular categories. Lead-generation explained in this chapter, is not uncommon in some countries with stringent restrictions on RECF. In this study (Chapter 3, 4, 5), the equity-based RECF in China refers to the private equity model, not including revenue-based RECF because most of the Chinese regulations, and policies, as well as RECF platforms, view revenue-based crowdfunding (RBC) as a single class.

Table 2: Summary of Crowdfunding Models

Exchange	Model	Explanation	Level of Risk
Equity	Private Equity	The fundraiser exchanges shares or part of ownership; The investors will gain future dividends and shares of the company or project. The funding goals are high, and the contributions from investors are large relative to other crowdfunding models	High risk because of unlimited gain and loss
	Royalty/Revenue	The fundraiser shares the profits from the company or project with the investors; Investors invest for a percentage of ongoing gross revenues and expect the loan to be repaid within 3 to 5 years of the initial investment	High risk (lower than private equity but higher than debt) due to the lower return rate than that of private equity and potential loss of investment
Debt	Business Lending	The fundraiser, always SMEs, get capital from single or multiple, private and institutional investors; The investors get principal and interest	Medium risk (lower than equity because debt holders are senior to equity provided bankruptcy)
	Peer-to-Peer	Fundraiser uses the marketplace to place requests for personal or small business loans; Investors receive their principal with interest in exchange for their contribution	
Appreciation	Reward	The fundraiser raises capital for a conceptual idea of a project or ongoing business; The investors usually get a copy of the product or a memento from the project as a reward	Low risk (primary fulfillment and fraud risk) No real risk for financial return

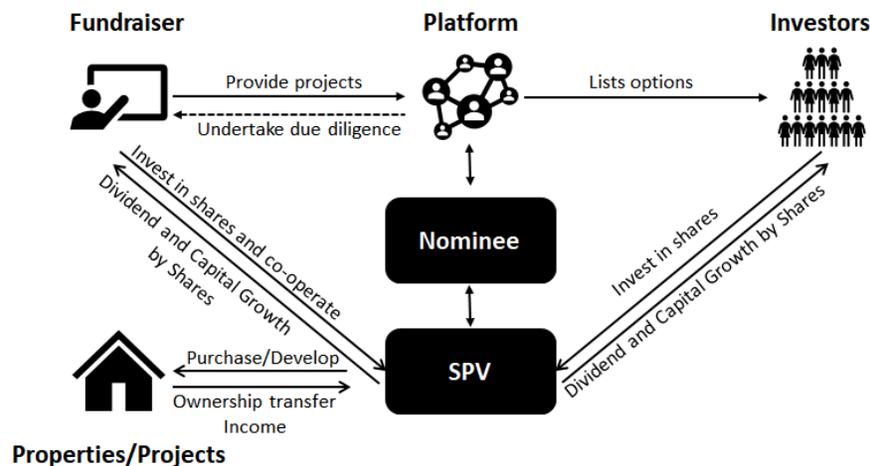
	Donation	The fundraiser uses donation-based crowdfunding generally for the social good; The investors will not obtain any incentive or profits other than appreciation	No risk (primary fulfillment and fraud risk) No security interest, so it is difficult to raise a large amount of capital
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(Sources: Tanya, 2015; The World Bank. *Crowdfunding's Potential for the Developing World*. 2013.)

Equity-based Model

Typically, it is more difficult for fundraisers to raise equity than debt because equity is riskier than debt (Table 2), and it will take more time to raise equity.²⁹ In an equity-based model (see the basic structure in Figure 2), individuals inject capital into a project in the form of equity or shares, pretty like buying stocks in the stock market. The model requires a particular purpose vehicle (SPV) such as a limited company for an investment pool, while the platform will manage the SPV.

Figure 2: Basic Equity-based Model of RECF



(Sources: developed by the author. Refer to O’Roarty 2016)

Syndicate or Co-investment crowdfunding model, a particular type in the equity-based model of RECF, is a structure gathering a group of investors to invest in a property. Then each investor owns a portion of a property and shares revenues as well as capital appreciation. This model

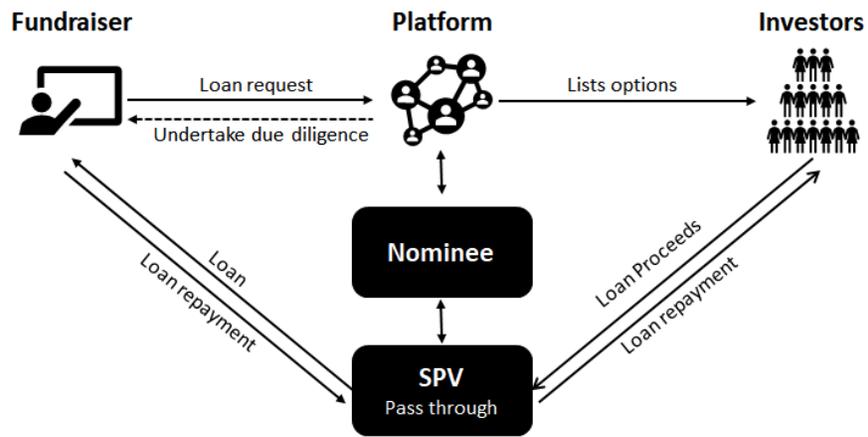
²⁹ Andrew 2017. 59.

allows retail investors to co-invest with ventures on platforms such as angelsden.com and syndicate.com.

Debt-based Model

RE debt-based crowdfunding is an alternative way to finance a project. For example, since construction loans usually have short terms, and not all the projects can obtain permanent loans, the needs to bridge loans for developments are not uncommon.

Figure 3: Basic Debt-based Model of RECF



(Sources: developed by the author. Refer to O’Roarty 2016.)

In a debt-based crowdfunding model (see the basic structure in Figure 3), a certain amount of debt is put on the platform and will be paid over a fixed period. RE debt-based crowdfunding has discretionary and semi-discretionary models: in discretionary models, investors could select loans based on their criterions; Semi-discretionary models will allocate a diversified portfolio of loans to investors based on their risk settings.³⁰ The platforms usually act as operational managers who are similar to their roles in equity fundraising. Since there is a time lag between an investment list and completion, pre-funding models are prevalent in most platforms, allowing real estate developers to get financing in days instead of than weeks or months.³¹

³⁰ O’Roarty 2016. 23.

³¹ O’Roarty 2016. 24.

Lead Generation

In countries where RECF is constrained, lead generation is a solution or a particular way of crowdfunding. Platforms list investment opportunities and attract potential investors, and they help developers to get access to investors and charge fees as an agent instead of collecting capital for these projects.

Either in the equity-based or debt-based model, the capital raised from the RECF platforms is often put in the banks that incorporate with the platforms instead of on the platforms themselves for capital security. When a campaign succeeds, the funding will be used for SPV to execute the project or development. If the campaign cannot raise enough capital during the allotted amount of time, the funding will return to investors.

2.2.3 Benefits

Crowdfunding, as well as RECF, is a supplement in the capital market. RECF platforms offer a myriad of unique advantages for both investors and fundraisers:

For investors, real property and PE (private equity) require a large amount of capital and high transaction cost as well as operating expenses. The high entry barrier excludes most non-institutional investors. A traditional private-equity fund requires a minimum of \$250,000 for an investor and an annual fee of 2% of capital as well as a 20% promotion fee when a hurdle rate is achieved³². As to products in the public market such as REITs, they do not provide investors with enough information of an individual property or project and do not endow them with the control power. Debt assets, like bond or MBS, are not flexible in term of investment horizon or have a high capital requirement.

³² James Garrett Baldwin. 2019. "How to Invest in Private Equity Real Estate". Accessed by July 25, 2019. <https://www.investopedia.com/articles/investing/093015/how-invest-private-equity-real-estate.asp>.

Conversely, RECF lowers the requirement for minimum investment because thousands of potential investors can view the offerings. Although the management fee varies on the RECF platforms, most platforms charge investors no more than 2% of their investment, and some of them charge fundraisers other than investors (see Appendix A). Also, investors can compare individual investment options in the various form on the platforms, and create their diversified real estate portfolios across types, locations, investment terms, return, and track record. The platforms, instead of agents, distribute all the investment opportunities, leading to a low transaction fee. For instance, Fundrise, one of the largest RECF platform for both accredited and unaccredited users in the US, allows \$500 as a minimum entry level for its starter portfolio, and the platform portfolios with redemption plans have 8.7 to 12.4% historical return rates on average.³³

For developers or general partners, their funding resource primarily comes from lending institutions such as banks and limited partners such as pension fund, insurance fund, or sovereign wealth fund. The process to gain their investment can be quite time-consuming, and fundraisers are subject to strict restrictions on the deal structure, and high legal and transaction fee. RECF increases the investors base for these fundraisers and gives investors freedom on time with the internet access, thus enabling fundraisers to gain capital faster, easier, and more cheaply than raising capital through traditional financial vehicles. Fundrise has invested over 500,000 members, a phenomenal investor base. The crowdfunding industry market research and data analysis company HiveWire and e-commerce website-building platform Shopify analyzed the 400,000 completed crowdfunding campaigns on Kickstarter and Indiegogo, two leading platforms in 2014 and found that the average length of the campaign was 35 days.³⁴

2.2.4 Risks and Uncertainties

Like any investment, RECF has risks that refer to the “known unknowns,” “the understood

³³ Accessed by July 10, 2019, <https://fundrise.com/>.

³⁴ Catherine Clifford. 2014. “Everything You Need for a Winning Crowdfunding Campaign (Infographic)”. Accessed by July 25, 2019, <https://www.entrepreneur.com/article/236974>.

possibility of the future turning out to be different from one's prior expectations."³⁵ The risks include business failure and execution challenges; Business failure might come from improper management decisions or wrong estimations of market demand,³⁶ while the insufficient industry expertise probably leads to execution challenges. However, as a newborn in the FinTech or online alternative finance, RECF also comes with uncertainties that refer to "unknown unknowns," also meaning the unknown possibilities of future outcomes.³⁷ The uncertainties are more complicated than risks regard that it is not understood and thus cannot be quantified. The uncertainties might be caused by technologies, massive investors, regulations, and other unpredictable reasons. Here are some specific risks and uncertainties of RECF as follows:

Regulation

After the JOBS ACT (Jumpstart Our Business Startups Act), crowdfunding is legal in the US, and small businesses have been allowed to raise funding from a pool of small investors. However, the regulations, laws, and policies globally are not mature enough to establish a crowdfunding market as rigorous as the stock market. In the UK, the FSMA (Financial Services Markets Act of 2000) has not contemplated crowdfunding though it contains some regulations that can be used to crowdfunding loosely.³⁸ Throughout much of the European Union, the crowdfunding laws and regulations have been unclear, and equity crowdfunding has been conducted without explicit regulatory approval or disapproval.³⁹ In China, the government is struggling to create regulations and policies about the online finance industry, including crowdfunding, but there is no specific legislative one for crowdfunding.⁴⁰ An unsound legal environment leads to a high risk of fraud or failure because crowdfunding becomes an easy way to scam or execute low-quality projects.⁴¹

³⁵ David M. Geltner, Norman G. Miller, Jim Clayton and Piet Eichholtz. 2014. *Commercial Real Estate Analysis and Investments*, Third Edition. Mason, OH : On Course Learning, c2014. 218

³⁶ The World Bank. 2013. *Crowdfunding's Potential for the Developing World*. Finance and Private Sector Development Department. Washington, DC: World Bank.

<http://documents.worldbank.org/curated/en/409841468327411701/Crowdfundings-potential-for-the-developing-world>. 10.

³⁷ Geltner 2014. 218.

³⁸ Ross S. Weinstein. 2013. "Crowdfunding in the U.S. and Abroad: What to Expect When You're Expecting". *Cornell International Law Journal* 46(2). 438.

³⁹ Weinstein 2013. 447.

⁴⁰ Matija Blace and Anita Grubisic. 2017. "Crowdfunding in China – Development Perspectives". 19th International Scientific Conference on Economic and Social Development (Book of Proceedings). 193.

⁴¹ Samantha Goins. 2014. *Real Estate Crowdfunding: Alternative Finance Sector Report*. www.intelligent-partnership.com.

Return

There is not a straight answer for the average annual return rate of the RECF platforms. The case study written by Joseph Hogue indicates that average RECF returns are between 11% and 15%, but the real benefit is in diversification.⁴²

According to the real estate crowdfunding: Alternative Finance Sector Report: The forecast returns rate of equity investments returns range from 7% to 33% per year, with an average of 18% per year. The return rate seems higher than the S&P average return rate (9.89%) from 2010 to 2018 after the financial crisis 2008,⁴³ and that of FTSE Nareit All REITs (11.34%) in the same period.⁴⁴ In the report, debt investments have fixed return rate between 7% and 19% per year, with an average of 14.25%, while the prevailing interest rate of the construction loan from a US bank ranges from 5.5 to 6%.⁴⁵ Roughly, the return of equity investments in the RECF platform has an approximate 800bp risk premium to that of S&P index return and 600bp risk premium for that of FTSE Nareit All REITs. The return of debt investments also has an 800bp risk premium to that of the construction loan.

The risk premiums reflect the risk and uncertainty level of RECF. In general, equity-based investment has a higher expected return than debt-based investment (Table 2), and the expected return on small platforms is higher than that on large platforms probably due to their low credit quality and inexperienced management. However, the attractive high return rates easily make investors ignore the underlying risks, while the insufficient education on crowdfunding for public might raise blind passion for the new investment vehicle with a brunch of uncertainties.

⁴² Joseph Hogue. 2018. "How High are Real Estate Crowdfunding Returns [Case Study]". Accessed by <https://mystockmarketbasics.com/average-real-estate-crowdfunding-returns/>.

⁴³ "Compound Annual Growth Rate (Annualized Return)". Accessed by July 25, 2019, http://www.moneychimp.com/features/market_cagr.htm.

⁴⁴ "Nareit Annual Returns by Investment Sector: 1972-2018". Accessed by July 25, 2019, <https://www.reit.com/data-research/reit-indexes/annual-index-values-returns>

⁴⁵ ValuePenguin. "Average Commercial Real Estate Loan Rates for 2019". Accessed by July 25, 2019, <https://www.valuepenguin.com/average-commercial-real-estate-loan-rates>.

Default Loss

For small investors, it can be challenging to afford the default loss of projects on the platforms. Most RECF platforms do not disclose their default rate and loss of default like PE firms. Though some platforms protect investors using their provision fund when defaults happen, many platforms do not provide any protection in an environment without enough regulations. Investors of debt-based crowdfunding might get part of recovery after the sales of the backed properties, but the recovery rate is subject to the real estate market and the quality of the assets, hard to estimate whether the initial investment can be recouped. The equity-based crowdfunding investors will suffer more than the debt-based crowdfunding investors since when there are no backed assets. In 2017, the default rate of the global CMBS sector was 3.3%, and the European CMBS had the highest default rate (10.9%).⁴⁶ In the US, the cumulative lifetime default probability is near 16%.⁴⁷ Although the default probability of the RECF investment is difficult to estimate because few platforms disclose the information, the default rates of CMBS can be a reference.

Additionally, investors lack a relationship with their sponsors and cannot help sponsors deal with the events which cause defaults: in a traditional PE partnership, GPs (General Partners) have a strong incentive to maintain a long-term relationship with their LPs (Limited Partners) and their public praise for raising funding for the next projects.⁴⁸ However, in the partnerships within the crowdfunding platforms, GPs do not know with their investors and are likely to make decisions which hurt their LPs in real estate projects. On the other side, these LPs with different standpoints, investment horizons, the proportion of equity shares, and without necessary expertise and connection in the industry are probably not helpful to GPs in trouble.⁴⁹ It is difficult for such a bunch of investors to agree on whether to increase the investment when the budget is insufficient.

⁴⁶ S&P Global Rating. 2018. Default, Transition, and Recovery: 2017 Annual Global Structured Finance Default Study and Rating Transitions. www.spglobal.com/ratingsdirect. 4.

⁴⁷ Geltner 2014. 435.

⁴⁸ John H. Vogel Jr. and Benjamin S. Moll. 2014. "Crowdfunding for Real Estate". *The Real Estate Finance Journal* (Summer/Fall 2014). 10.

⁴⁹ Vogel 2014. 10.

Liquidity

Real estate investment for private properties is always known for its weak liquidity, a distinct disadvantage owing to lack of a secondary market. In this case, liquidity is finally subject to the rules of the specific RECF platform. The investors who invest in eREITs of Fundrise attain periodic liquidity through the quarterly redemption plan, but it is not practical every time since distributions are not guaranteed. Investors will suffer from worse liquidity if default events happen.

2.3 Global RECF Market Introduction (Excluding China)

2.3.1 Overview by Markets

The United States

In 2010, RECF as a community funding-based concept came up in Washington DC;⁵⁰ From 2013 to 2015, the industry boost rapidly, and over 100 platforms including Fundrise, Realty Mogul, iFunding, Realty Shares, and Patch of Land. The market volume of the RECF in the US increased by 95% annually, from \$130 million in 2014 to \$ 1.85 billion in 2017.⁵¹ It seems that the RECF platforms in the US are not interested in international expansion.⁵² The US has a relatively clear regulation system for crowdfunding. In April 2012, President Barack Obama issued the JOBS Act into law to make small business raise funding easier, welcomed by many technologies and startup communities. Title III (known as the CROWDFUND Act) allows companies to issue securities by crowdfunding. Under the regulation, companies can raise maximal to \$1 million in a year, while securities for certain types of small offerings are exempt from registration with SEC (certain disclosures must be filed with SEC); Investors might invest, tiered by their net worth or yearly income. Based on Title III, the amount invested by an investor does not exceed “(i) the greater of \$2,000 or 5% of the annual income or net worth of such investor, as applicable, if either the annual income or the net worth of the investor is less than \$100,000; (ii) 10% of the annual income or net worth of such investor, as applicable, not to exceed a maximum aggregate amount

⁵⁰ O’Roarty 2016. 12.

⁵¹ O’Roarty 2016. 14.

⁵² Cambridge Centre for Alternative Finance 2018. The 3rd Americas Alternative Finance Industry Report. 42.

sold of \$100,000, if either the annual income or net worth of the investor is equal to or more than \$100,000".⁵³ The final rules of Title III were adopted by the SEC in October 2015 and went into effect in May 2016.⁵⁴ Though the CROWDFUNDING Act has been not uncontroversial due to reasons such as \$1 million cap, Title III creates a solid legislative base for crowdfunding in the US.

The United Kingdom

Compared to the US and China, the UK crowdfunding is small regard market volume. In 2019, the transaction volumes for equity-based crowdfunding, debt-based crowdfunding, and reward-based crowdfunding are respectively \$718.6 million, \$2,441 million and \$88 million,⁵⁵ ranked after the US and China. However, RECF plays a crucial role in the UK crowdfunding industry. In 2017, the UK RECF amounted to £211 million (\$270 million) increasing by more than 200%.⁵⁶ The RECF platforms in the UK seem to have a high level of globalization: in the survey conducted by the Cambridge Centre for Alternative Finance in 2017, 29% of UK RECF platforms preferred to have a global brand, and 14% of their market volume is related with cross-border inflow and 12% with cross-border outflows.⁵⁷ In the UK, the FCA (Financial Conduct Authority) regulates the crowdfunding industry, RECF included;⁵⁸ The regulation was introduced in 2014 and has kept updating according to the post-implementation review.⁵⁹ The demand for bridging finance, housing shortage, and the growth of the private rented sector has triggered RECF platforms such as LendInvest with a debt-based model and PropertyPartner (see Appendix A) with an equity-based model.⁶⁰

⁵³ 112th Congress. 2012. Jumpstart Our Business Startups Act, Public Law 112-106.

⁵⁴ U.S. Securities and Exchange Commission. 2015. "SEC Adopts Rules to Permit Crowdfunding". Accessed by July 25, 2019, <https://www.sec.gov/news/pressrelease/2015-249.html>.

⁵⁵ Statista, Crowdfunding/Crowdlending/Crowdfunding.

⁵⁶ Cambridge Centre for Alternative Finance. 2018. The 5th UK Alternative Finance Industry Report.

<https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/5th-uk-alternative-finance-industry-report/#.XTqwrKH25jx>. 7.

⁵⁷ Cambridge Centre for Alternative Finance 2018. The 5th UK Alternative Finance Industry Report. 9-26.

⁵⁸ FCA. 2016. Crowdfunding. Accessed by July 25, 2019, <https://www.fca.org.uk/consumers/crowdfunding>.

⁵⁹ O'Roarty 2016. 18.

⁶⁰ O'Roarty 2016. 20.

Europe

In 2017, the market volume of alternative finance in Europe was EUR 3.369 billion (\$3.8 billion), and crowdfunding accounted for 20%. In the subfield of the crowdfunding industry, the market volume of the RECF in Europe was EUR 259 million (\$ 293 million), with an 8% percentage of the total alternative finance and 38% of the crowdfunding. The role of the RECF might be underestimated as some Equity-based Crowdfunding platforms do not distinguish between RECF campaigns and Equity-based Crowdfunding campaigns on their platforms.⁶¹ Germany (EUR 127 million), France (EUR 67 million) and Sweden (EUR 48 million) were the leaders in the industry. The representative platforms include EstateGuru, Exporo, Zinsbaustein, and Housers.

2.3.2 Players

The study tries to look at one or two of the successful RECF platforms in the main financial markets such as the US, UK, Europe, and Singapore(as a representative in the rest of Asia) in order to understand the players and their current operations in the global market.

There are three criterions for the selected platforms: location, the amount of the raised fund, and the number of members or investors. The latter two standards represent the platforms' influence in their respective regions to some degree. To clarify, it is possible that the term "member" on some platforms is not the same as the term "investor" on other platforms. However, they are assumed not different in the study since there is no exact explanation.

Table 3 includes the information of six selected platforms. The study also collected the launched date, platform models, the minimum investment amount, and the average annual return. Appendix A summarizes farther attributes about these platforms. In terms of market size and number of members or investors, the leading platforms Fundrise and Realty Mogul in the US are far more significant than those in other regions.

⁶¹ Cambridge Centre for Alternative Finance. 2019. Shifting Paradigms: The 4th European Alternative Finance Benchmarking Report. <https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/shifting-paradigms/#.XTqxlKH25jw>. 32.

Table 3: Selected RECF Platforms in the Global Markets

Name	Location	Launched	Platform model	Fund Raised	Fund Invested	Member or investor	Minimum	Average Annual Return
Fundrise	US	2010	Equity Debt	\$660M	\$2.5B	500,000	\$500	8.7-12.4%
Realty Mogul	US	2013	Equity Debt	\$400M	\$2B	180,000	\$1,000	N/A
Property Partner	UK	2015	Equity Debt	N/A	€148M (\$165M)	13,000	€1,000 (\$1240)	6.5-8.5%
House Crowd	UK	2012	Equity Debt	N/A	€105M (\$117M)	25,487	€1,000 (\$1240)	9.2-10%
Estate Guru	Europe (Estonia)	2013	Debt	N/A	€127M (\$141M)	25,728	€50 (\$55)	12.1%
Investa crowd	Singapore	2015	Equity Debt	\$40M	\$450M	1,750	S\$100,000 (\$73,000) (S\$25,000 for some first-time investors)	14.53% (2018)

(Sources: the official websites of the selected platforms. Accessed by July 1, 2019. The data was self-reported.)

Similarity

Most of the platforms (5 out of 6) provide both equity-based and debt-based models, probably because this way enables them to provide more options with different risks and returns to investors. The minimum investment required depends on the specific investment offerings, but generally, most platforms start from 1000 by dollar, EUR or GBP, and EstateGuru allows smaller amount than that to attract investors who seek low minimum investment. The self-reported average annual returns vary, but large platforms such as Fundrise and Property Partners have lower average annual return rates than small platforms perhaps because small platforms are backed by less funding and trusted less by market and investors and must advertise higher return. Returns of equity investment offerings on these platforms are often higher than those of debt investment offerings since equity investment has a higher risk than debt investment. The comparison of returns is quite unlikely accurate because the platforms probably use different calculation methods, and there is not sufficient disclosure of the exact data about returns.

All the platforms will “protect” the funding of the investors by an SPV structure, which means the platforms act independently of the SPVs in an unlikely event such as bankruptcy. After the insolvency, a contractual entity will often be appointed to take over the role of the platform to serve the investments. The capital to launch these platforms came from external ventures but different in round types. There has been no listed RECF platform at current; Fundrise is the one the closest to the IPO process.

Difference

The RECF platforms differ in many ways like liquidity, the structure of investment fee, investment offerings type (i.e., investment plan, auto-invest possibility) as well as the requirement for investors. The liquidity level for each platform is different. Some platforms do not offer any liquidity before the offering ends like The House Crowd. A secondary market on the platform is helpful though there is no guarantee for buyers. Some platforms charge investors annual management fee by a certain percentage for their use of the asset management platform such as Fundrise. Some charge investors a one-off fee for each investment like Property Partners. Platforms like EstateGuru charge sponsors instead of investors based on the amount of capital raised. The structure of fee might alter as the platform's scale or model changes, or its partners request a new agreement.

Each platform has discrepancies on their offering options and locations. For example, Fundrise provides Debt, Equity, Preferred Equity but the properties on the platform are only within the US, and the investors are only qualified if they are US residents. Conversely, Realty Modul welcomes international investors, and the properties on Investacrowd spread over the world. The requirement for the accreditation of investors are different, too, and some platforms only provide offerings to accredited investors. From a profit perspective, an extensive customer base with few restrictions on investors is more beneficial for platforms, but the reality is that the regional regulations, the operation skills of the platforms or their money partners probably will limit their “expansion strategy.”

CHAPTER 3: THE PRESENT STATE

3.1 Introduction of the Crowdfunding in China

China is the world's second-largest economy,⁶² and largest economy in terms of GDP (PPP) (gross domestic product based on purchasing power parity) with a population of 1.3 billion and \$14.2 trillion as its GDP while it has been the most significant single contributor to world growth since the global financial crisis of 2008.^{63 64 65} It is the world's fastest-growing major economy with the average annual growth rate 6% over 30 years.⁶⁶ Although the growth of China's GDP has slowed down to 6.5% in 2018 which was the lowest rate since 1990 and is projected at 6.2% in 2019 by World Bank because of weaker growth in investment and exports, China's economy remains resilient⁶⁷. With the enormous scale, China is still one of the popular investment destinations for ventures and PE because its economy has one of the fastest growth rates in the world though cooling down.⁶⁸

Though having a thriving economy, China has a mismatch between its economy and the financial system: SMEs contribute 60% of the country's GDP and employ almost 65% of the labor; However, the majority of loans offered by the state-owned commercial banks flows into state-owned or state-controlled companies, making the Chinese SMEs rely heavily on non-banking financing mechanisms.⁶⁹ The financing gap faced by the SMEs has spurred various kinds of "informal" financial intermediaries, including online alternative finance sectors like P2P lending and

⁶² The World Bank. "The World Bank in China (Updated on Apr 08, 2019)". Accessed by July 25, 2019, <https://www.worldbank.org/en/country/china/overview>.

⁶³ Wikipedia. "List of countries by GDP (PPP)". Accessed by July 25, 2019, [https://en.wikipedia.org/wiki/List_of_countries_by_GDP_\(PPP\)#cite_note-2](https://en.wikipedia.org/wiki/List_of_countries_by_GDP_(PPP)#cite_note-2).

⁶⁴ International Monetary Fund. 2019. "World Economic Outlook Database, April 2019". Accessed by July 25, 2019, <https://www.imf.org/external/pubs/ft/weo/2019/01/weodata/index.aspx>.

⁶⁵ The World Bank. The World Bank in China.

⁶⁶ Nelson D. Schwartz and Rachel Abrams. 2015. "Advisers Work to Calm Fearful Investors". The New York Times. Accessed by July 25, 2019, <https://www.nytimes.com/2015/08/25/business/dealbook/advisers-work-to-calm-fearful-investors.html>.

⁶⁷ The World Bank. 2018. China Economic Update (Report No. 132900-CN). <http://pubdocs.worldbank.org/en/917591545202039807/CEU-Dec-2018-EN.pdf>.

⁶⁸ Nick Leung. 2019. "China Brief: The state of the economy". McKinsey on China. Accessed by July 25, 2019, <https://www.mckinsey.com/featured-insights/china/china-brief-the-state-of-the-economy>.

⁶⁹ Kellee S. Tsai. 2016. "When Shadow Banking Can Be Productive: Financing Small and Medium Enterprises in China". The Journal of Development Studies. DOI: 10.1080/00220388.2016.1228877.

crowdfunding.

In the meantime, many retail investors are looking for investment opportunities with flexible credit and returns above bank deposit rates.⁷⁰ The benchmark interest rate of the PBoC (People's Bank of China) is 0.35%, and that of the lump-sum time deposit for three months to three years ranges from 1.1% to 2.75%.⁷¹ China's annual inflation rate, “unchanged from the previous month's 15-month high and matching market expectations”, kept at 2.7% in June 2019.⁷² Though the “REITs” in China is expected to range from 7% to 8%,⁷³ ⁷⁴ the entry barrier is not low, while the REITs market has not developed as the regions such as the US. The first “REITs” in the public market was issued in 2015, and the investment minimum was RMB 100,000 (\$14,536).⁷⁵ However, the public REITs market has stayed in the early state.⁷⁶

Noticeably, China has a high acceptance of internet and mobile technologies so that the market is suitable for the prosperity of digitization of all industry sectors. The amount of internet users in China has reached to 829 million in March 2019, more than double that of the US which ranked at the third with 293 million, making China the country with the highest number of internet users.⁷⁷ Over 95% of internet users get access to the internet through mobile devices, and the percentage has kept increasing from 39.5% in 2008 to 98.6% in 2018.⁷⁸ The prevalence of mobile

⁷⁰ Cambridge Centre for Alternative Finance. 2016. Harnessing Potential: The Asia-Pacific Alternative Finance Benchmarking Report. <https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/harnessing-potential/#.XTuR-aH25jw>. 46.

⁷¹ People's Bank of China. “Notice of the people's bank of China on lowering the benchmark interest rates of RMB loans and deposits of financial institutions and further promoting the reform of interest rate liberalization (Yinfa NO.325, 2015)”. <http://www.pbc.gov.cn/tiaofasi/144941/3581332/3588280/index.html>.

⁷² Trading Economics. “China Inflation Rate”. Accessed by July 25, 2019, <https://tradingeconomics.com/china/inflation-cpi>.

⁷³ Although Chinese government has strived to push the issuance of real estate tax, the official regulations have not been realized yet; So, whether China has a REITs in a real sense is not uncontroversial.

⁷⁴ Huamei Real Estate. 2019. “the Return for REITs is more than 9% and expected to decline in 2019”. Accessed by July 25, 2019. http://www.sohu.com/a/291630016_120071705.

⁷⁵ Economic Information Daily. 2015. “China's first publicly offered REITs real estate trust fund is about to hit the market with a minimum threshold of 100,000 yuan”. Accessed by July 25, 2019, <http://trust.jrj.com.cn/2015/06/25074219397633.shtml>.

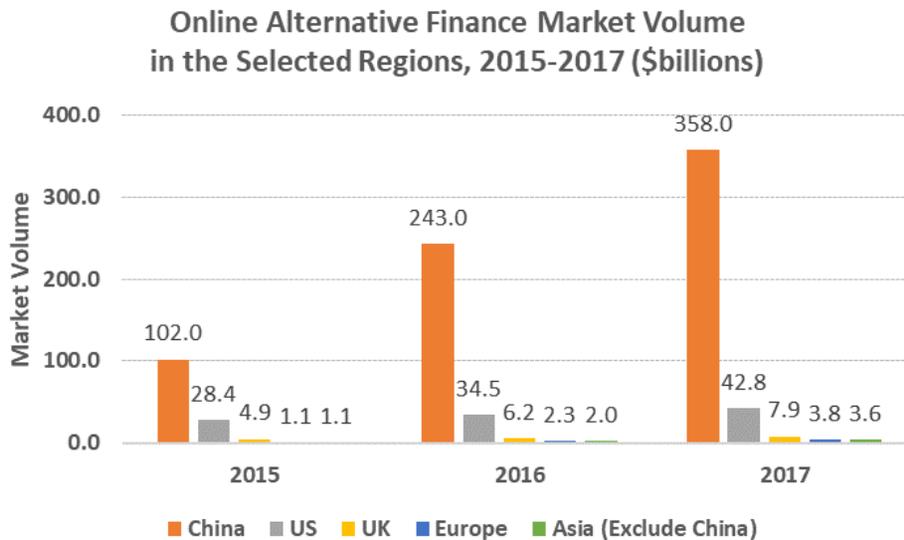
⁷⁶ Baidu Baike. “REITs”. Accessed by July 25, 2019, <https://baike.baidu.com/item/%E6%88%BF%E5%9C%B0%E4%BA%A7%E4%BF%A1%E6%89%98%E6%8A%95%E8%B5%84%E5%9F%BA%E9%87%91/7601047?fromtitle=REITs&fromid=6867013>.

⁷⁷ Statista. “Countries with the highest number of internet users as of March 2019 (in millions)”. Accessed by July 25, 2019, <https://www.statista.com/statistics/262966/number-of-internet-users-in-selected-countries/>.

⁷⁸ CIW Team. 2019. “China internet users' snapshot 2019”. China Internet Watch. Accessed by July 25, 2019, <https://www.chinainternetwatch.com/29010/china-internet-users-snapshot/>.

internet extraordinarily popularizes internet-based technologies such as mobile payment. China leads the world in the mobile payment business, and its mobile payment market size increases by 58% to RMB 467.9 trillion (\$67.8 trillion) in 2018, expected to reach at RMB 1,800 trillion in 2025.⁷⁹

Figure 4: Online Alternative Finance Market Volume in the Selected Regions, 2015-2017 (\$billions)⁸⁰



(Sources: developed by the author. Refer to Cambridge Centre for Alternative Finance, The 4th European Alternative Finance Benchmarking Report (2019); The 3rd Americas Alternative Finance Industry Report (2018); The 3rd Asia Pacific Region Alternative Finance Report (2018); The 5th UK Alternative Finance Industry Report (2018); The 3rd European Alternative Finance Industry Report (2018); Cultivating Growth: The 2nd Asia Pacific Region Alternative Finance Industry Report (2017))

These factors have contributed to the world’s biggest FinTech or online alternative finance market together in terms of market volume (See Figure 4). In 2017, the Asia Pacific accounted for

⁷⁹ Researchinchina. 2019. Global and China Mobile Payment Industry Report, 2019-2025. <http://www.researchinchina.com/>.

⁸⁰ The currency in the reference is different based on the region and is exchanged into USD to make the rough comparison easier. The source for the yearly average exchange rate includes: www.statista.com, www.forecast-chart.com.

88% of the global market.⁸¹ Mainland China with five cities in the global top ten FinTech hub,⁸² which has remained the regional leader from 2015 and accounted for over 99% of the total regional market volume. Most of the online alternative finance models in China have expanded incredibly quickly, including crowdfunding (1.1). In 2013, The World Bank Claimed that the highest potential for crowdfunding in the developing countries lied in China, where the market volume could be over \$50 billion in 2025.⁸³

Crowdfunding in China started in 2012 and exploded in 2014,⁸⁴ but the first crowdfunding platform, Demohour, opened in 2011. Demohour specialized in art and technology products and received 7,000 project proposals and raised more than 2,000 projects after two years' operation.⁸⁵ The most successful campaigns on Demohour came from movie animations: Big Fish and Begonia (2013) raised RMB 1.58 million (\$0.26 million) from 3996 backers and got box office over RMB 500 million (\$81 million).⁸⁶ With the success of Demohour, large corporations participated in the game and started their crowdfunding platforms. In December 2013, Alibaba launched Yelebao for film crowdfunding on its Taobao platform. JD.com, one of the largest e-commerce online platforms, launched Coufenzi in July 2014 and JD Equity Crowdfunding in 2015. Baidu Crowdfunding and Tencent Succor launched in 2016 indicated that another Chinese IT giants engaged in the crowdfunding market. In July 2016, 91 Jinrong acquired the Demohour. The number of crowdfunding platforms in operation increased from 29 in 2013 to 427 in 2016, with a CAGR 96%, and the amount of raised fund rose from RMB 335 million (\$54 million) before 2014 to 225 billion (\$50 billion) in 2016, with a CAGR 775%.⁸⁷

⁸¹Technavio Research. 2018. "Global Alternative Finance Market 2018-2022". Accessed by July 25, 2019, <https://www.businesswire.com/news/home/20181025005796/en/Global-Alternative-Finance-Market-2018-2022-APAC-Dominates>.

⁸² Cambridge Centre for Alternative Finance. 2019. The Future of Finance is Emerging: New Hubs, New Landscapes Global FinTech Hub Report. <https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/2018-global-fintech-hub-report/#.XTtsA6H25jw>. 9.

⁸³ The World Bank 2013. Crowdfunding's Potential for the Developing World. 42.

⁸⁴ Duoqi Xu and Mingyu Ge. 2017. "Equity-based crowdfunding in China: beginning with the first crowdfunding financing case". Asian Journal of Law and Society 4(1). 81-107.

⁸⁵ Zaiyu Huang, Candy Lim Chiu, Sha Mo and Rob Marjerison. 2018. "The nature of crowdfunding in China: initial evidence". Asia Pacific Journal of Innovation and Entrepreneurship 12(3). 300-322.

⁸⁶ Xu Fan. 2016. "'Big Fish and Begonia' is a dream project". China Daily. Accessed by July 25, 2019, http://www.chinadaily.com.cn/culture/2016-07/21/content_26165280.htm.

⁸⁷ Yingcan Consulting. 2018. Crowdfunding Industry Annual Report 2017. www.yingcancanxun.com

However, the problems accompanied by the phenomenal development of crowdfunding in China are apparent. Though the transaction volume of crowdfunding kept increasing and the amount of raised fund did not shrink, the number of platforms fell to 209 in 2017 and decreased by over 50% due to the regulation clampdowns; 331 platforms had to change their positionings, and 270 of them closed.⁸⁸ Only 159 crowdfunding platforms were still in operation in December 2018 and 110 platforms until May 2019.⁸⁹ From a positive perspective, the reshuffle faced by crowdfunding probably indicated a high standard for the industry and a strictly regulatory trend.

Regulation has been a hot-button topic in the whole online alternative finance industry, including crowdfunding. In 2016, Ezubao, once China's biggest P2P lending platform, turned out to be a Ponzi scheme that collected RMB 59.8 billion (\$9.14 billion) from more than 900,000 investors.⁹⁰ In March 2019, Chinese police arrest 41 criminal suspects associated with the failed P2P lending platform Tuandai.com whose lending business worth more than RMB 130.7 billion (\$19 billion) in February, a China's top platform at the age of seven.⁹¹ Unluckily, a total of RMB 14.5 billion (\$2.11 billion) in the outstanding loans seems unlikely to be returned to the 220,000 investors on Tuandai.com.⁹² The unfortunate incidents highlighted the vulnerable regulatory framework in the FinTech and online alternative finance industry.

Though the central government issued a series of announcements and special rectification schemes (see Appendix D) to encourage the development of FinTech or online alternative finance including crowdfunding, China has not issued specific regulations or laws formally on crowdfunding yet. At the same time, the central government cracked down illegal fundraising, slowing down the industry due to the blurring regulatory environment.⁹³

⁸⁸ Yingcan Consulting 2018.

⁸⁹ Renchuang Consulting. 2019. Crowdfunding Industry Monthly Report. www.zhongchoujia.com.

⁹⁰ Reuters. 2017. "Leader of China's \$9 billion Ezubao online scam gets life; 26 jailed". Accessed by July 25, 2019, <https://www.reuters.com/article/us-china-fraud/leader-of-chinas-9-billion-ezubao-online-scam-gets-life-26-jailed-idUSKCN1BNOJ6>.

⁹¹ Asia Times. 2019. "Tuandai under investigation for illegal fund-raising". Accessed by July 25, 2019, <https://www.asiatimes.com/2019/03/article/tuandai-under-investigation-for-illegal-fund-raising/>.

⁹² Asia Times 2019.

⁹³ Zhi Chen and Hongwei Wang. 2018. Financing Status of China's Crowdfunding Platforms. In: Wang J., Xu H., Ma J., Zhang Y., Chen Z. (eds) Financing from Masses. Singapore: Springer. DOI: https://doi.org/10.1007/978-981-10-5843-1_7. 119.

3.2 Introduction of the RECF in China

After Demohour, the Chinese market has accepted crowdfunding, and all the subsectors started to flourish. In September 2014, one of the largest China real estate developers, Vanke, launched the first RECF campaign with fang.com (the leading real estate online platform for information, letting and leasing) and fangtx.com (a Chinese online lending platform).⁹⁴ Within nine hours, the target funding, RMB 540,000 (\$87,900), was raised by 540 investors.⁹⁵ The campaign, picked by over 120 primary news service,⁹⁶ got much more attention than thought. The era of the RECF in China has started from then.

The number of the RECF platforms soared from October to December in 2014, and in the first half-year of 2015, the total raised fund was approximately RMB 1 billion (\$150 million).⁹⁷ In April 2015, another China's large developer, the Greenland Group, launched its first online investment offering with Alibaba's Ant Financial service and Lufax.com (Ping An's wealth management sales platform), raising RMB 32 million (\$4.8 million) within half an hour; The group built up Greenland Crowdfunding in December of the same year. The company focused on innovating RE-backed debt securities and offerings.⁹⁸ In June 2015, Dalian Wanda Group, once China's most prominent commercial property developer and online payment services company 99 Bill offered the first commercial property crowdfunding project in China to invest in the next phase of five Wanda Shopping Plaza developments through the entity "Stable Earner 1".⁹⁹ With a minimum investment of RMB1,000 (\$161) and an expected annualized return of over 12%, the project attracted the retail investors who contributed 10 % of the \$800 million raised within three days, opening commercial real estate world to a new audience of small investors. In May of the same year, over ten industry-leading developers formed the CRECA (China Real Estate Crowdfunding

⁹⁴ www.chinanews.com. 2014. "9 Hours, 540 investors: the first real estate crowdfunding offering was snapped up". Accessed by July 25, 2019, http://finance.ifeng.com/a/20140925/13145697_0.shtml.

⁹⁵ www.chinanews.com 2014.

⁹⁶ www.chinanews.com 2014.

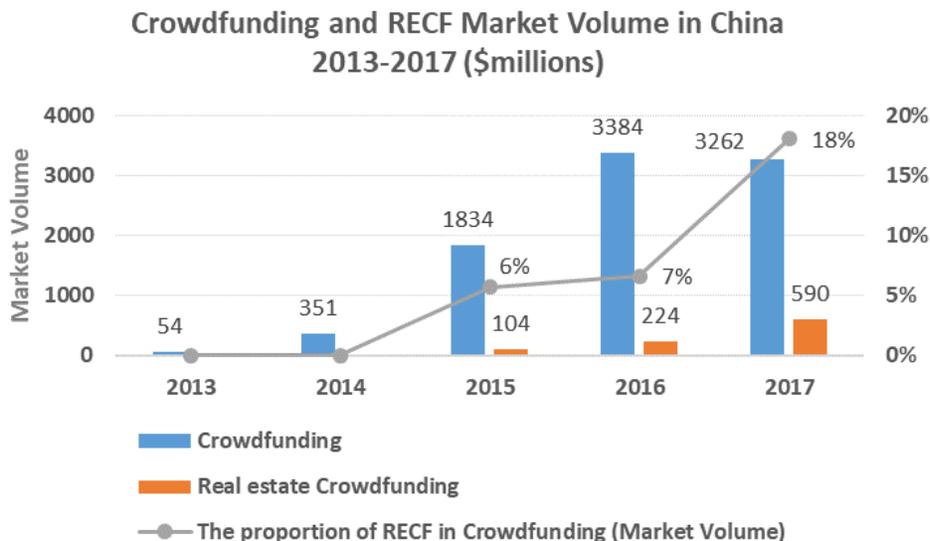
⁹⁷ Oriental Morning Post. 2015. "the Classification of Real Estate Crowdfunding in China". Accessed by July 25, 2019. <http://zz.house.163.com/15/0916/09/B3KI2PUQ024412QU.html>.

⁹⁸ O'Roarty 2016. 23.

⁹⁹ Rhian Nicholson. 2015. "Real estate crowdfunding takes off in China". Accessed by July 25, 2019, <https://www.jllrealviews.com/economy/real-estate-crowdfunding-takes-off-in-china/>.

Alliance) with over 30 members mainly from Chinese real estate industry, finance service, crowdfunding startups now,¹⁰⁰ and the RECF in China welcomed its gold time.

Figure 5: Crowdfunding and RECF Market Volume in China, 2013-2017 (\$millions)



(Sources: developed by the author. Refer to Yingcan Consulting, *Crowdfunding Industry Annual Report 2015/2016/2017*; China Real Estate Crowdfunding Alliance, *The White Paper on Real Estate Crowdfunding of China 2016/2017/2018*)

From 2015 to 2017, the average growth rate of the fund raised through the RECF platform is 78%, from \$104 million in 2015 to \$590 million in 2017 (Figure 5). The role of RECF in the crowdfunding industry of China has been increasingly important in terms of market volume. At the end of 2015, there were six platforms exclusively in the real estate vertical and many platforms with mixed verticals that operated RECF businesses.^{101 102} By the mid-April 2016, 30 crowdfunding platforms

¹⁰⁰ The members of CRECA by July 2019 are:

Real developers: Vanke, Greenland, Vantone, Huayuan Real estate, Country Garden, Greentown, Sincere, Newhope real estate, SOHO China, Cifi Group, BRC, Excellence Group, Dongou International, Powerlong, Shimao Property, Dahua Group, Ziwei Real Estate, Runlong Group;

Real estate related companies: Dao Group (Design and Planning); VVUPUP, FOEN, Bravat (Material);

Finance Service: Ping An Bank, Ping An Trust, Ping An Real Estate, Ping An securities, Ping An-UOB Fund, CMIG;

Crowdfunding startups: Choufang.me, Kaishiba, Zhong.com, Pinganfang.com (closed), 17 Housing.com (closed); Other: Teamfirst Group, Huan Group.

(Sources: the CRECA website. Accessed by July 25, 2019, <http://www.hererc.com/about/chengyuan/>)

¹⁰¹ Yingcan Consulting. 2017. *Crowdfunding Industry Annual Report 2016*. www.yingcanzixun.com.

¹⁰² Yingcan Consulting. 2016. *Crowdfunding Industry Annual Report 2015*. www.yingcanzixun.com.

involved in the RECF projects, 18 of which were in the real estate vertical.¹⁰³

However, the dynamics of the real estate market changed the developing RECF since bubbles in China’s real estate market triggered various types of speculative activities including crowdfunding speculations and both central and local government started to control RECF.¹⁰⁴ On March 18 and April 12, Shenzhen IFA (Internet Finance Association) issued “The Notice of prohibiting speculative activities on purchasing house, and strengthen the financial risk control” and “The Notice of Shenzhen Internet Finance Association on Halting Real Estate Crowdfunding Business” to promote the stability of the housing market, specifying the online alternative finance companies were not allowed to be involved in business such as down payment loans, bridge loans or house purchasing through RECF.¹⁰⁵ The two notices indicated that the prohibited RECF business was not limited to commercial housing, stores, factory facilities, and apartments, and the crowdfunding models were not limited to purchasing and leasing. Finally, nine RECF in Shenzhen stopped their operations.¹⁰⁶ After the government intervened the industry, the “TOP 10 Chinese RECF platforms” (Table 4), which shined in 2015 could not hold on with their business models. As the regulation emerged as well as trials and failures, the RECF in China has grown in different ways (3.3).

Table 4: TOP 10 Chinese RECF platforms in 2016

Rank	Name	Chinese Name	Launched	Business Field	Reasons
1	Zhongchouwangjin	众筹网金	2014	Real Estate, Internet, Crowdfunding, Finance	The first professional crowdfunding platform in the real estate vertical in China
2	Wuyouwofang	无忧我房	2014	Real Estate	The first RECF platform with a complete process in China
3	Ping An House	平安好房	2014	Real Estate, Internet, Finance	The most significant real estate digital platform

¹⁰³ Yingcan Consulting. 2016. Crowdfunding Industry Quarterly Report 2016. www.yingcanzixun.com.

¹⁰⁴ Chen 2018. 103.

¹⁰⁵ Shenzhen Internet Finance Association. <http://www.szifa.org.cn>.

¹⁰⁶ Shenzhen Internet Finance Association. <http://www.szifa.org.cn>.

4	Luju Crowdfunding	乐居众筹	2014	Real Estate	O2O (Online to offline) real estate platform
5	Real Estate Tycoon	地产大亨网	2013	Real Estate	The first RECF platform in China
6	He Crowdfunding	合众筹	2015	RECF	The RECF platform with both domestic and overseas business
7	Weichuang Crowdfunding	微创众筹	2014	Real Estate	The RECF platform focusing on real estate financing
8	Landlord	洋地主	2011	Real Estate, Internet, Finance	The RECF platform for overseas Chinese
9	Haizhong	海众	2014	Residential and CRE in the school districts in the US	The largest RECF platform with overseas business in China
10	Weitoufang	微投房	2014	Real Estate	The most profession RECF platform in China

(Sources: CRIC. 2016. *The RECF Study Report*. <http://www.doc88.com/p-2915238085982.html>.)

3.3 The Present State of the RECF in China

3.3.1 Model

Current China is not a market that can develop most of the RECF models like the US, UK, or Europe because of government control. The housing market in China has been hot for years. According to China House Prices YoY Growth data from March 1999 to May 2019, China's House Prices has an average annual growth rate at 8%,¹⁰⁷ while the US' House Prices grew at 3.1% annually almost during the same period.¹⁰⁸ The house price index of Beijing tripped from Jan 2005.¹⁰⁹ Policymakers have ramped up tightening measures, more than 60 cities (including counties) have rolled out property tightening measures such as home purchase and sales restrictions since 2017 to control the hot market in order to prevent financial crisis.¹¹⁰ Therefore, co-investment that allows investors to have part of ownership is illegal in China. Down payment loans that increase

¹⁰⁷ CEIC Data. "China House Prices Growth (1999-2019)". Accessed by July 25, 2019, <https://www.ceicdata.com/en/indicator/china/house-prices-growth>.

¹⁰⁸ Zillow. "United States Market Overview, United States Home Prices & Values". Accessed by July 25, 2019, <https://www.zillow.com/home-values/>.

¹⁰⁹ China Index Academy. "Newly developed Housing Index (2005-2019)". Accessed by July 25, 2019, <https://fdc.fang.com/index/XinFangIndex.html>.

¹¹⁰ Sheng Songcheng, Song Hongwei and Li Shoujun. "6 Keys to Understanding China's Rising Real Estate Prices". Accessed by July 25, 2019, <http://www.ceibs.edu/new-papers-columns/6-keys-understanding-china%E2%80%99s-rising-real-estate-prices>.

the leverage of the housing market through RECF are also illegal since PBoC sets the percentage of down payments.

Though crowdfunding has grown fast in recent years, China does not have specific regulation or laws. In the Notice of soliciting public opinion about “the management measures on financing by PE crowdfunding (trial) (Draft for comments)” issued by SAC (Securities Association of China) in December 2014, equity crowdfunding (referred as private equity crowdfunding in the Notice) was a finance vehicle through PE, and the accumulative equity shareholders for a specific project should not be any more than 200 individuals, which hampered the development of RECF in China.¹¹¹ RE development is capital-intensive, so the limitation on the number of investors constraints the project size. If 200 investors invest at RMB 1,000 minimum base, the capital raised will be approximately RMB 200, 000 (\$29,000) in all, far from enough for building a property.

At the current stage, the widely accepted RECF models in China based on the prototypes explained in 2.2 include cooperative building model, marketing model, wealth management model.

Cooperative Building Model

Under the cooperative building model, crowdfunding happens after the investors are identified, and their needs are confirmed. The model is one type of equity-based models, but the investors will be the owners of the properties in the future instead of equity shareholders for return. The investors, like LPs in the traditional PE partnership, can participate in the development process, realizing their requirement to customize the property (generally residential). Cooperative building model reduces fees on financing, marketing and sales, and inventory since the buyers and funding are ensured initially. The cooperative building model is not co-investment because investors have the whole ownership of their apartment in those residential building. Crowd Funding House, a RECF platform with the cooperative building model, provides investors with

¹¹¹ Securities Association of China. Accessed by July 25, 2019, http://www.sac.net.cn/tzgg/201412/t20141218_113326.html.

customization of properties. Investment offerings with the detailed information of the developments are listed on the platform to attract investors. After completing in raising fund, the platform will cooperate with the known developers. The investors participate in the process of development by selecting different modules of design, plan layout, and interior decoration. Besides, they can purchase the customized house for a lower price, say, an RMB 50,000 discount for an RMB 25,000 crowdfunding investment (CFI).

Marketing Model

The types of marketing models can be various, either equity-based or debt-based. The nature of this model is not for raising money, but for pushing marketing or sales activities in the form of RECF. Coufenziqian, including the lottery activity and down payment waiving, was a RECF campaign on JD.com supported by Sino Ocean Group, a Hong Kong-listed RE development company. Through a lottery activity, 11 out of all the investors could obtain an apartment by paying RMB 11, and those who did not win would get the investment back. For the down payment waiving, Sino Ocean Group waived nine investors' down payment (30% of the total price) and did not return the investment to the other investors. RECF draws attention from potential buyers and builds a brand for the RE development (real estate development) companies, resulting in the lower market fee.

Wealth Management Model

The investors under this model consider return based on increasing price in the Chinese housing market. The fundraisers, generally developers, cooperate with the RECF platforms and list the investment offerings which have been developed but not sold yet in order to get cash to turn over quickly. After the completion of crowdfunding, the investors will get part of ownership or equity shares based on the property types and investment offering types and get rental or sale return proportionally. There are also non-performing assets whose prices usually are 70-80% of the market value obtained through auction listing on the RECF platforms. The investment offerings on Yimihaodi.com with a debt-based model, are mainly about the renovation for rental apartments and hotels. Investors gain different fixed-rate return based on different projects.

Although many publications have admitted the classification illustrated above, it is a little outmoded for almost all the platforms under these models were shut down because of violations with the regulations and laws in the real estate market (4.1.1). Since these models primarily focus on the housing market and create speculative activities by attracting retail investors to engage with a small capital, it is not surprising that the Chinese government intervene forcefully in the similar RECF activities to stabilize the housing market. In such a situation, the classification is not applicable anymore. From a fundamental perspective for crowdfunding models, reward-based model and equity-based (especially revenue-based) model are two main prototypes in the RECF field of China (3.3.2 and 3.3.3). The reward for the RECF investment offerings are the discounts for using the projects in general instead of “products” in other types of crowdfunding.

3.3.2 Players

Large corporates, such as traditional financial service institutions and e-commerce giants and, real estate developers, as well as startups, are primary players involving in the Chinese RECF. Big IT giants such as BAT (Baidu, Alibaba, and Tencent), JD.com and Qihoo 360 integrate the crowdfunding platforms into their FinTech chains.¹¹² Their crowdfunding platforms blend multiple verticals such as art, agriculture, healthcare, game, and TMT (Technology, Media, Telecom), listing RECF investment offerings too. Traditional financial service institutions such as Ping An Insurance try to leverage their brand, capital, and data by crowdfunding. Ping An Insurance launched several crowdfunding platforms including pinganfang.com, a closed platform exclusively in the real estate vertical. Table 5 shows some mixed crowdfunding platforms involving in RECF launched by startups.

¹¹² O’Roarty 2016. 11.

Table 5: Selected crowdfunding platforms with real estate vertical in China

Name	Location	Launched	Platform model	Fund Raised	Member or Investor	Property Types
Kaishiba 开始吧	Hangzhou	2015	Equity Reward	RMB 5.7 billion	70,000	Hotel, Homestay
MiniIPO 迷你投	Beijing	2015	Equity Reward	RMB 7 billion	100,000	Rental Apartment, Hotel
Mengdaa.com 萌达众筹	Xiamen	2016	Equity Reward	-	-	Rental Apartment, Hotel
Linktou.com 链投	Shanghai	2016	Equity Reward	-	-	Hotel

(Sources: developed by the author. Refer to the official websites of the selected platforms; the data is self-reported; Accessed by July 10, 2019.)

Real estate developers have played a crucial role in the RECF in China (3.2). However, developers seem to use RECF as a marketing or sales tool to facilitate the sales and increase the turnover rate other than a “real” online alternative finance vehicle to raise fund probably because they have more finance channels and normal RECF limited by the number of investors (3.3.1) cannot satisfy their large-size capital needs.

Though the market volume of the RECF in China has kept rising from 2014, there are not many platforms focusing on the real estate vertical. On zhongzhoujia.com, a Chinese crowdfunding information website, there are only 24 platforms in the real estate category, and most of them were closed in terms of operation.¹¹³ Table 6 lists five RECF platforms whose operative status are active. However, there are no new investment offerings on Crowdfunding House and Yimihaodi.com, and new investors cannot sign up an amount on the latter platform, while Ezu360.com tries to quit the RECF business. It is unknown whether these platforms operate well.

¹¹³ Accessed by July 25, 2019, <http://www.zhongchoujia.com/platform>.

Table 6: Selected RECF platforms in China

Name	Location	Launched	Platform model	Fund Raised	Member or Investor	Minimum
Duocaitou 多彩投	Beijing	2014	Equity Revenue Reward	RMB 4.794 billion (\$700 million)	10,240	RMB 10,000 (Depend on offerings)
Crowdfunding House 众筹房	Hangzhou	2015	Equity, Reward (Cooperative Building)	RMB 66.33 million (\$9.64 million)	3,394	RMB 1,000 (Depend on offerings)
Yimihaodi.com 一米好地	Shanghai	2014	Debt (Wealth Management)	RMB 814.22 million (\$118.36 million)	10,195	RMB 1,000
Ezc360.com e资产 (converting)	Changsha	2016	Debt (Wealth Management)	RMB 202.01 million (\$29.37 million)	2,080	-
Jiahui Crowdfunding 惠嘉众筹	Zhengzhou	2014	revenue	-	-	-

(Sources: developed by the author. Refer to the official websites of the selected platforms; the data is self-reported; Accessed by July 10, 2019)

3.3.3 Characteristics

The number of RECF platforms was eight by December 2017, including those in real estate and space renovation categories,¹¹⁴ while was no new RECF platform in 2018 shown on zhouchoujia.com. RECF as an independent category is less developed than the US, UK, and Europe. For example, the US had another 23 RECF platforms merely in 2017 Top 100 Real Estate Equity Crowdfunding Sites besides Fundrise and Realty Mogul,¹¹⁵ indicating there were more in terms of the total number. However, the RECF in China is not soft regarding its estimated \$590 market volume in 2017. On one side, approximately \$319 million (RMB 2.154 billion) was contributed by the RECF unicorn, Duocaitou, accounting more than half of the total market volume of the RECF in China.¹¹⁶ On the other side, mixed crowdfunding platforms with real estate

¹¹⁴ Yingcan Consulting 2018.

¹¹⁵ Robert Hoskins. "2017 Top 100 Real Estate Equity Crowdfunding Sites". Accessed by July 25, 2019, <https://crowdfundingpr.wordpress.com/top-100-crowdfunding-websites/top-100-real-estate-crowdfunding-sites/>.

¹¹⁶ 01 Fincance (01caijing). 2018. "Crowdfunding is dead? The review of crowdfunding in 2017". Accessed by July 25, 2019,

arms have played an essential role. For example, in 2017, Kaishiba ranked second in terms of the market volume of the RECF in China.¹¹⁷

Regulations and policies (3.3.1) limit the platform models: The limitation on the total number of investors raises the barrier of investment for small investors. For example, most of the minimum investment for the equity-based RECF in Duocaitou is over RMB 50,000 (\$7,250), while an apartment project located in the US called Mill Creek Residential asked for RMB 1 million (\$145,000) as the lowest investment requirement.¹¹⁸ However, in the US or UK, \$1,000, or EUR 1,000 (Table 3) is not uncommon. The hurdle damages the essential value of crowdfunding to some extent, dragging it back to a traditional PE game with few players. Difficulties in developing equity-based offerings have made the revenue-based, and reward-based model spread in China.

Noticeably, compared to other regions with multiple property types on the RECF platforms, under both commercial and residential sectors, the RECF in China concentrates in hospitality (hotel, homestay), rental apartment and co-working space.¹¹⁹ The focus on CRE (Commercial Real Estate) enables the RECF platforms to avoid the risks caused by changing regulations and policies on the housing market issued by the Chinese government. The strategy has an inner market logic: the world is welcoming the new CRE era. According to JLL's prediction, the value of the investable CRE assets will reach \$65 trillion by 2020.¹²⁰

Consumption upgrading in China triggers the hospitality market,¹²¹ and the rental housing market is expected to boost because of policies and investment by leading market players.¹²² In June 2016, General Office of the State Council of the People's Republic of China issued the Several

<https://www.01caijing.com/article/20517.htm>.

¹¹⁷ 01 Fincance (01caijing) 2018.

¹¹⁸ Accessed by July 25, 2019, <https://www.duocaitou.com/project/detail/100908>.

¹¹⁹ 01 Fincance (01caijing) 2018.

¹²⁰ JLL. 2019. "Building economy has become a new industrial model. Four trends guide the future of building standardization". Accessed by July 25, 2019, <https://www.joneslanglasalle.com.cn/zh/newsroom/future-of-building-economy>.

¹²¹ Su, Luo. "Crowdfunding homestays and hotels? New real estate finance awakes." Accessed by July 25, 2019, <https://www.weiyangx.com/329915.html>.

¹²² JLL. 2018. "The rise of China's rental housing market". Accessed by July 25, 2019, <https://www.joneslanglasalle.com.cn/en/newsroom/china-rental-housing-market>.

Opinions of the General Office of the State Council on Accelerating the Cultivation and Development of the Rental Housing Market (document No. 39) which supported the development of rental housing system. Overseas PE funds such as GIC (a Singapore sovereign wealth fund) have been piling into China's rental flat sector.¹²³

The drawbacks about disclosure, exit, and global transaction of the RECF in China is evident. Most platforms in other regions disclose their operation data such as return to help investors with the investment decisions to some extent though the data is self-reported. However, even on the largest RECF platform Duocaitou, investors are not able to have a clear picture of the organization due to the limited disclosure. Fundrise provides investors with periodic exit possibilities, while Property Partner offers a secondary market to enhance liquidity. Unfortunately, most of the RECF investors in China can only exit at the end of the investment term, ranging from 2 to 5 years in general. Also, it is evident that the RECF platforms have not had an international strategy like the UK and Europe and rely only on the local website and brand.¹²⁴

3.4 Case Studies

3.4.1 Duocaitou: the largest RECF platform in China

Duocaitou, found in October 2014 in Beijing, has been the largest RECF platform in China from 2017. The startup raised RMB 10 million (\$1.5 million) from the Chinese domestic venture Shunwei capital at the angel round in August 2015, and another RMB 10 million (\$1.5 million) from three Chinese ventures (Innoangel Fund, Share Capital and Shunwei) at its Pre-A round in June 2016.¹²⁵ In September of the same year, Duocaitou obtained the strategic investment RMB 5 million (\$0.75 million) from Max-elerator, Rising Fund and DCM, a venture focusing on technological companies in the US, Japan, and China, invested RMB 63.1 million (\$ 10 million) in

¹²³ Yangpeng Zheng. 2018. "Rental properties are the new gold in China for overseas investment funds". South China Morning Post. Accessed by July 25, 2019, <https://www.scmp.com/property/hong-kong-china/article/2150306/rental-properties-are-new-gold-china-overseas-investment>.

¹²⁴ Cambridge Centre for Alternative Finance. 2018. The 3rd Asia Pacific Region Alternative Finance Report. https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/3rd-asia-pacific-region-alternative-finance-industry-report/#.XT_3aqH25jw. 45.

¹²⁵ Zero2ipo Research. 2015. "Shunwei invests in Duocaitou". Accessed by July 25, 2019, <https://invest.pedata.cn/>.

Duocaitou with Shunwei Capital at the series A round.¹²⁶

At the initial stage, Duocaitou attempted to conduct various types of campaigns about space such as gyms and red wine villa, but the platform has concentrated on hospitality and rental apartment businesses now. Most property types on Duocaitou are hotel and homestay located in both China and other regions such as the US and Thailand. There are 343 campaigns raised for hotels, accounting for 59% of the total number of the completed campaigns on the platform, and 172 raised for homestays, accounting for 29% (Figure 6). The platform has scaled up quick with the market volume increased by approximately 261% annually from RMB 23 million (\$3.7 million) in 2015 to RMB 3.885 billion (587 million) in 2018, and the number of funded projects increased from 23 to 330 during the same period.¹²⁷ According to the data from 10 Finance, Duocaitou has two slots on the Top 10 Equity Crowdfunding Campaign 2017: Mehood Elegant Hotel in Suzhou raised RMB 100 million, ranked the second and Guangzhou Mehood Lestie Hotel raised RMB 51.6 million (\$7.5 million), ranked the fifth.¹²⁸

The platform uses the equity-based, revenue-based model, and the reward-based model; The average annual return is about 15.12% to 20.12%.¹²⁹ Revenue-based model is the most common on Duocaitou as it allows more investors to involve in the RECF. 505 campaigns used the revenue-based model, accounting for 86% of the total number of the completed campaigns on the platform. Under this model, the expected return was different based on the amount of investment. Discounts for booking rooms are the rewards offered to the investors who are the potential consumers in the future. For example, Manxin Hotel in Suzhou, a sub-brand of China Lodge Group, a leading hospitality corporation in China, is raising RMB 5 million (\$0.725 million) on the platform in 2019. Each share for the 10% expected return is worth RMB 20,000 (\$2,900) or 50,000 (\$7,250), and the price of each share for the 11% expected return is RMB 100,000 (\$14,500); All the investors can enjoy 7% of their investment to offset their costs in the hotel.

¹²⁶ Zero2ipo Research 2015.

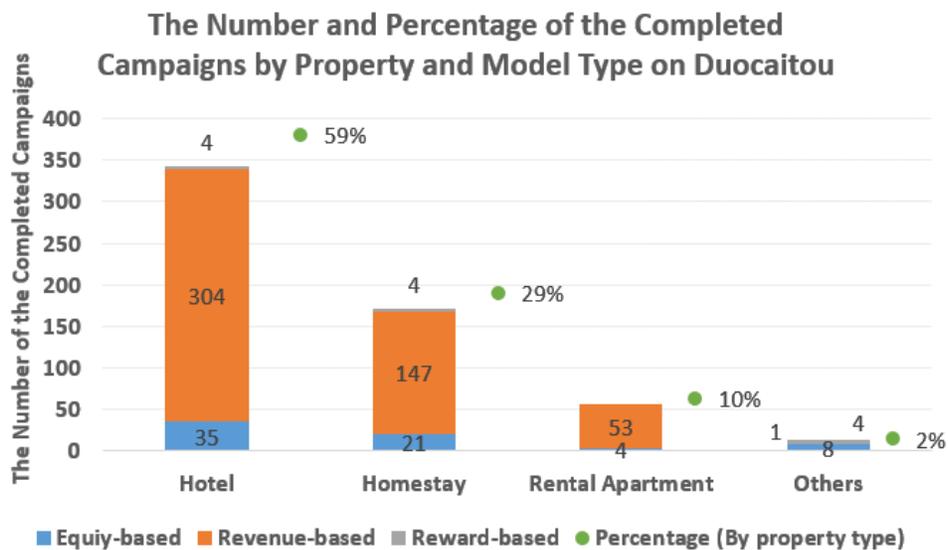
¹²⁷ Accessed by July 25, 2019, <https://www.duocaitou.com/about/about-us>

¹²⁸ 01 Fincance (01caijing) 2018. "Crowdfunding is dead? The review of crowdfunding in 2017".

¹²⁹ 01 Fincance (01caijing) 2018.

Among all the completed campaigns, there are 68 (12%) using the equity-based model and 12 (2%) with the reward-based model (Figure 6), much less than the number of the revenue-based campaigns. Unfortunately, the study was not able to understand the exact mechanism of the equity-based campaign on Duocaitou since the entire information of the completed campaigns are open to the public and there are no ongoing equity-based campaigns at present.

Figure 6: The Number and Percentage of Completed Campaigns by Property and Model Type on Duocaitou



(Sources: developed by the author. Refer to the completed campaigns on the Duocaitou website, accessed by July 15, 2019.)

The study collected the information and data on the rental apartment sector on Duocaitou to comprehend aspects about the projects such as fundraisers, the target amounts of funding and investment minimums for investors (see more details in Appendix B). There are 57 campaigns for rental apartments in total, 53 of which based on the revenue-based model, and there are 7 projects located out of China. The target amount of funding ranged from RMB 0.3 million (\$44,000) to RMB 15 million (\$2.18 million), RMB 2.9 (\$422,000) on average, while the actual funding raised for a project ranged from RMB 0.38 million (\$55,000) to RMB 43.9 million (\$6.38 million), RMB 8.51 million (\$1.24 million) on average. The main requirement for the investment minimum was RMB 10,000 (\$1,250) to RMB 50,000 (\$7,250), but some outliers ask for over RMB

500,000 (\$72,500). Interestingly, 2 out of 3 campaigns which failed in raising the target amount of funding are the projects located in other regions with high investment minimums probably because the investors are not comfortable enough to invest a large amount of capital in the global projects. Many fundraisers are startups of space such as V+Space and Qingzhu International Student Apartment, and they have used the platform repeatedly since it is difficult for SMEs to get funding in China (3.1). It is not clear whether the fundraisers need to build the properties for the projects or lease the space.

After the target amount is achieved, the crowdfunding platform takes charge of supervision and disclosure, and the representatives of investors can participate in the decision during the operation on the board of directors. The platform requests share pledge as collateral for reducing the default risk as well as the systematic risk due to the business in the single vertical.¹³⁰ Investors depend on repurchasing by the control shareholders at the end of the agreed term to exit, and the repurchase price is settled down in the agreement or according to the market value; Except for the appointed nodes, investors have to seek for transferees by their own.

Most of Duocaitou's peers founded in 2014 could not survive because of their businesses in the housing market. In the opinion of the author, Duocaitou's success mainly depends on its positioning on CRE and the digitization of the offline PE in the real estate industry.

3.4.2 Kaishiba: the mix crowdfunding platform active in the real estate vertical

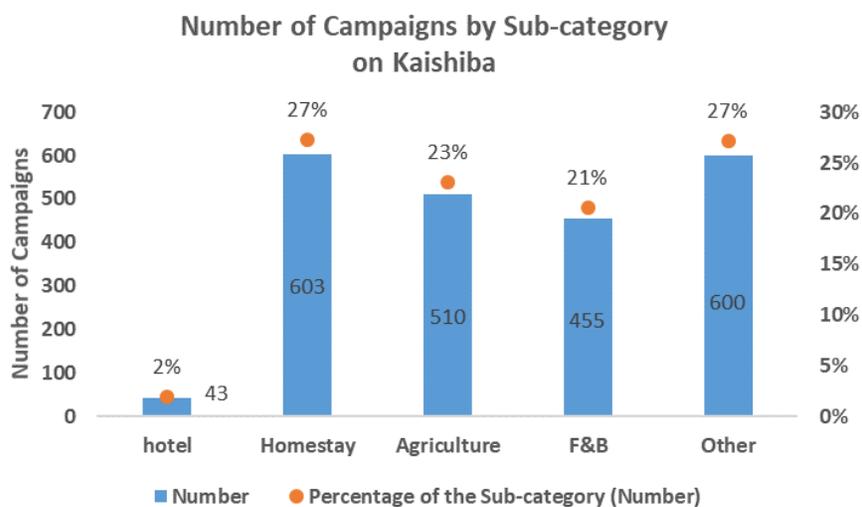
The Hangzhou-headquartered Kaishiba (formerly "Kaistart") was officially launched in March 2015. The crowdfunding platform focuses on the consumption upgrading containing non-standard accommodation, personalized catering, new agriculture, new leisure, and other industries in the early stage.¹³¹ Kaishiba has raised \$49.5 million over four rounds in total, and its most recent funding, RMB 190 million (\$28 million) came from a Series C round led by YF Capital in August 2017. The platform with multiple verticals, the member of CRECA, is active in RECF.

¹³⁰ 01 Fincance (01caijing) 2018. "Crowdfunding is dead? The review of crowdfunding in 2017".

¹³¹ Crunchbase. Accessed by July 25, 2019, <https://www.crunchbase.com/organization/kaistart#section-overview>.

In the first half-year of 2017, the platform raised RMB 1.09 billion (\$160 million), ranked the first in all the crowdfunding platforms in terms of market volume. Another RMB 1 billion was raised by the end of the same year.¹³² By November 2018, Kaishiba raised RMB 5.7 billion (\$860 million) through 2,183 campaigns, supported by over 70,000 investors.¹³³ The average fund raised was RMB 2.8 million, and the average investment amount by person ranged from RMB 10,000 (\$1,250) to RMB 50,000 (\$7,250), while each project lasted for three to five years on average.¹³⁴

Figure 7: The Number and Percentage of Campaigns by Sub-category on Kaishiba



(Sources: developed by the author. Refer to the completed campaigns on the kaishiba website, accessed by July 15, 2019.)

As Kaishiba attempts to integrate all the industries about consumption upgrading, it is not surprising that hotel and homestay are the main RECF businesses on the platform, while the number of homestays accounts for almost 30% (Figure 7). In the hotel business, Kaishiba partnerships with the leading hospitality groups such as Atour. The platform model mixed equity, revenue, and reward like Duocaitou. The return for revenue ranges from 5% to 6% on average,

¹³² Duan Xu and Yang Xu. 2017. "Dark horse in the crowdfunding: Kaishiba raised 1.1 billion yuan in the first half of the year, far more than JD and Taobao". 01 Fincance (01caijing). Accessed by July 25, 2019, <https://www.01caijing.com/article/16649.htm>.

¹³³ Accessed by July 25, 2019, https://www.kaishiba.com/special/mactive/about_index.

¹³⁴ Yugang Wang. 2018. "Take Space as the Core Assets, Kaishiba embarks on integration of the Homestay Industry in the future". Aifenxi. Accessed by July 25, 2019, http://www.sohu.com/a/233520514_545428.

and that for equity depends on the projects.¹³⁵

The study reviewed all the completed hotel campaigns to understand the investment offerings on Kaishiba better (see the details in Appendix C). Almost all the projects were revenue-based with an estimated return 8% to 15%. The target amount ranged from RMB 50,000 (\$7,250) to RMB 300,000 (\$43,500), and the raised fund on average was RMB 7.15 million (\$1.04 million), 6,212% of the target. It seems that Kaishiba was very cautious, and also, these projects probably did not use RECF to raise fund. In terms of the number of potential investors, the fundraisers took the RECF campaigns as a marketing tool. The average size of these projects was 5,292 square meters (56,962 square feet) with 74 keys and valued at RMB 19 million (\$2.76 million). The small or medium hotels are “asset-light” to some extent because the space for them is rent by the fundraisers. The most common investment term is three or five years, while the exit nodes are usually at the third or five years.

However, the liquidity level of the platform is weak without a secondary market and with long investment terms on average. For example, a campaign for Three Penguins Inn, a chain homestay in China aims to raise RMB 50,000 (\$7,250), and the expected annual return is 14.01% in the proposal on the platform while the investors can exit in two years or five years by share buy-back at the par value.¹³⁶

Though with the similar underlying assets in real estate part, Kaishiba is different from Duocaitou regarding its medial social attributes. Every investment offering is “translated” into a story about dream, love, lifestyle posted on the platform or official account of Wechat (A Chinese version of Twitter), gathering a brunch of followers who are willing to invest and will be organized into a community on Wechat after becoming investors. Such a positioning constitutes the profile of its investors: those living in first-tier cities at the age of 28 to 45, and 60% are female.¹³⁷

¹³⁵ Yugang Wang 2018.

¹³⁶ Kaishiba. 2019. “The Home of Three penguins (Shanghai Disney) Proposal”. Accepted by July 25, 2019, www.Kaishiba.com

¹³⁷ Yugang Wang 2018.

CHAPTER 4: CHALLENGES, RISKS, AND OPPORTUNITIES

4.1 Challenges and Risks

4.1.1 Blurred Legal Framework

79% of Chinese considered the FinTech regulation in China as a critical challenge because the future of the Chinese regulatory environment has been unclear or unstable and 54% indicated that the high legal compliance costs were another essential challenge; Over one-third of the platforms that took survey thought that the regulation did not meet the requirement of the crowdfunding industry and lacked flexibility.¹³⁸

The CSRC (China Securities Regulatory Commission) has included equity-based crowdfunding in its legislative work plan for two consecutive years and claimed that “Measures for the pilot administration of equity-based crowdfunding” was expected to be issued in March 2019,¹³⁹ indicating that the equity-based crowdfunding is promising with government’s support. However, the regulatory environment for RECF is still in misty because the equity-based model is part of the RECF in China, and regulations, as well as policies in the Chinese real estate market, are always changing. As mentioned in 3.3.1 and 3.4, the revenue-based model is quite popular in the RECF field of China, and RBC is a subcategory of the equity-based models (Table 2). RBC in the gray zone, neatly sidesteps the limitation on the number of equity shareholders and enables campaigns to increase exponentially, reversely meaning that there will be many uncertainties to utilize this model without any specific expected regulation.¹⁴⁰

In the present state of the regulatory environment, RECF is on suspicion of illegally absorbing public deposits, issuing securities, and fundraising. Based on Interpretation of Several Issues Concerning Specific Application of Law in the Trial of Criminal Cases about Illegal Fundraising,

¹³⁸ Cambridge Centre for Alternative Finance 2018. The 3rd Asia Pacific Region Alternative Finance Report. 58.

¹³⁹ Renchuang Consulting. 2019. Crowdfunding Industry Monthly Report (March 2019). <http://www.zhongchoujia.com/data/32008.html>.

¹⁴⁰ International Financial News. 2017. “Revenue-based Crowdfunding is a hit, but the relevant regulation has caught on”. Accessed by July 25, 2019, <http://finance.sina.com.cn/roll/2017-01-09/doc-ifxzkssy1309047.shtml>.

illegal Fundraising in China refer to:

- 1) Raise capital without the approval from authorities or under cover of legal operations;
- 2) Advertise publicly by channels such as media, pitch, flyer, SMS, etc.;
- 3) Promise to refund the principal and interest or repay in kind, cash or shares within a specified period;
- 4) Raise funding from public, namely non-specific object.

Crowdfunding, as well as RECF, meet 2), 3) and 4) by nature, and it is difficult to judge whether the projects on the RECF platforms have approvals from authorities. In the PRC Securities Law (Revised in 2014), “A public offer shall be constituted if: 1) The securities are offered to the public in general; 2) The offer of securities targets at particular persons who, in the aggregate, exceed 200; 3) Make another offer as specified in laws or administrative regulations. The use of announcements, public inducements or a disguised public offer method is not permitted for non-public offers of securities”, and any entity or individual cannot offer public securities without approval from authorities.¹⁴¹ Though RBC on the RECF platforms is not a security by definition, strictly, the RBC investment offerings violate the law in terms of the number of non-specific investors.

Besides the risks about crowdfunding and the relevant platform models, some RECF investment offerings involve in the violation of the provisions on pre-sale of housing and restraints on purchasing. According to the Law of administration of the real estate of PRC (revised in 2009), developers cannot sell the properties without commercial property permit which requires land use permit, zoning permit, capital investment proof (over 25% of the expected construction cost has been invested) and confirmed construction process as well as delivery date.¹⁴² Details differ in different cities based on the requirement from the local government. For example, pre-sale is

¹⁴¹ Adopted at the 10th Session of the Standing Committee of the 12th National People’s Congress on, and effective as of, August 31, 2014.

¹⁴² Amended for the second time in accordance with the decision on amending part of the laws of the tenth session of the standing committee of the eleventh National People's Congress on August 27, 2009.

only allowed after the completion of the basement and primary structure in the 1 to 3-floor properties in Guangzhou.¹⁴³

In conclusion, lagged and the unclear legislative frame has limited the development of the RECF in China, especially in terms of crowdfunding models, diversification of property types as well as campaign size. Meanwhile, most of the public cannot trust the RECF industry in such an unstable regulatory environment, making SMEs challenging to get financing by crowdfunding.

4.1.2 Low-level Diversification and Globalization

Diversification

Subject to the regulations, laws, and policies, most of the investment offerings on the RECF platforms in China make hotels and homestays as their underlying assets located in China. It might be commonsense that real estate acts as a diversifier of other assets such as stock, but the investment on the single industry and its subsector in the same country is inevitably risky. The combinations of assets are valuable because diversification benefit is essential for real estate investment from abroad, mixed-asset portfolio perspective, and the reason for inclusion for real estate in many sizeable institutional portfolios.¹⁴⁴

From a geographic perspective, the properties on the Chinese RECF platforms are mainly domestic when RECF platforms in other regions have international projects. The over location-concentrated business increases the higher risk for both platforms and their investors and probably miss the high return opportunities as markets are not moving in the same way relating to reasons such as regional economy, capital scarcity, and demographics.¹⁴⁵ International real estate investment probably provides with better returns as well as diversification benefits regarding this condition.¹⁴⁶

¹⁴³ People's Government of Guangdong Province. 2019. "Regulations on the administration of pre-sale of commercial housing in Guangdong province". Accessed by July 25, 2019, http://www.gd.gov.cn/zwgk/zcfgk/content/post_2531052.html.

¹⁴⁴ Geltner 2014. 524.

¹⁴⁵ Geltner 2014. 612.

¹⁴⁶ Geltner 2014. 612.

Besides the homogenous types of properties as well as their locations, there are not many options for the RECF investment offerings in terms of the crowdfunding models, most of which are revenue-based, while there is no similar counterpart like eREITs on Fundrise neither. The platforms seem to be the reason causing such a homogenization. However, in effect, the regulatory environment for RECF, insufficient expertise of platforms, the and public's unfamiliarity with the mechanism of real estate investment through a combined portfolio conduce to the complicated problem together.

Globalization

In the UK, 14% of the RECF market volume was dependent on cross-border inflows and 12% on cross-border outflows, and over 29% of the RECF platforms have global websites and brand in 2017.¹⁴⁷ Unfortunately, the globalization of FinTech or online alternative finance in China has stayed at a low level (3.3.3) like the US that seems also focuses on the local market only (2.3.1). For example, “9% of P2P/marketplace business lending, P2P/Marketplace Property Lending and 7% of P2P/Marketplace Consumer Lending have some ‘Other’ international web presence. A minority - 3% of P2P/Marketplace Business Lending and 5% of P2P/Marketplace Consumer Lending have a global website and brand”,¹⁴⁸ implying a limited interest in global expansion. As to crowdfunding and RECF, platforms with presence in multiple languages are uncommon, and few platforms accept investors other than Chinese citizens, hindering oversea capital into the market. On the contrary, the crowdfunding in the rest area of Asia Pacific have attempted to capture more global market share by establishing their global brand and international websites more actively than China, “25% of surveyed firms responded to the survey in more than one Asia Pacific country, with most of these platforms actively operating in up to three countries”.¹⁴⁹

¹⁴⁷ Cambridge Centre for Alternative Finance 2018. The 5th UK Alternative Finance Industry Report. 26-27.

¹⁴⁸ Cambridge Centre for Alternative Finance 2018. The 3rd Asia Pacific Region Alternative Finance Report. 45.

¹⁴⁹ Cambridge Centre for Alternative Finance 2018. The 3rd Asia Pacific Region Alternative Finance Report. 45.

4.1.3 Underdeveloped Platforms

China is a latecomer for crowdfunding as well as RECF, and the RECF platforms are much less developed than those in the US, UK, and Europe.

Expertise

The RECF platforms need enough expertise to engage in real estate investment as they take charge of due diligence, a necessary step to ensure the quality of the listed offerings and assist in asset management after fundraising. However, it is doubtful whether the current RECF platforms in China have such abilities in terms of their team portfolios and roles in the investment process. For example, Duocaitou claims that the platform uses its risk-control model, three-party data, and manual reviews to conduct the due diligence of the potential projects, and will disclose the status of the project periodically.¹⁵⁰ Nevertheless, whether the platform has a specific team that interprets the mechanism of real estate investment is questionable. There is no information that a third-party expert or institution will help the platform with the processes such as valuation. In effect, no one guarantees the reliability of the valuation of the projects listed on the platform.

Disclosure

The offerings from Chinese RECF platforms are not transparent in terms of the disclosure degree. After founding for three years, Kaishiba just has started to establish its disclosure center and research its rating system with University,¹⁵¹ meaning that within such an extended period, the investors might invest in the projects without knowing the risks sufficiently. Even so, the founder, Jianjun Xu, considered that it was challenging to persuade fundraisers disclosing all the necessary information and data without legal obligations.¹⁵² Although each project has an investment proposal on the APP of Kaishiba, there is no guarantee that the information or data is reliable. Another giant, Duocaituo even does not provide any access to the proposals of the completed campaigns. Besides, investors are unable to find out default rates or realized return rates on

¹⁵⁰ Duocaitou. "User Guide". Accessed by July 25, 2019, <http://www.duocaitou.com/about/user-guide>.

¹⁵¹ 36Kr. 2018. "Information disclosure center will be established; Launch rating research on crowdfunding with third parties". Accessed by July 25, 2019, https://36kr.com/p/5135458?ktm_source=feed.

¹⁵² 36Kr 2018.

these RECF platforms as an investment decision-making reference. Further deteriorating the problem about disclosure, RECF helps the enterprises to raise funding from masses, but investors in China cannot even know whether they are supporting a deadbeat because the RECF platforms cannot get access and report to Credit Investigation System of PBoC.

Risk Management

The main problems about risk management are the Chinese RECF platforms' exit mechanisms and insufficient capabilities to deal with the default issues. As mentioned in 3.3.3, investors' primary way to exit is to wait for share buy-back at the presumed intermediate-term or end term. The long wait can increase the risks and uncertainties of investment. By 2017, 16 of 216 offerings in Duocaitou, two cases launched by the same fundraiser included, were resolved through judicial arbitration.¹⁵³ The default rate at 7.4% is perhaps acceptable for some investors regarding the returns, but it is not ignorable that almost all these platforms were launched within five years, while the average investment term for their projects ranges from 3 to 5 years. The default wave, if applicable, might happen in 1 or 2 years if the platforms did not execute due diligence carefully and have not owned a high-level ability to handle with defaults.

Besides, given the underlying assets for hotels and homestays are leased by the fundraisers in general, it is unclear whether the share pledge claimed by the platform can recover the default loss. A default will bring a severe consequence because the platforms at present and massive investors are unable to operate the projects in default and cannot sell the leased properties. For example, Duocaitou, as an agency, seems able to be fair to both fundraisers and investors. However, the platform only charges the fundraisers' management fee based on the amount of funding raised. For its profit consideration, the platform might exaggerate the valuation for the listed projects. Compared to Duocaitou, Kaishiba controls the amount raised very strictly to reduce the default events, from RMB 50,000 (\$7,250) to RMB 200,000 (\$29,000), yet with such a

¹⁵³ Congrui You. 2019. "It is difficult to get the return after investment; The crowdfunding investment on Duocaitou is suspected of lax risk control". Accessed by July 25, 2019, <https://finance.sina.com.cn/chanjing/gsnews/2019-03-15/doc-ihrfqzkc4154609.shtml>.

limitation on the amount, meaningless to help the SMEs to get capital.

4.2 Opportunities and Trends

4.2.1 Clear Regulatory System

The unclear regulatory environment hinders the development of the RECF in China (4.1.1), while it could be a niche opportunity for the industry. After JOBS ACT, the total number of investors in regulation crowdfunding rose by 158% from 2016 to 2017,¹⁵⁴ deducting a potentially positive connection between the introduction legislation and the crowdfunding development. The European Parliament adopted the Commission's proposals for crowdfunding regulation drafted in March 2018 to protect investors and boost crowdfunding platforms.¹⁵⁵ It is not unreasonable to believe that the crowdfunding, as well as the RECF market in China, will follow the steps as other regions.

It is essential to create transparent regulations and laws that distinguish crowdfunding as well as RECF from illegal fundraising and illegal securities, specifying the precise terms that violate the legislative framework. Equity crowdfunding has been the focus of attention since 2015 in China, but other types of crowdfunding models are not ignorable for their large market volumes in the industry. It is necessary to relate the regulations with the existing or potential policies in the real estate market, such as presale laws or purchasing limitations to protect investors and prosper the RECF platforms. Due to the risky nature of the RECF business, a series of standard criterions will help with the risk management on a legislative level. For example, what are the qualifications of both platforms and investors? What can the maximal amount of fund be raised based on the project's valuation? What terms must the platforms disclose? How long should a campaign period last?

¹⁵⁴ Jason Best and Sherwood Neiss. 2018. The 2017 State of Regulation Crowdfunding: US Securities-based Crowdfunding under Title III of the JOBS Act. Accessed by July 25, 2019, <https://www.crowdfundinsider.com/2018/01/127112-2017-state-regulation-crowdfunding-us-securities-based-crowdfunding-title-iii-jobs-act/>.

¹⁵⁵ European Parliament. New EU rules to boost crowdfunding platforms and protect investors. Accessed by July 25, 2019. <http://www.europarl.europa.eu/news/en/press-room/20181105IPR18253/new-eu-rules-to-boost-crowdfunding-platforms-and-protect-investors>.

The performance of the fundraisers and their affiliated partners are necessary to be shared on the Credit Investigation System of PBoC and across the finance industry in order to lower the intended defaults. Since the crowdfunding is an industry born not long ago and the iteration seems frequent because of the business models and new technologies, open dialogue with the stakeholders in the industry will add flexibility and timely updates to the legislative framework. The industry association, such as CRECA can play a crucial role as a bridge between multiple stakeholders and regulators.

4.2.2 High-level Diversification

Expansion in the CRE Market

The housing market, as one of the main drivers of the Chinese economy, accounts for about 30% of gross domestic product, directly and indirectly, considered to be overheated for many years.¹⁵⁶ Therefore, the policies on the housing market keep changing because the Chinese government desires to cool the market. On the contrary, the CRE (Commercial Real Estate) market in China is expected to grow: Foreign investor invested RMB 78 billion (\$11.5 billion) in 2018, increasing 61.5% year-on-year from 2015.¹⁵⁷ From asset performance, due to improving employment and expanding the economy of China, offices continue to be a favorite of institutional investors; Retail properties have adopted new strategies to embrace e-commerce, while industrial shows a strong demand because of e-commerce.¹⁵⁸ The considerable demand for CRE will bring many opportunities to the RECF industry, resulting in a high level of diversification.

Worldwide Opportunities

Besides involvement in diverse subsectors of Chinese real estate, overseas real estate investment is another big opportunity for the RECF in China. Based on the statistic from Juwai.com, a leading Chinese International Property Portal, the investors from Mainland China brought overseas

¹⁵⁶ Christopher Balding. 2018. "Why China Can't Fix Its Housing Bubble". Bloomberg Opinion. Accessed by July 25, 2019, <https://www.bloomberquint.com/opinion/why-china-can-t-fix-its-housing-bubble>.

¹⁵⁷ Wang Ying. 2019. "Foreign commercial real estate deals soaring". China Daily. Accessed by July 25, <http://www.chinadaily.com.cn/a/201901/24/WS5c4915fda3106c65c34e639f.html>.

¹⁵⁸ Mordor Intelligence. Commercial Real Estate Market in China - Trends, Industry Competitiveness & Forecasts to 2022. <https://www.mordorintelligence.com/industry-reports/commercial-real-estate-market-in-china>.

properties with a market size over \$100 billion in 2016, \$119.7 in 2017, increasing by 18.1%. China has been the king player in global CRE investment.¹⁵⁹ In the US market alone, Chinese overseas property transactions are predicted to hit \$220 billion by 2020, and China will become the most extensive and fastest-growing country of origin of international property buyers who invest in the US.¹⁶⁰ There are 23,563 Chinese investors with over \$1 billion net assets, and the number is projected to 51,839, an incredible customer base for overseas real estate investment.¹⁶¹ It is not surprising that “36% of China's HNWI's (High Net Worth Individual) have already bought property abroad, and 41% intend to invest within the next three years”.¹⁶² Apart from HNWI's, the middle-income class has engaged in the affordable outbound real estate markets such as Southeast Asia.¹⁶³

Though with an essential regulatory risk, the overseas real estate market is a niche opportunity for the RECF in China. In the new rules governing outbound investment which went into effect in March 2018 issued by NDRC (China's National Development and Reform Commission), Chinese firms must report through online platform under the government supervision if they have conducted foreign investment deals, and deals with the size of over \$300 million require specific approvals.¹⁶⁴ However, when loosening restrictions on overseas investment in infrastructures as such business parks, logistics, and tech parks, NDRC explained that the restrictions do not include individual investors in its reply to some key questions.¹⁶⁵

Potential Boom in the Debt-based RECF

The lack of diversification lies not only in property types and locations but also in the CFI models and products of the present RECF field. Since the current RECF platforms in China focus on equity-

¹⁵⁹ Juwai. 2019. “Get the world by Overseas service brokers: China business journal interview juwai.com director and CEO Xuexin Luo”. Accessed by July 25, 2019, <https://www.juwai.com/news/288574.htm>.

¹⁶⁰ Juwai 2019.

¹⁶¹ Juwai 2019.

¹⁶² Juwai.2017. Reach Chinese overseas property buyers. <https://www.juwai.com/news/288574.htm>.

¹⁶³ Juwai 2019.

¹⁶⁴ National Development and Reform Commission. 2018. Measures for the administration of enterprises' overseas investment, NDRC (No.11).

¹⁶⁵ Queena LIU. 2019. “Understanding Chinese Growing Investment into Foreign Real Estate”. Dragon Social. Accessed by July 25, 2019, <https://www.dragonsocial.net/blog/china-real-estate-investment/>.

based and revenue-based models, there is room for debt-based RECF. The current RBC projects on the RECF platforms in China are similar to debt-based projects to some extent in terms of “fixed-rate return with a fixed period,” but their investment periods are more extended than debt-based projects; The projects are probable not backed by collaterals. Debt-based RECF projects are promising for a few reasons:

- 1) The equity form has more limitations subject to regulations and policies, regard to the number of shareholders or investors’ qualifications;
- 2) Considering about liquidity, the average investment term of the current equity-based or revenue-based investment offerings ranges from 3 to 5 years on Duocaitou and Kaishiba, while the investment term of debt-based investment is much shorter, 1.5 years on average in regions such as Europe where debt investment offerings are popular;¹⁶⁶
- 3) The debt-based investment is less risky than other types of RECF investment due to the relatively high liquidity and collaterals such as land or properties;
- 4) For most unprofessional retail investors, debt-based crowdfunding is more understandable.

4.2.3 Global Expansion

Though China has a sizeable domestic market for RECF, it is not early to attempt to establish a global brand to enlarge investor base by attracting international investors.

Also, there is room for non-Chinese RECF platforms to raise funding in China and vice versa: some Chinese startups like AI company Mobvoi succeeded in raising money on Kickstarter, and there are ongoing trials to bridge China and other regions with crowdfunding.¹⁶⁷ The globalization of the China RECF in the future highly relies on how the entrepreneurs weigh the benefits of global capital against the obstacles to expand globally. Building an international website presence can be a start, and it is useful to localize the platform through the collaboration with local partners such as social media tools like Facebook and local third-party regulators to enhance the public

¹⁶⁶ Goins 2014.13.

¹⁶⁷ Floship. 2019. “Crowdfunding in China: Practices and Trends You Need to Know”. Accessed by July 25, 2019, <https://www.floship.com/crowdfunding-in-china-practices-and-trends/>.

confidence and acceptance. Partnership with the existing local RECF platforms is a probable strategy too. Globalization of the RECF that cannot be completed only by the RECF startups needs the support from multiple sides such as regulators and traditional financial institutions.

4.2.4 Improved Platforms

The study has discussed the present state of the RECF platforms in both Chapter 3 and 4 and illustrated that the big problems lie in lack of expertise in the real estate industry, insufficient disclosure, and risk management.

The RECF platforms can build their industry capability or partnership with those with expertise already, such as the traditional brokers (JLL and CBRE), general partners of PE fund and real estate developers. The platforms can strengthen their ability to seek for industry opportunities and select reliable projects backed by these “Strategic partners,” while their partners benefit from the cooperation in terms of alternative finance source and brand promotion. The improved disclosure level is vital to enhance the trust of investors, reflecting the effectiveness of risk management to some extent. Provided that the assumptions in 4.2.1 are feasible and realized, the standardized disclosure “package” will be an obligation to fundraisers. The verification of information disclosed by the fundraisers and the platforms by a third-party organization is necessary to ensure the authenticity, protecting small investors, most of whom do not have such an ability. A robust risk management system, including a throughout due diligence, an effective rating system, and post-investment management that can lower the default probability and loss, plays an essential role in the survivals of the RECF platforms.¹⁶⁸ From the recovery of default perspective, a RECF platform that enables to operate the property by own or by its partners when the investment is in trouble seems reliable.

4.2.5 Emerging Players

Besides the startups, venture companies, large developers, and hospitality operators, more

¹⁶⁸ Ningning Tao. 2018. “Local crowdfunding platforms will upgrade the risk control system, and speculative arbitrage as well as fake crowdfunding will be eliminated”. Accessed by July 24, https://www.thepaper.cn/newsDetail_forward_2035470.

emerging players, such as SMEs in RE development, PE fund, and traditional financial institutions, will engage in the RECF industry.

The primary financing sources for Chinese developers include bank loans, stock issuance, bond, “REITs,” PE fund, oversea financing, convertible bond, and syndicate loans.¹⁶⁹ The most significant challenge for small and medium developers is that they cannot leverage on brands, credits, and various resources like large or top developers to get finance.¹⁷⁰ Banks now are under pressure from Beijing to deleverage, and thus, loans are difficult to get. Most small and medium developers cannot satisfy the CSRC’s requirement for stock or bond issuance, while the cost of overseas listing is too high for them to afford; PE funds or oversea capital prefer to cooperate with large developers.¹⁷¹ “REITs” might be one solution, but its expected return is high in China currently, increasing the financing cost, while the investment term is 1 to 3 years in general, not matching with the long-term capital requirement of developers.¹⁷² Therefore, Chinese small and medium developers are trapped in funding woes, facing bankruptcy owing to high leverage. 90% of small and medium developers are predicted to shut down.¹⁷³ In such a situation, RECF is a probable financing tool for SMEs in the field of RE development, and small and medium developers are supposed to be more active participants.

As RECF keeps growing, more institutional players will participate in the industry. There is an apparent gap between institutional investors who look for sustainable projects to invest in, and enterprises, especially SMEs, which look for investment.¹⁷⁴ At present, the RECF platforms in China prefer lodging sector partly because of capital size barrier, and thus more institutional

¹⁶⁹ Qing Zhang. 2016. “The Application and Development Research of the Real Estate Crowdfunding in China”. Master Thesis, Dalian University of Technology. 10-16.

¹⁷⁰ China Data Academy. 2019. the Top 100 of China’s Real Estate Development Companies Report 2019. <https://fdc.fang.com/report/12314.html>.

¹⁷¹ Zhang 2016. 10-16.

¹⁷² Zhang 2016. 10-16.

¹⁷³ Dongyue Lin. 2015. “90% of developers will disappear within 10 years; The outlook of small and medium-sized developers is bleak”. Daily Economy News. Accessed by July 25, 2019, http://finance.ifeng.com/a/20150109/13417460_0.shtml.

¹⁷⁴ Hester Holtland and Vicky van Heck. 2019. “White paper: Institutional investors & crowdfunding: The right match? Dutch Association of Investors for Sustainable Development (VBDO)”. <https://www.vbdo.nl/wp-content/uploads/2019/05/Institutional-investors-crowdfunding.pdf>. 3.

players are needed to engage in the RECF market from the capital perspective. It is also not uncommon that institutional investors invest in crowdfunding platforms as a whole instead of specific projects.¹⁷⁵

For example, the PE fund could be a big potential player in the RECF industry as fundraisers or investors. Until May in 2019, there have been 24,307 registered private fund managers in AMAC (Asset Management Association of China), and 77,465 PE funds with size at RMB 13.31 trillion (\$1.93 trillion); China is expected to attract 26% of the total market size of PE fund allocated in Asia (\$14 billion out of \$53 billion), and become the most massive real estate investment target in the region.¹⁷⁶ The radical capital from both overseas and domestic are seeking for worthwhile projects aggressively, and RECF might be a promising solution. For RECF consideration, PE fundraisers or investors with sound investment records are helpful to accelerate the normalization of the industry. The GPs play a crucial role to decrease the default probability and relieve the stress on the RECF platforms with their expertise in the real estate industry, thus enhancing the confidence of small investors in the CFI. On the other hand, LPs like the pension fund, sovereign fund, and insurance fund widely view real estate as a particular fit with their needs. Stable and fast-developing RECF platforms provide ideal marketplaces for them to allocate the capital at hand.

As the RECF has snowballed, besides PE fund, traditional financial institutions such as banks start to look for ways to work with the small fundraisers through the businesses on the RECF platforms. The debt-based crowdfunding and P2P lending have long attracted such institutional investors: in the US, institutional players capture 60% of loans on P2P lending platforms.¹⁷⁷ In China, the financial institution Ping An Group is an active player in the FinTech including RECF, and it launched its RECF platform though failed.

¹⁷⁵ Holtland 2019. 3.

¹⁷⁶ www.guandian.cn. 2019. "Rescue the developers from financing difficulties: how can real estate private equity fund win the game?". Accessed by July 25, 2019, http://www.sohu.com/a/322382246_655634.

¹⁷⁷ Peter Baeck and Liam Collins. 2015. "Big and small funders learning to play together". Accessed by <https://www.nesta.org.uk/blog/big-and-small-funders-learning-to-play-together/>.

4.2.6 Technologies and Innovations

Crowdfunding was born with the genes of technologies and innovations as a subcategory of FinTech. The development of the RECF in China is rudimentary, merely completing a basic model to raise fund online. However, the rapid changes and growth of the industry are predictable as many innovative technologies, and new platforms models spring up. For example, for both investors and fundraisers as well as the RECF startups, so much data from the traditional real estate capital market has transferred online for the first time so that new algorithm-driven business systems might come up for the industry.¹⁷⁸ Data analysis can predict the future investment trends in the RECF: who are the fundraisers? What are the types and sectors of properties? In which areas? How much and how long should these projects be funded based on revenue, operation, and valuation? What models are the most appropriate? What is the best strategy for CFI? Apart from data analysis, ICOs (Initial Coin Offerings) is a new outfit for crowdfunding, and the potential of ICOs soared from the first ICO in 2013, raising unbelievable fund within seconds, and these trends indicate that cryptocurrencies and blockchain technology might drive the future of crowdfunding.¹⁷⁹

4.2.7 RECF Ecosystem

RECF, as well as the whole crowdfunding industry, grows based on the “crowdfunding ecosystem” like other business other than only startups or platforms. There are four interlinked elements in such an ecosystem: regulations, entrepreneurial culture, institutional players, moreover, community engagement.

The regulatory environment with transparency, scale, and speed leveraged by technology is vital to the development of the crowdfunding industry and the success of the RECF startups.¹⁸⁰ The clear regulations to protect retail investors from scams and frauds are necessary to help RECF

¹⁷⁸ Valentina Assenova, Jason Best, Mike Cagney, Douglas Ellenoff, Kate Karas, Jay Moon, Sherwood Neiss, Ron Suber and Olav Sorenson. 2016. “The Present and Future of Crowdfunding”. California Management Review 58 (2). cmr.berkeley.edu.

¹⁷⁹ Anya Phan. 2018. “The Past, Present & Future of Crowdfunding”. Accessed by July 25, 2019, <https://medium.com/hyperbridge/the-past-present-future-of-crowdfunding-c029a1746c60>.

¹⁸⁰ The World Bank 2013. Crowdfunding’s Potential for the Developing World. 51.

win the public trust and avoid to make the industry collapse. RECF startups will also benefit from such an environment because they can make effective strategies according to the terms of regulations and suffer from fewer risks of going bankrupt than operating businesses that are perhaps illegal. In order to encourage the globalization of RECF, how the cross-border regulators cooperate with each other under different cultural and political context is challenging.

RECF startups are not the only involvers to establish an entrepreneurial culture; Government support, institutional oversight, and other technological enterprises related to RECF play a critical role. Besides the regulatory environment, the government can support the RECF initiatives by providing preferential policies on tax relief, co-working space, or incubators as well as accelerators. The oversight from the third-party institutions will standardize Chinese RECF field and strengthen small investors' confidence in the industry. Additionally, all the technological enterprises related to crowdfunding assist in the development of the industry. For example, Once RECF business starts scaling up or expanding globally, the money transfer platforms will be essential.

Institutional players in the real estate industry and capital markets, such as developers, PE fund (both GPs and LPs) or traditional financial institutions can act more than fundraisers or money partners. They can leverage their expertise, data, and capital as the partners of RECF platforms to assist in due diligence, rating reference, and asset management, farther enhancing the reliability of the RECF industry.

As to community engagement, the current Chinese retail investors for crowdfunding are, "are more accustomed to the role of buyer rather than investor. They tend to be more interested in the physical products and benefits such as early delivery of the good or discount prices, rather than showing support for the entrepreneurial and inventive spirit, which has been an important element for crowdfunding's popularity in the US".¹⁸¹ Since the users' mentality will shape the

¹⁸¹ The World Bank 2013. Crowdfunding's Potential for the Developing World. 100.

future of the industry, “crowdfunding education” offered by the members in the RECF ecosystem is necessary to expand small investors’ interpretation of the industry. The education endows investors with the knowledge about RECF, helps them to understand whether they are suitable for CFI, and protect them from being trapped by the low-quality RECF platforms or projects. Academic institutions, social media, and NGOs will contribute to the ecosystem. The views about the RECF industry posted on Facebook or Wechat official amounts sprinkle upon the public, increasing the potential customer base.

The study might not mention all the relevant parties of RECF, but, undoubtedly, a robust RECF ecosystem in China cannot be achieved unless a close collaboration established by all the stakeholders.

CHAPTER 5: CONCLUDING REMARKS

5.1 Concluding Remarks

The first part of this chapter will illustrate the summary of the research findings related to the questions in Chapter 1 (1.2).

Q1: What is the current state of the RECF in China in terms of history, market size, structure model, and players?

The RECF in China is a young latecomer, and it started in 2014 but has boomed very fast with a market value at \$590 million in 2017, double that of the UK and Europe. After the Vanke's first trial, large developers and several traditional financial institutions flocked in the market to scramble the hot cake by cooperating with the existing mixed platforms such as JD.com or building their RECF capability on their own. Various platform models and investment offerings have emerged during 2015; However, many of them have touched the red tape of the existing Chinese regulations, laws, and policies. The intervention from government clamped down the Chinese RECF, leading most popular platforms at that time to shut down. Even the RECF businesses on the mixed crowdfunding sites shrunk to avoid the regulatory uncertainties. Fortunately, the industry is projected to grow continuously under such an unclear regulatory environment. The inevitable drivers are not limited to the strong financing demand of SMEs caused by the market gap, investment demand from retail investors, potential CRE market, and emerging innovative technologies.

The present RECF industry in China, though with an incredible market volume, is over-concentrated on a few platforms such as Duocaitou and Kaishiba discussed as the case studies in Chapter 3. The platforms exclusively focusing on the RECF vertical are less developed than those in the other RECF-leading regions; In such a market, many RECF investment offerings are listed on the mixed crowdfunding platform. The cooperative building model, wealth management

model, and market model has been widely accepted as the mainstream RECF platform models in China, but from the fundamental crowdfunding structure model perspective, equity-based, revenue-based and reward-based models are the most common, while the latter two are more popular than the equity-based model. The key players in the current RECF market of China include e-commerce giants (BAT, JD.com), traditional financial service institutions and large developers besides the RECF startups and ventures, although the former three players became more cautious than they were because of the unstable regulatory environment. The RECF business in China is insufficiently diversified since it is currently so focused on the hospitality (hotel and homestay) and the rental apartment sector, conceivably resulting in the higher risk than the investment portfolios with enough diversification.

Q2: What are the successful cases in terms of platforms, and what are the factors that affect them?

The number of successful platforms is minimal after 2015 called “Year one of regulation.” Now, the largest platform in the RECF vertical is Duocaitou (3.4.1), which has raised RMB 4.821 billion for 844 projects until July 2019, while Kaishiba (Kaistart) is a mixed crowdfunding platform active in the RECF vertical (3.4.2). Most campaigns on both platforms are for hotels, homestays, and rental apartments. The investment minimum of most offering starts from RMB 10,000 (\$1,250), and the common investment term ranges from two to five years. The expected return depends on the specific projects, but the practical value ranges from 10% to 20% (3.4) based on the case studies. Investors exit mainly through repurchasing by the fundraisers at the assumed nodes on the initial agreement or the end of the investment, but the repurchase is not guaranteed. Arisen tourism and consumption upgrading are two main drivers for the successes of these two cases, while the businesses focusing on these sub-sectors avoid the risks related to the housing market. Besides, the Chinese government who encourages to develop the rental housing market supports the businesses for the rental apartments. Those unsuccessful RECF platforms were shut down between 2015 and 2019 mainly because their business models, no matter co-investment in the NPA or cooperative building, assisted in the speculative activities in the housing market in

disguise, prohibited by Chinese regulators.

Q3: What are the main challenges and risks of RECF in China?

The biggest challenge or risk for the RECF in China is the blurred regulatory environment which scares off the potential players, including investors. Though a rudiment regulation of the equity-based crowdfunding is expected to be issued in 2019, the dust is not settled yet; There are no clear regulations for other types of crowdfunding. Due to the complex of the real estate industry, the RECF investment is highly possible to conflict with the changing policies.

Another weakness of the Chinese RECF industry is the lack of diversification regard of the classes of underlying assets, locations of the properties (domestic), and limited types of the offerings (equity, revenue, and rewards), leading to high risk for platforms and investors. The current Chinese RECF platforms are in the early stage in terms of their expertise in real estate, level of disclosure, and ability to control risk. Besides, the low level of globalization and seemingly low desire to expand globally will restrict the future development of the Chinese RECF.

Q4: Are there potentials or opportunities to develop RECF in China? What are the underlying drivers, and what might be the future?

Chapter 4 discussed the potentials, opportunities, and future of the RECF in China. The RECF in China is promising, considering market demand, institution engagement, and technological innovation.

Market Demands

- The prosperity of CRE in China creates considerable room for the birth of new RECF products;
- There is a funding gap for the SME developers, and institutional investors are looking for projects to invest in;

- The RECF products are more understandable to Chinese investors, most of whom view real estate as a preferential asset.

Institution Engagements

- Regulatory institutions with the help of the industry association will involve in the RECF industry to improve the regulatory environment, probably triggering a new wave of development;
- Institutional players in the real estate investment such as the PE fund, participate in the game with their experience and expertise, diversifying the types of underlying assets and enlarging the size of the RECF investment as well as increasing the confidence of investors; Other traditional financial institutions contribute to the industry by their brand, capital, data, and customer base.

Technological Innovations

- As a “family member” of FinTech, RECF will develop with the innovation and update of technology. For example, transparency, liquidity, the accuracy of valuation, and risk management will be enhanced through data analysis or blockchain technologies.

The expectations for the future RECF in China from this study’s perspective are:

- There will be a more precise and flexible regulatory system in the next few years;
- More diversified investment options with different asset classes, locations, investment terms, and structure models will emerge, and the debt-based RECF is expected to catch up and soar in the future;
- The RECF platforms will improve the transparency, liquidity, risk management (i.e., due diligence, rating system, default recovery) and ways to exit of the investment offerings either by strengthening their operating abilities, using new technologies or cooperating with institutional investors;
- Institutional players help the rapid growth of the industry in the future;
- The globalization of the Chinese RECF platforms and more cooperation among cross-

border players (crowdfunding platforms, ventures, developers, other related operators) boost the new opportunities of industry growth;

- A RECF ecosystem will be built up.

5.2 Limitation and Further Research

The typical limitations in this study are data sources, and lack of interviews for the RECF platforms in the case studies to confirm the results.

The ideal data for a statistic on market size or other use is no later than 2018. However, in this study, some data in 2017 or before was used partly because the database such as Venture Scanner is unavailable due to fund limitation. Moreover, even the database which focuses on FinTech and online alternative finance startups does not probably contain market data in all the regions. Unlike for an organization like Cambridge Center for Alternative Finance, it is difficult for an individual researcher to conduct the study with the supports from the RECF platforms as well as the official associations such as UKCFA (the UK Crowdfunding Association) and get responses with statistical significance. Therefore, the data and information from the reports from these organizations are not updated enough.

Data and information were extracted from the yearly and monthly reports issued by different organizations to get an understanding of the development of the RECF in China from 2014. For example, Yingcan consulting company published the crowdfunding industry report yearly from 2015 to 2017, and zhongchouzhijia.com released monthly crowdfunding reports regularly from 2016. Though all these organizations research on the overall status of the Chinese crowdfunding, their targeted platforms, and classification methods might vary, leading the comparison rough. Another concern about the study is that the data, such as the amount of the raised fund or average annual return directly from the RECF platforms is self-reported, and probably not accurate or reliable.

Due to the limited connections with the RECF industry and time constraints, there are no

interviews for the RECF platforms in the case studies to understand more about them from their internal perspectives that can contribute to a more objective analysis with the public news and reports. Not all the data and information are available on the official websites for the public, while the empirical findings of these RECF platforms based on public information might not reflect the overall picture and underlying reasons as well as motivations without interviews. Therefore, it is not unreasonable to assume that the predictions for the trends are not convincing enough only by the desk work.

RECF in China is very young and developing fast. All the empirical data and the conclusions speculated are quite limited in terms of timeliness because the market changes quickly. Here might be a few potential topics for the future researches in the RECF in China:

- Understand how the RECF platforms can make their risk management system effective when every campaign contains hundreds of investors in order to protect retail investors, for example, from a scam, fraud, and severe default losses;
- Attempt to know the exact ways that institutional investors can participate in the RECF as well as their motivations, requirements, and preferences;
- Study the feasibility of the cross-border RECF platforms and the possible models of operations;
- Dig out the roles of players in a RECF ecosystem and the mechanism of an efficient system.

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APPENDIX A: SELECTED GLOBAL RECF PLATFORMS

Fundrise^{182 183}



Location: United States

Founded: 2010

Platform model: Equity/Debt

Property types: Commercial, Residential, Single-Family

Fundraised (cumulative): \$660 million¹⁸⁴

Fund invested (cumulative): \$2.5 billion

Number of Projects Funded: N/A

Members/Investors: 500,000

Members/Investors from: United States

Average annual return: 8.7 - 12.4%

Management fee: 0.85%¹⁸⁵

Minimum investment: \$500 (Starter portfolio); \$1,000 (Core portfolio)

Secondary marketplace: No

Auto invest: Yes

Fundrise is one of the pioneers of online RECF. Its first-round of Series A investment was led by Chinese social networking company Renren (a Chinese version of Facebook) who invested \$31 million of the total \$38 million¹⁸⁶. An eREIT (electronic Real Estate Investment Trust) was invented and launched by Fundrise for investors to invest in commercial real estate in 2015, shocking the RECF. Fundrise does not require accreditation for investors. Besides regular investment offerings, investors have an opportunity to engage in Fundrise IPO (internet Public Offering) process by investing up to 25% of their total account balance. Unfortunately, the investment on the platform is only available to US residents. As mentioned in the chapter above, Fundrise has no secondary market itself, and it has a quarterly redemption plan for eREIT while distributions are not guaranteed. For investors with other investment offerings, they need to submit a redemption request and might obtain liquidity with a probable penalty of up to 3% monthly after a 60-day waiting period.

¹⁸² Accessed by June 30, 2019, <https://fundrise.com/>.

¹⁸³ Investorjunkie. "Fundrise Review 2019: Invest in Commercial Real Estate Passively". Accessed by June 30, 2019, <https://investorjunkie.com/44326/fundrise-review/>.

¹⁸⁴ Wikipedia. "Fundrise". Accessed by July 25, 2019, <https://en.wikipedia.org/wiki/Fundrise>.

¹⁸⁵ The eDirect offerings, eREITs and eFunds, pay a 0.85% annual asset management fee. In addition, clients of the investment services and management system pay a 0.15% annual investment advisory fee, although this may be waived in certain circumstances. In total, expect to pay as much as 3% on fees. (Sources: <https://investorjunkie.com/44326/fundrise-review/>).

¹⁸⁶ Wikipedia. "Fundrise".

Realty Mogul^{187 188}



Location: United States
Founded: 2013
Platform model: Equity/Debt
Property types: Commercial, Residential, Single-Family
Fundraised (cumulative): \$400 million
Fund invested (cumulative): \$2 billion
Number of Projects Funded: 300
Members/Investors: 180,000
Members/Investors from: Globally
Average annual return: N/A
Management fee: depends on investment options
Minimum investment: \$1,000
Secondary marketplace: No
Auto invest: N/A

Realty Mogul is a leading RECF platform in the US, backed by various venture capital firms and additional strategic investors such as real estate firms. Realty Mogul has raised \$9 million for its first capital raise from Canaan Partners, and an additional \$35 million from Sorenson Capital, Canaan Partners, and additional strategic partners in July 2015. The platform serves for both Accredited investors and non-accredited investors, but subject to some legal limitations; The later ones are only eligible to invest in the MogulREIT I and MogulREIT II offerings. Its obvious drawback is that the investment cannot be quickly sold or traded on public stock exchanges, and there is no secondary market on the platform.

¹⁸⁷ Accessed by June 30, 2019, <https://www.realtymogul.com/>.

¹⁸⁸ Investorjunkie. "Realty Mogul Review 2019 – Real Estate Investing Through Crowdfunding". Accessed by June 30, <https://investorjunkie.com/45797/realty-mogul-review/>.

Property Partner¹⁸⁹



Location: United Kingdom

Founded: 2014

Platform model: Equity/Debt (Buy-to-let investment plans)

Property types: Apartment buildings, houses, commercial

Fund invested (cumulative): EUR 148 million

Number of Projects Funded: N/A

Members/Investors: 13,000

Members/Investors from: Globally

Average annual return: 6.5-8.5%

Management fee: 2% (One-off fee)

Minimum investment: EUR 1,000

Buyback guarantee: No

Secondary marketplace: Yes

Auto invest: Yes

Property Partner is the biggest RECF site in Europe based in the UK with more than EUR 131 million in assets under management (current investments). Investors can invest in individual projects and investment plans (an income plan, balanced plan, and growth plan). On the platform, investors can create a diversified portfolio when investing over EUR 5000. The methods to withdraw for investors are either selling it on the resale market or exit at market value after five years with Property Partner's "5-yearly exit protection".

¹⁸⁹ Accessed by June 30, 2019, <https://www.propertypartner.co/>.

The House Crowd¹⁹⁰



Location: United Kingdom

Founded: 2012

Platform model: Equity/Debt (Peer-to-peer lending loans, property development and property crowdfunding for buy-to-let)

Property types: N/A

Fund invested (cumulative): EUR 105 million

Number of Projects Funded: 398

Members/Investors: 25,487

Members/Investors from: European countries and selected other countries (Switzerland, Canada, Australia, New Zealand, etc.)

Average annual return: 9.2% (Peer-to-peer lending, net of any fees); 10% (Equity)

Management fee: No (debt, charge borrowers); 5% (Equity)

Minimum investment: EUR 1,000

Secondary marketplace: No

Auto invest: Yes

The House Crowd is the second-largest RECF platform in the UK. The platform provides various investment options with detailed information and auto-invest. The platform claims that there have been zero capital losses for any members on its peer-to-peer loans, development loans or assured rental products because they only focus on investments that produce predictable income returns instead of speculative investment. However, there is not a secondary market on the platform. So, it is probably more difficult for investors to exit investments before their loans or projects end than for those on the platforms with secondary markets.

¹⁹⁰ Accessed by June 30, 2019, <https://www.thehousecrowd.com/>.

EstateGuru¹⁹¹



Location: Estonia

Founded: 2013

Platform model: Debt (Short term real estate loans for property developers, secured)

Property types: N/A

Fund invested (cumulative): EUR 127 million

Number of Loans Funded: 834

Members/Investors: 25,728

Members/Investors from: European countries

Average annual return: 12.1%

Management fee: No (Charge borrower)

Minimum investment: EUR 50

Buyback guarantee: No

Auto invest: Yes

Secondary marketplace: No

Auto invest: N/A

EstateGuru is the third most prominent RECF site in Europe. The platform lists real estate loans for property developers with an average LTV 57.81%. All the loans are backed with a mortgage. The average loan term of issued loans is 14.4 months, while 10.4 months is the average loan term of repaid loans and €152,424 is the Average loan size. Due to the short term and small capital size, EstateGuru advertises itself as one of the safest asset classes. If a borrower is in financial difficulties, the platform will negotiate with both parties for solutions. The borrower might be given a repayment break before the law firm hired by the platform act the debt.

¹⁹¹ Accessed by June 30, 2019, <https://estateguru.co/>.

Investacrowd^{192 193}



Location: Singapore

Founded: 2015

Platform model: Equity/Debt

Property types: Commercial, Residential

Fundraised (cumulative): \$40 million

Fund invested (cumulative): \$450 million

Number of Projects Funded: 19

Members/Investors: 1,750

Members/Investors from: Globally

Average annual return: 14.53% (2018)

Management fee: No

Minimum investment: S\$100,000 (S\$25,000 for some first-time investors)

Secondary marketplace: Yes

Auto invest: N/A

Investacrowd is one of only a few crowdfunding platforms in Singapore and called best crowdfunding platform for investing in real estate by ValueChampion Singapore, a free source for information and tools for choosing a credit card, insurance plans, loans, and investments. It allows investors to invest in RE development in developed markets including Australia, Hong Kong, Japan, the United Kingdom, the United States, and Singapore by debt or equity ways. All projects are security-backed to protect investors from defaults to some extent. Like most of RECF platforms, Investacrowd cannot guarantee repayment but reduce the risk. The disadvantages of Investacrowd might be its minimum investment that is higher than most of the platforms globally and the requirement for accredited investors.

¹⁹² Accessed by June 30, 2019, <https://www.investacrowd.com/>.

¹⁹³ Valuechampion. "Singapore's best crowdfunding platform for investing in real estate". Accessed by June 30, 2019, <https://www.valuechampion.sg/investacrowd-p2p-crowdfunding-investors-review>.

APPENDIX B: THE COMPLETED APARTMENT CAMPAIGNS ON DUOCAITOU

Chinese Name	Name	Model	Target Amount (RMB, million)	Fund raised (RMB, million)	Minimum (RMB)	City
橙堡公寓 (金恒德店二期)	Chengbao Apartment (The 2nd phase of Jinhengde)	Revenue	0.9	1.59	10,000	Chengdu
青沐公寓	Qingmu Apartment	Revenue	0.8	2.09	10,000	Shenzhen
E+公寓 (三期)	E+ Apartment (The 3rd phase)	Revenue	2.0	2.92	10,000	Nanjing
M5 行政公寓酒店	M5 Executive Apartment	Revenue	2.0	3.45	20,000	Chengdu
包租婆女神公寓 (二期)	Baozupo Goddess Apartment (The 2nd phase)	Revenue	1.0	10.26	20,000	Beijing
橙堡公寓 (金恒德店)	Chengbao Apartment (Jinhengde)	Revenue	1.0	4.00	20,000	Chengdu
雪鸮公寓 (24 中学店)	Snowy Owl Apartment (No.24 Middle School)	Revenue	1.0	1.71	10,000	Dalian
JIKHOME (武汉观澜国际店)	JIKHOME (Guanlan International)	Revenue	1.0	1.06	10,000	Wuhan
NeXHome (轻奢公寓杭州店)	NexHome Apartment	Revenue	1.0	4.45	10,000	Hangzhou
魔族国际青年社区	Mozi International Youth Community	Revenue	1.0	6.11	20,000	Shanghai
返场项目 新人专享第 6 辑	Returning Project for New Investors (The 6th)	Revenue	0.3	0.48	10,000	Beijing
美滋梦公寓 (武汉欢乐谷店)	Meizimeng Apartment (Huanlegu)	Revenue	1.0	1.14	20,000	Wuhan
乐乎城市青年社区 (苏铁阳光店)	Lehu City Youth Community (Yangguang)	Revenue	1.0	1.67	10,000	Chengdu
寓米公寓 (广州海珠合生广场店)	Yumi Apartment (Haizhuhesheng Plaza)	Revenue	2.0	2.31	10,000	Guangzhou
未来城 (上海万体馆店)	Vly Apartment (Wantiguan)	Revenue	3.0	3.96	10,000	Shanghai
武汉杰晨美寓	Wuhan Jiedaokou Apartment	Revenue	2.0	5.14	10,000	Wuhan
E+公寓 (二期)	E+ Apartment (The 2nd phase)	Revenue	2.0	3.82	20,000	Nanjing
朗筑公寓 (西溪湿地店)	Langzhu Apartment (Xixi Wetland)	Revenue	3.0	6.08	20,000	Hangzhou
请住 分散式青年居住空间	Qingzhu Distributed Youth Living Space	Revenue	2.0	10.95	20,000	Beijing
成都像素公寓	Chengdu Pixel Apartment	Revenue	3.0	4.03	20,000	Chengdu
悠年公寓 Downtown	Younian Apartment Downtown	Revenue	2.2	6.96	20,000	LA, USA
沃家 (大冲店)	Wojia (Dachong)	Revenue	4.0	12.60	10,000	Shenzhen
E+青年公寓	E+ Youth Apartment	Revenue	2.0	6.30	20,000	Nanjing
恺亚国际公寓 (红星店)	Kaiya International Apartment (Hong Xing)	Revenue	3.0	13.37	25,000	Shanghai
怒醒公寓 (会展中心店)	Nuxing Apartment (Exhibition Center)	Revenue	2.4	3.58	20,000	Zhengzhou
大阪川 house 旅行公寓	Osaka House Apartment	Revenue	2.0	8.14	20,000	Osaka, Japan
V+SPACE (环球港社区)	V+SPACE Community (Global Harbor)	Revenue	5.0	18.82	20,000	Shanghai

请住·留学生公寓 (传媒大学店)	Qingzhu International Student Apartment (Communication University of China)	Revenue	6.0	34.60	50,000	Beijing
青宿 1987 公寓	Qingsu 1987 Apartment	Revenue	1.0	10.04	20,000	Hangzhou
臻爱逸家(汉峪金谷店)	Zhenaiyijia (Hanyujing)	Revenue	8.0	28.70	50,000	Jinan
西兰蒂亚公寓酒店	Zealandia Apartment	Revenue	10.0	35.50	100,000	AT, USA
燕京里青年社区	Yanjingli Youth Community	Revenue	1.0	3.30	25,000	Beijing
包租婆女神公寓	Baozupo Goddess Apartment	Revenue	5.0	15.00	50,000	Beijing
V+SPACE (杭州江南社区)	V+SPACE Community (Jiangnan)	Revenue	3.0	31.20	20,000	Hangzhou
V+SPACE (东方路社区)	V+SPACE Community (Dongfang Road)	Revenue	3.0	10.22	20,000	Shanghai
臻爱逸家(领秀城店)	Zhenaiyijia (Lingxiu City)	Revenue	3.0	5.32	20,000	Chongqing
XY 酒店公寓 (北京三里屯店)	XY Hotel Apartment (Sanlitun)	Revenue	1.0	1.39	10,000	Beijing
请住·留学生公寓	Qingzhu International Student Apartment	Revenue	4.2	23.31	35,000	Beijing
有一居	Youyiju	Revenue	2.0	0.38	20,000	Tokyo, Japan
V+SPACE (金桥社区)	V+SPACE Community (Jinqiao)	Revenue	5.0	9.25	50,000	Shanghai
泰国普吉岛 UTL 公寓	Thailand Phuket UTL Apartment	Revenue	0.6	3.00	300,000	Phuket, Thailand
非鱼丽舍(楚天府)	Feiyulische (ChuTianFu)	Revenue	2.0	2.52	20,000	Wuhan
寓米西尔曼公寓 (合生广场店)	Yumi Apartment (Hesheng Plaza)	Revenue	2.0	3.30	20,000	Guangzhou
屋奇良宿(成都高新区店)	Wuqiliangsu (High Tech District)	Revenue	1.9	2.92	10,000	Chengdu
蜜空间公寓(殷高西路店)	Mi Space Apartment (Yingao West Road)	Revenue	3.0	7.34	20,000	Shanghai
非鱼丽舍(云悦坊)	Feiyulische (Yun Yuefang)	Revenue	3.0	6.28	20,000	Shanghai
泰国普吉岛 UTN 公寓	Thailand Phuket UTN Apartment	Revenue	6.3	1.26	630,000	Phuket, Thailand
XY 酒店公寓 (北京金茂府店)	XY Hotel Apartment (Jinmaofu)	Revenue	1.0	1.17	10,000	Beijing
可遇学霸公寓	Keyuxueba Apartment	Revenue	2.0	2.69	10,000	Wuhan
恺瑞居 (旭辉海上国际)	Kairuiju (Xuhui Haishang International)	Revenue	3.0	4.12	20,000	Shanghai
屋奇良宿(春熙路店)	Wuqiliangsu (Chunxi Road)	Revenue	2.0	2.40	10,000	Chengdu
XY 酒店公寓(东直门店)	XY Hotel Apartment (Dongzhimen)	Revenue	0.8	0.80	5,000	Beijing
三亚百栎度假公寓	Sanya Baidu Resort Apartment	Revenue	1.0	1.27	10,000	Sanya
V+SPACE (陆家嘴社区)	V+SPACE Community (Lujiazui)	Equity	3.0	37.10	50,000	Shanghai
臻爱逸家(鲁能星城店)	Zhenaiyijia (Nuneng Xing City)	Equity	15.0	43.90	30,000	Chongqing
可遇女神公寓	Keyu Goddess Apartment	Equity	6.0	6.85	50,000	Wuhan
Mill Creek 亚特兰大高级公寓	Mill Creek Residential	Equity	10.0	3.00	1,000,000	AT, USA

(Sources: developed by the author. Refer to the official website of Duocaitou. Accessed by July 25, 2019, www.duocaitou.com.)

APPENDIX C: THE COMPLETED HOTEL CAMPAIGNS ON KAISHIBA

Chinese Name	Name	Target (RMB)	Fund raised (RMB, million)	Investor	GFA (Sqm)	Key	Valuation (RMB, million)	Term (Year)	Exit (Year)	Return	Min (RMB)
昆明盈澜雨禾雅舍	Yingque · Yuheya House, Kunming	50,000	1.37	58	655	12	5.00	3	2,3	8%-10%	15,000
腾冲云边精品酒店	Cloud Edge Boutique Hotel	50,000	1.74	63	1,230	11	3.50	5	2,5	10.70%	21,000
小鸟云居长沙铜官窑店	A Bird in The Cloud, Changsha	100,000	7.23	253	2,165	58	10.00	5	3,5	12.30%	20,000
上海云庐梵品酒店	Yunlu Vatican Hotel, Shanghai	100,000	5.87	219	N/A	N/A	10.00	5	2,3,5	N/A	N/A
RAW 酒店	Raw Hotel	50,000	3.25	131	1,700	25	5.50	5	2,5	11.76%	16,500
浙江景宁云鹤和美酒店	Yunhehemei Hotel Jingning	50,000	1.31	59	503`	67	8.00	5	2,3,5	N/A	16,000
安母酒店金山店	Golden Hill Inn	50,000	9.32	297	4,365	92	17.00	3	1,2,3	10%-15%	17,000
圣莲岛度假酒店	Suining Shenglian Island Resort	100,000	0.32	26	10,800	78	35.00	3	2,3	11.19%	9,800
三亚约主题酒店	Sanya Yue, The Theme Hotel	100,000	2.98	189	3,300	N/A	8.00	5	3,5	N/A	N/A
上海浮隐轻旅酒店	Fuyin Hotel Shanghai	100,000	1.36	40	1,420	N/A	8.00	5	3,5	N/A	N/A
葛丹悠悠艺术酒店	Gedan Youyou Art Hotel	100,000	1.80	85	1,300	N/A	5.00	5	3,5	N/A	N/A
舟山海天国际酒店	Zhoushan Haitian International Hotel	100,000	5.51	221	11,095	151	15.00	3	3	N/A	N/A
甲邸飞鸟集	Jiadi Stray Birds	50,000	3.20	51	3,300	N/A	10.00	3	3	N/A	N/A
维也纳国际酒店南宁安吉万达店	Vienna International Hotel Nanning	100,000	2.14	41	12,000	N/A	25.00	10	3,3,3	N/A	N/A
桔子精选酒店虹口足球场店	Orange Hotel Shanghai	100,000	6.52	140	6,700	125	28.00	3	1,2,3	N/A	N/A
维也纳酒店拉萨堆龙时代广场店	Vienna International Hotel Lasa	100,000	2.54	42	3,757	95	16.50	3	3	N/A	N/A
淳意V酒店	Chunyi V Hotel	100,000	2.23	47	3,069	78	13.20	N/A	3	N/A	N/A
如花美宿酒店公寓富力店	Ruhameisu Hotel Fuli	50,000	1.17	57	1,050	19	1.50	3	2,3	N/A	N/A
文山皇朝酒店	Wenshan Imperial Hotel	100,000	0.35	27	4,098	63	5.00	5	3	N/A	N/A
西塘诗韵艺术酒店	Shiyun Art Hotel	50,000	3.88	52	6,200	N/A	10.00	5	3,5	N/A	N/A
智派公寓五和店	Zhipai Aparment Wuhe	100,000	5.19	130	6,410	238	13.00	5	3,5	N/A	N/A

环球恐龙城洛曼城堡酒店	Dinoman Hotel	200,000	4.49	209	3,632	56	15.00	5	3,5	N/A	N/A
武夷山德懋堂	Demaotang Resort Wuyi Mountain	100,000	39.38	943	8,829	N/A	50.00	5	3	N/A	N/A
德清莫干山诺富特酒店	Novotel Hotel Moganshan Deqing	200,000	13.40	713	31,188	N/A	60.00	5	3	N/A	N/A
智派公寓梅林店	Zhipai Apartment Meilin	100,000	3.70	587	2,010	70	5.00	5	3,5	N/A	N/A
广西千景酒店云天宫店	Guangxi Qianjing Hotel, Yuntiandong	200,000	1.62	198	8,293	96	12.00	5	3,5	N/A	N/A
九华山开元美途酒店	Kaiyuanmeitu Hotel Jiu Hua Mountain	100,000	5.24	611	360	30	22.00	6	3,6	N/A	N/A
昆明 WILL 茶文化主题酒店	Kunming WILL Tea Culture Theme Hotel	100,000	3.86	383	1,700	40	16.00	5	3	N/A	N/A
香格里拉桔子酒店精选	Orange Hotel Shangri-La	300,000	7.92	537	5,000	94	20.00	5	3	N/A	N/A
长沙小鸟云季酒店	A Bird In The Cloud Changsha	200,000	6.33	376	3,557	46	10.00	5	3	N/A	N/A
兰州 Holiday Inn	Lanzhou Holiday Inn	100,000	43.08	743	21,800	220	80.00	5	3,5	N/A	N/A
Hotel 秀	Show Hotel	200,000	9.28	506	3,180	80	N/A	N/A	N/A	N/A	N/A
龙泉翡丽酒店	Feeling Hotel Longquan	200,000	7.75	490	13,020	108	50.00	5	3	N/A	N/A
璞山云美女儿国酒店	Purmei Lugu Lake Hotel	100,000	8.56	698	2,688	65	14.00	5	3,5	N/A	N/A
宅这里软件园一期店	Residence Here Software Park	100,000	1.68	372	1,500	45	N/A	N/A	N/A	N/A	N/A
秋果酒店 798 艺术区店	Qiuguo Hotel-798	300,000	29.00	513	2,800	84	35.00	5	3	N/A	N/A
麦吉甄选酒店宁乡店	Maiji Hotel Ningxiang	100,000	8.02	283	6,000	116	N/A	N/A	N/A	N/A	N/A
青岛 U 酒店	Qingdao U Hotel	200,000	15.61	740	3,000	40	N/A	N/A	N/A	N/A	N/A
北山居精品酒店	Beishangju Hotel	200,000	2.61	413	179	20	N/A	N/A	N/A	N/A	N/A
维达拉酒店	Hotel Vidale	50,000	1.62	331	4,800	26	N/A	N/A	N/A	N/A	N/A
莫干山宿里 FUN 集度假酒店	Suli Retreat	200,000	7.71	599	2,400	29	N/A	N/A	N/A	N/A	N/A
杭州秀酒店	Hangzhou Show Hotel	200,000	17.00	751	4,700	91	26.00	5	N/A	N/A	N/A
湖南冠君电竞酒店	Hunan Guanjun E-Sports Hotel	100,000	0.67	21	1,741	36	6.50	5	3	N/A	N/A

(Sources: developed by the author. Refer to the completed campaigns on the kaishiba website, accessed by July 25, 2019, www.kaishiba.com.)

APPENDIX D: REGULATIONS AND POLICIES FOR THE CROWDFUNDING INDUSTRY IN CHINA: 2015-2019 (MARCH)

Time	Issued by	Content about Crowdfunding
1.2015	General Office of the State Council	Guiding Opinions on Developing Crowd-Innovating Space and Promoting Massive Innovation and Ventures: Launched the financing pilots of online equity crowdfunding; Standardize and development regional equity market to support SMEs. ¹⁹⁴
7.2015	State Council	Guiding Opinions of the State Council on Actively Promoting “Internet +” Action: launched the innovative pilots to integrate industry and finance; Explore financing services that combine equity and debt. ¹⁹⁵
7.2015	Ten ministries and commissions including the People’s Bank of China	Guiding Opinions on Promoting the Healthy Development of Internet Finance: Equity crowdfunding must be conducted on the platforms of equity crowdfunding (internet websites or other similar digital media); Equity crowdfunding business is regulated by the CSRC.
8.2015	China Securities Regulatory Commission	Notice on Conducting Special Examination for the Institutions Carrying out Equity Financing Activities via the Internet: any entity or individual cannot conduct equity crowdfunding activities Without the approval of the regulatory agencies of CSRC. At present, some “equity crowdfunding” is non-public equity or private equity raised via the Internet, out of the scope of equity crowdfunding specified in the guiding opinions.
9.2015	State Council	Guiding Opinions on Accelerating the Construction of the Platforms to Support Massive Innovation and Entrepreneurship: Implement equity crowdfunding stably and encourage SMEs to raise funding at the early stage by equity-based crowdfunding. ¹⁹⁶
9.2015	General Office of the State Council	Opinions on Promoting Online and Offline Interaction and Accelerating the Innovative Development and Transformation and Upgrading of Businesses: develop online finance such as the third-party payment and non-public equity. ¹⁹⁷
10.2015	Ministry of Commerce	Opinions on Accelerating the Innovative Development of the integration of Online and Offline Service Industry: Guide enterprises in the service industry to fully use the capital market, obtain financial resources for innovation by online non-public equity. ¹⁹⁸
12.2015	State Council	Opinions on Further Improvement of the Ratio of Direct Financing and Optimizing Financial Structure: Lower down the financing cost

¹⁹⁴ General Office of the State Council. The Guidance on Developing Massive Innovation and Entrepreneurship, GBF (2015) No. 9.

¹⁹⁵ State Council. The Opinions of the State Council on Actively Promoting “Internet +” Activities,GF (2015) No. 40

¹⁹⁶ State Council. Guiding Opinions about Accelerating the Construction of Massive Innovation and Entrepreneurship Supporting Platform, GF (2015) No. 53.

¹⁹⁷ State Council. Opinions on Promoting Online and Offline Interaction and Accelerating the Innovative Development and Transformation and Upgrading of Businesses, GBF (2015) No. 72.

¹⁹⁸ Ministry of Commerce. Opinions on Accelerating the Innovative Development of the integration of Online and Offline Service Industry, SFMH (2015) No. 865.

		for real sectors of the Chinese economy; Reduce the leverage ratio of Chinese companies and diversify the risks of China's financial system.
1.2016	State Council	Notice of the State Council on Development of Planning for Promoting Inclusive Finance (2016–2020): Support massive innovation and entrepreneurship by equity crowdfunding platforms; Establish specific laws and regulations on inclusive financial service; Amend the Securities Law and consolidate the legal base of equity crowdfunding. ¹⁹⁹
2.2016	State Council	Opinions of the State Council on Further Preventing and Disposing of Illegal Financing: Issue regulations on P2P lending and equity crowdfunding as soon as possible and promote Internet finance to develop regulatorily.
3.2016	The Fourth Session of the Twelfth National People's Congress	Outline of the Thirteenth Five-year Plan for National Economic and Social Development: Improve the regulation system, and standardize reward crowdfunding, equity crowdfunding, and P2P online lending.
4.2016	State Council	Notice of the State Council on Issuing the Scheme for Promoting Comprehensive and Innovative Reform and Accelerating the Construction of Global Scientific and Technological Innovation Center: Support Shanghai to conduct equity crowdfunding pilot projects. ²⁰⁰
8.2016	State Council	The Thirteenth-five Plan for National Scientific and Technological Innovation: Promote intellectual property securitization pilots and equity crowdfunding pilots, explore and standardize the development of innovative Internet finance. ²⁰¹
9.2016	State Council	Some Opinions on Promoting the Healthy Development of Venture Capital: Standardize the development of Internet-based equity financing platforms and provide information and technology services for individuals to invest in ventures directly.
10.2016	General Office of the State Council	Implementation Plan of Rectification Work of Internet Financial Risks: crack down the illegal, and protect the legal, reduce risks in an orderly way, make clear the division of duties, strengthen coordination.
10.2016	15 ministries and commissions including CSRC	Implementation Plan for the particular rectification work of equity-based crowdfunding risk: Deal with equity financing in the name of equity crowdfunding; Raise funding for private equity fund in the name equity crowdfunding; Illegal funding raising conducted by real estate development enterprises and agencies.
1.2017	Ministry of Industry and Information Technology	Guidance on further promoting the informatization of small and medium-sized enterprises: make full use of the advantages of online lending and equity-based crowdfunding, which have a wide range of efficient and convenient objects, to meet the needs of SMEs.
7.2017	State Council	The opinions of intensifying the implementation of the strategy of innovation-driven development to further promote the in-depth development of mass entrepreneurship and innovation: support the development of Internet finance, guide and encourage the standardized development of crowdfunding platforms, launch

¹⁹⁹ State Council. Notice on Issuing the Development Plan for Promoting Inclusive Finance (2016–2020), GF (2015) No. 74.

²⁰⁰ State Council. Notice on Issuing the Scheme for Promoting Comprehensive Innovation and Accelerating the Construction of Global Scientific and Technological Innovation Center, GF (2015) No. 23.

²⁰¹ State Council. Notice on Issuance of the Thirteenth-Five Plan for National Scientific and Technological Innovations, GF (2016) No. 43.

		pilot projects for public crowdfunding with small amounts of equity, and strengthen risk control and standardized management.
3.2018	China Securities Regulatory Commission	<i>Measures for the administration of equity-based crowdfunding pilots were planned in CSRC's legislative work plan.</i>
9.2018	State Council	<i>Opinions on promoting high-quality development of innovation and entrepreneurship and upgrading mass entrepreneurship and innovation:</i> Crowdfunding is defined as an essential financing tool and service tool for entrepreneurship and innovation.
1.2019	State Council	<i>Guiding opinions on supporting the profound reformation and opening up of Xiongan New District in Hebei:</i> Support equity crowdfunding and other innovative business in Xiongan.
3.2019	China Securities Regulatory Commission	<i>Measures for the administration of equity-based crowdfunding pilots:</i> The CSRC has listed equity-based crowdfunding in its legislative work plan for two consecutive years

(Sources: developed by the author. Refer to Chen 2018. Chapter 6; Yingcan Consulting. Crowdfunding Industry Annual Report 2015/2016/2017; Renchuang Consulting. Crowdfunding Industry Monthly Report.)

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