Contributions to Management Science

Andrea S. Funk

Crowdfunding in China

A New Institutional Economics Approach



Contributions to Management Science

More information about this series at http://www.springer.com/series/1505

Andrea S. Funk

Crowdfunding in China

A New Institutional Economics Approach



Andrea S. Funk University of Würzburg Würzburg, Germany

a.t.: Würzburg, Univ., Diss., 2018

ISSN 1431-1941 ISSN 2197-716X (electronic)
Contributions to Management Science
ISBN 978-3-319-97252-7 ISBN 978-3-319-97253-4 (eBook)
https://doi.org/10.1007/978-3-319-97253-4

Library of Congress Control Number: 2018954487

© Springer Nature Switzerland AG 2019

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors, and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Switzerland AG The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland



Acknowledgements

I would like to thank all the people who have supported me over the last few years to realise this project. First and foremost, I would like to thank my supervisor Prof. Dr. Doris Fischer, who has always encouraged me to follow my interests and who enabled me to realise my own research project and simultaneously develop my personality. Secondly, I would like to thank Prof. Dr. Peter Bofinger for his openness on China-related topics and his readiness to assess my thesis. Thirdly, I would like to thank the University of Wuerzburg and my colleagues at the Institute of East and South Asian Cultural Studies for providing me a welcoming working atmosphere. Amongst these, I am particularly grateful to Maximilian Dullo, who served as my sparring partner for all kinds of issues. Fourthly, I thank Rune Steenberg, who introduced me to the theory of financialisation.

Besides, I would like to thank my research peers and interview partners, who have shared my passion for crowdfunding and provided me with valuable insights. Amongst these, I would like to highlight the *German Crowdfunding Network* and the *European Crowdfunding Network*, who enabled me to exchange views with other scholars and also practitioners from the field of crowdfunding. My field research would not have been possible without Feng He, the pioneer of crowdfunding in China, who promptly replied to my LinkedIn request and who introduced me to Du Mengjie. The latter proved to become my most valuable contact in Beijing. I was not just impressed by the information he provided me, but also by his personality and entrepreneurial spirit at a young age. Next to these two gentlemen, I am grateful for knowing Fabienne Frauendorfer, who has introduced me to Grace, a tough lady who patiently taught me a lot about crowdfunding in China. Moreover, I would like to thank Sean and his wife for valuable insights into China's changing crowdfunding landscape, for offering me free accommodation in Guangdong without knowing me in person, and for being heart-warming hosts.

Furthermore, I thank my brother, Joseph Funk, for convincing me of the benefits of the software LaTeX. In addition, my thanks go to Florian Thünken for assisting me with any technical questions and to Thiago Peixoto who shared long hours with me sitting at the desk whenever I was searching for hidden errors. Thanks also go to Katharina Höhendinger for proofreading my draft.

viii Acknowledgements

I would also like to thank my friends, who helped me to overcome struggle and supported me with scientific and non-scientific talks. Above all, I would like to thank Isabell Dettmer, Sabrina Weithmann, Laura Böhnlein, and last but not least Lena Ulmer. My family has always been the greatest support, for which I am deeply grateful.

This dissertation was financially and ideationally supported by a doctoral scholarship of *Hanns-Seidel-Stiftung*. I further thank the *Bayerisches Hochschulzentrum für China*, which has funded one of my field studies in China.

Contents

1	The	Matter	r of Crowdfunding in China	1
	1.1	Motiv	ation	1
	1.2	Theor	у	5
	1.3	Resea	rch Design and Methodology	6
	1.4		ure of This Work	9
2	Crowdfunding in the Context of New Institutional Economics 1			
	2.1	Theor	ies of New Institutional Economics	11
		2.1.1	Institutions, Transaction Costs	
			and Principal-Agent-Relations	12
	2.2	Choic	e of Finance	22
		2.2.1	Categories of Finance	23
		2.2.2	Personal Parameters Influencing the Choice of Finance	27
	2.3	The R	ole of Financial Intermediaries	30
		2.3.1	The Original Function of Financial Intermediaries	30
		2.3.2	The Theory of Financialisation	32
	2.4	Inforn	nal Finance as a Complement to the Formal Finance Sector	36
		2.4.1	Research on Informal Finance	36
		2.4.2	Features of Informal Finance	39
		2.4.3	Rotating Savings and Credit Associations:	
			A Benchmark for (Formal and Informal) Finance	42
	2.5	Intern	et Finance and FinTech	48
3	The	Conce	pt of Crowdfunding in the West Versus in China	51
	3.1	Definition and Origins of Crowdfunding 5		
	3.2	The E	volution and Modifications of Crowdfunding	58
	3.3	3.3 Crowdfunding Research		61
		3.3.1	Western Literature on Crowdfunding	61
		3.3.2	Chinese Literature on Crowdfunding	70
	3 4	Crowo	Ifunding and New Institutional Economics	76

x Contents

		3.4.1	Crowdfunding as an Institution that Rules	
			Principal-Agent-Relations and Economises	
			Transaction Costs	76
		3.4.2	Crowdfunding Platforms Versus Classic Financial	
			Intermediaries	84
		3.4.3	Crowdfunding Versus Rotating Savings and Credit	
			Associations and Other Forms of Traditional informal	
			finance	86
		3.4.4	The Choice for Crowdfunding	90
4	Froi	m Info	mal Finance to Internet Finance in China	95
-	4.1		's Formal Finance Sector	
		4.1.1	Historical Development of China's Banking Sector	
		4.1.2	Current Structure of China's Banking Sector	
		4.1.3	Challenges of China's Banking Sector	
	4.2	Inform	nal Finance in China	
		4.2.1	Informal Finance in China: In Line with the Emergence	
			of Private Entrepreneurship	105
	4.3	FinTe	ch in China: A Product of Entrepreneurial	
		and R	egulatory Forces	108
	4.4	China	's Internet Industry	111
		4.4.1	The Role of the Government	114
		4.4.2	The Ecosystem of China's Internet Giants	117
		4.4.3	China's Mobile Internet Market	128
		4.4.4	China's E-Commerce Market	130
		4.4.5	China's Payments Market	141
5	Cro	wdfund	ling in China	149
	5.1		volution of Crowdfunding in China	
	5.2		dfunding Education and Regulation	
	5.3		hinese Understanding of Crowdfunding	
		5.3.1	P2P Finance	
		5.3.2	Rewards- Versus Equity-Based Crowdfunding	157
		5.3.3	"Crowdfunding kafei" and "Playing with Crowdfunding"	
		5.3.4	WeChat Crowdfunding	165
	5.4	China	's Crowdfunding Platforms	167
		5.4.1	Start-up Crowdfunding Platforms	
		5.4.2	Specialised Versus Comprehensive Versus Combined	1.60
		5.4.2	CFPs.	168
		5.4.3	Financial Corporate Crowdfunding Platforms	170
	<i>E E</i>	5.4.4	E-Commerce Crowdfunding Platforms	172
	5.5		dding Crowdfunding in China's Financial Spectrum	174
	5.6		Studies on Crowdfunding in China	175 176
		5.6.1	Case Study of Palan Youth Hostel	176
		5.6.2	Case Study of Air Pollytion Motor Dita	
		5.6.3	Case Study of Air Pollution Meter <i>Dita</i>	101

Contents xi

		5.6.4	Conclusion of Cases	183
5.7 Embedding Chinese Crowdfunding in the Theore			dding Chinese Crowdfunding in the Theoretical Context	185
		5.7.1	Principal-Agent-Relations and Transaction	
			Cost Economics of WeChat Crowdfunding	
			and E-Commerce Crowdfunding	185
		5.7.2	Chinese Crowdfunding Versus Classic Financial	
			Intermediaries	189
		5.7.3		
			of Financialisation	189
		5.7.4	Chinese Crowdfunding Versus the Original	
			Crowdfunding Model Versus ROSCAs and Other	
			Forms of TIF	192
6	Trac	ditional	Informal Finance Versus Crowdfunding in China	199
	6.1	Implic	eations for Chinese Project Initiators	199
	6.2	Implic	cations for the Chinese Government	205
	6.3	Implic	eations for Chinese Crowdfunders	210
	6.4	Implic	eations for Chinese Crowdfunding Platforms	211
7	Lea	rnings f	from Crowdfunding in China	215
Aj	pend	lix A		221
Re	eferen	ices		233

List of Abbreviations

3C Computer, communications, and consumer electronics

A Agent

ABC Agricultural Bank of China

ADBC Agricultural Development Bank of China

AMC Asset management company
AON All-or-nothing crowdfunding

app Application

ATM Automatic teller machine
B2B Business-to-business
B2C Business-to-consumer

BA Business angel

BaFin Bundesanstalt für Finanzdienstleistungsaufsicht

BAT Baidu Alibaba Tencent

bn Billion

BOC Bank of China

BOCOM Bank of Communications
C2C Consumer-to-consumer

CBRC China Banking Regulatory Commission

CCP Chinese Communist Party
CCTV China Central Television
CDB China Development Bank

CEB China Exim Bank
CF Crowdfunding

CFP Crowdfunding platform **CIC** China Investment Corporation

CMB China Minsheng Bank

CN China

CNNIC China Internet Network Information Center

COD Cash on delivery

CSRC China Securities Regulatory Commission

e- Electronic-based

xiv List of Abbreviations

EC Equity crowdfunding

ECN European Crowdfunding Network

e.g. For example etc. Et cetera excl. Excluding

FinTech Financial Technology

GCN German Crowdfunding Network

GDP Gross domestic product
GMV Gross merchandise value

Huijin Central Huijin Investment Company

ibid. Ibidem

ICBC Industrial and Commercial Bank of China
ICT Information and communication technologies

ID Identificationi.e. That isincl. Including

IP Intellectual propertyIPO Initial public offeringIT Information technology

JOBS Act Jumpstart Our Business Startups Act

KIA Keep-It-All crowdfunding **LSE** Life-style entrepreneur

m- Mobile-basedMAU Monthly active userMOF Ministry of FinanceN/A Not available

n.a. No author providedNCFG Net Credit Finance Group

n.d. No date provided

NFC Near-Field Communication
NIE New Institutional Economics

n.p. No page provided
NPL Non-performing loan
n.y. No year provided
O2O Online-to-offline
OCF Original crowdfunding

P Principal

P2B Peer-to-business lending
P2P Peer-to-peer lending
PBOC People's Bank of China
PC Personal computer

PCBC People's Construction Bank of China

PDA Personal digital assistant

PE Private equity
Pl Project initiator

List of Abbreviations xv

PKU Peking University

PME Profit-maximising entrepreneur
POE Privately owned enterprise

PR Public relations

PRC People's Republic of China

QR Quick response

RCC Rural credit cooperative

ROSCA Rotating Savings and Credit Association

SAC Securities Association of China

SAFE State Administration of Foreign Exchange

SCMP South China Morning Post

SE Serial entrepreneur

SEC Securities and Exchange Commission
SME Small and medium-sized enterprise

SMS Short message service
SOB State-owned bank
SOE State-owned enterprise

TA Transactions

TCE Transaction cost economics
TIF Traditional informal finance

TK Transaction costs

tn Trillion

UCF Unified Compliance Framework

UK United Kingdom
US United States

USA United States of America

VC Venture capitalist
VPN Virtual private network

vs. Versus

WCC World Crowdfunding Conference

WTO World Trade Organization

List of Figures

Fig. 2.1	Common path of institutional change	14
Fig. 2.2	Sources of information asymmetry and transaction costs and	
	potential countermeasures	19
Fig. 2.3	Categorisation of different financial transactions and	
	respective appropriate governance structures	21
Fig. 2.4	Categories of finance including examples	25
Fig. 2.5	Classification of different forms of finance according to the	
	time of their implementation	25
Fig. 2.6	Provision of finance and public services in the West before	
	the era of financialisation	33
Fig. 2.7	Provision of finance and public services since the era of	
	financialisation	34
Fig. 2.8	Relationships between members of a ROSCA	47
Fig. 3.1	The Original crowdfunding concept	53
Fig. 3.2	The Chinese categorisation of crowdfunding versus P2P	72
Fig. 3.3	Triangular relationship and potential threats of a	
	crowdfunding campaign	77
Fig. 3.4	Tasks of a typical crowdfunding campaign (OCF type)	80
Fig. 3.5	Transaction costs of a typical crowdfunding campaign	
	(OCF type)	81
Fig. 4.1	Structure of China's banking sector as of 2014	100
Fig. 4.2	Classification of Chinese state-owned enterprises and	
	privately-owned enterprises	107
Fig. 4.3	Alibaba's core business before its Initial public offering	122
Fig. 4.4	The ecosystem of China's internet giants	124
Fig. 4.5	Development of disposable income and consumption of	
	Chinese rural and urban citizens	131
Fig. 4.6	Share of mobile vs. PC-based online sales in China	133

xviii List of Figures

Fig. 4.7	Categories of non-cash transactions	142
Fig. 5.1	Location of Chinese crowdfunding forms on the financial spectrum	174
Fig. 5.2	Principal-agent-relations and potential threats of a WeChat crowdfunding campaign	
Fig. 5.3	Principal-agent-relations and potential threats of an e-commerce crowdfunding campaign	
Fig. 5.4	Provision of finance and public services in China before the era of financialisation 2.0	
Fig. 5.5		
Fig. A.1	Business models of China's FinTech 50 companies	224

List of Tables

Table 2.1	Categories of transaction costs	10
Table 2.2	Examples of internal and external finance	23
Table 2.3	Transaction costs involved in a typical ROSCA	45
Table 3.1	Fictional crowdfunding campaign of a music album	55
Table 3.2 Table 3.3	Contrasting TIF to ROSCAs and the OCFLikely choices of crowdfunding by different types of	86
	entrepreneurs	92
Table 4.1	Share of bank loans of total capitalisation of Chinese POEs	107
Table 4.2	Numbers of small-scale private enterprises and regular	107
Table 4.3	private enterprises and their capitalisation	107
14010 113	US and Germany	109
Table 4.4	The world's most prospective FinTech unicorns in terms of	
Table 4.5	valuation	110
14010 4.5	capitalisation as of 2014	114
Table 4.6	Mobile phone and mobile internet usage in China and the	
	world as of 2014	129
Table 4.7	China's rural and urban income and consumption from 2000 to 2015	131
Table 4.8	Distribution of China's online sales via PC vs. mobile devices	133
Table 4.9	Revenue distribution of China's m-commerce market in 2014	134
Table 4.10	Top Chinese e-commerce platforms in Q3 2015	134
Table 4.11	Distribution of non-cash transactions in China in Q2 2015	143
Table 4.11	China's mobile payment champions in Q2 2015	144
14016 4.12	Clinia's moone payment champions in Q2 2013	144
Table 5.1	Collected data of reward-based crowdfunding in China of 2014 by Zero2IPO	159
Table 5.2	Collected data of equity-based crowdfunding in China of	139
	2014 by Zero2IPO	159

xx List of Tables

Table 5.3	Contrasting features of TIF, ROSCAs, OCF, WeChat	
	crowdfunding and e-commerce crowdfunding	193
Table 5.4	Transaction costs of TIF vs. ROSCA vs. OCF vs. WeChat	
	CF vs. e-commerce CF	195
Table 5.5	Likely choices of finance by different types of entrepreneurs	197
Table A.1	Interviews conducted during field research between 2013	
	and 2016	221
Table A.2	Literature on PIs' motivation for applying crowdfunding	222
Table A.3	Literature on methods and features of a successful	
	crowdfunding campaign	222
Table A.4	Analysis of 13 Chinese crowdfunding platforms by	
	Zero2IPO in 2014	223

Chapter 1 The Matter of Crowdfunding in China



1.1 Motivation

Crowdfunding (CF) is becoming an increasingly important financial tool. In 2010, the global crowdfunding market accounted for only USD 880 million. According to the recent Crowdfunding Industry Report, the crowdfunding volume in 2014 totalled USD 16.2 billion. By 2016, crowdfunding is expected to surpass the market value of classical venture capital funding. Whilst some years ago, crowdfunding was predominantly applied by charities and actors of the creative industry, it has turned into an alternative financial tool for start-ups, entrepreneurs and Small and medium-sized enterprises (SMEs) across all sectors. Crowdfunding's global growth rate is mainly driven by the Asian crowdfunding market, which grew by 320% between 2013 and 2014, putting it slightly ahead of Europe as the second-biggest crowdfunding region, right after North America. Within Asia, the People's Republic of China (PRC) has been identified as the key market for CF's growth. Despite its growing popularity, research on crowdfunding, particularly on crowdfunding in China, is still scarce. This work aims at closing this research gap.

According to a recent World Bank report, China holds the greatest potential for crowdfunding's future. By 2025, the PRC could account for more than half of the global crowdfunding volume potentially totalling up to USD 50 billion.⁵ Even though crowdfunding was non-existent in China before 2011, its exponential growth rates reflect this potential. In 2014, Chinese citizens had contributed a total of USD 436 million (RMB 2.82 billion) to domestic crowdfunding projects; this figure

¹Emmerson (2015).

²Massolution (2015, p. 13).

³Emmerson (2015).

⁴Massolution (2015, p. 52).

⁵infoDev (2013, p. 10).

rose to USD 864 million (RMB 5.585 billion) in the first half of 2015. Particularly since China's government has passed draft regulations on equity crowdfunding in December 2014, the number of Chinese Crowdfunding platforms (CFPs) has been increasing, from 142 in 2014 to 235⁶ by the end of June 2015.⁷ As the PRC's crowdfunding industry is still quite young, and its growth rates are expected to rise even further, China could indeed become the largest crowdfunding market in the world in the near future.

The approximated figures in the World Bank report seem plausible, yet, the results are based on questionable parameters. Some of the key variables are not applicable to China and thus probably have biased the findings. In addition, the report contains some errors and contradictions. On the other hand, China's crowdfunding features some characteristics that have been neglected by the World Bank and which eventually could justify the estimated growth rates.

In my opinion the World Bank's findings could even fall short of the actual future development as China holds a unique environment for crowdfunding. Certain external factors favour the development of crowdfunding and have provided China a beneficial initial position which eventually led to those exponential growth rates. These features are rooted in China's history and therefore cannot be assimilated by other countries. In particular, I expect a growing potential for crowdfunding in China due to the following three reasons:

First of all, crowdfunding's rise in China can be traced back to its established informal finance sector. As China's formal finance sector is underdeveloped and cannot serve the entire market, Chinese are used to employing alternative sources of finance. Therefore, the Chinese population is relatively open to new forms of finance. In the end, the existing informal finance structures could contribute to a faster and more comprehensive acceptance of crowdfunding in China.

Secondly, crowdfunding in China is promoted by its agile internet sector, driven by e-commerce giants and social media providers. Next to their core businesses, these companies also provide online payment systems and financial services like crowdfunding. As a consequence, banks and other traditional financial institutions have to face additional competition.

Thirdly, the Chinese government welcomes and promotes this development. Whilst the PRC is struggling to alter its traditional formal financial sector, internet finance per se is considered to be a motor for financial reform. China's premier minister, Li Keqiang, in particular set the development of internet finance as a

⁶This number is likely to include only donation-, rewards-, and equity-based CFPs as China is said to have about 1000 debt-based P2P CFPs. See Ren (2015).

⁷Research and Markets (2015, n.p.).

⁸E.g. the number of a country's *Facebook* users is utilised as a proxy for social media engagement. However, *Facebook* is officially banned from China. Yet, the PRC has a very high social media engagement; although the majority of Chinese use domestic social media.

⁹Funk (2016).

1.1 Motivation 3

policy priority in 2014. ¹⁰ In China's *Financial Stability Report* of 2014, financial innovation is stressed and a special chapter has been dedicated to the *Development and Oversight of Internet Finance*. Therein internet finance was officially defined for the first time as comprising of the following six categories: *Internet payment, P2P online lending, non-P2P online micro loans, internet-based mutual fund sales, innovative online platforms of financial institutions*, and *crowdfunding*. ¹¹ The report also states that "[i]nternet finance and traditional finance compete and cooperate with each other". ¹² Internet finance in particular challenges the hegemony of state-owned financial corporates, which are forced to innovate in order to become more competitive. For example, China's big state-owned banks nowadays also offer mobile banking to improve customer experience. ¹³ Ultimately, crowdfunding and other forms of internet finance could accelerate the reformation of China's formal financial sector.

Not least, crowdfunding and other sources of internet finance can bridge the gap between formal and informal finance in China and probably therefore are promoted by the Chinese government. As Chinese formal banks only serve a certain clientele, a substantial part of the Chinese society relies on informal financial sources. However, informal finance is comparably expensive and rather opaque. The internet, on the other hand, provides transparency and is able to reduce transaction costs. Consequently, financial services become affordable to a broader customer base. According to the People's Bank of China (PBOC), the invention of "internet finance has promoted inclusive finance and filled in the gap in traditional financial services". This statement hints at the role that tools like crowdfunding are intended to fill: Aiding the underserved market participants, replacing less transparent forms of traditional informal finance (TIF) and thereby integrating both alternative forms of finance and marginal market actors into the formal finance sector.

In the end, the triad of an underdeveloped formal financial sector, an established informal finance sector, and a dynamic internet finance sector provides a unique setting for crowdfunding in China.

This work aims to investigate crowdfunding's role in China and particularly its potential to change the Chinese informal finance sector. In order to evaluate crowdfunding's function within China, I discuss the features that crowdfunding provides for all respective stakeholders who are affected by this new form of finance. First, crowdfunding is a financial tool for individual founders, start-ups, ventures and entrepreneurs, which I subsume under the term *project initiators (PIs)*. Secondly, crowdfunding is also an alternative investment tool for savers and other capital providers. Whilst investments in TIF commonly are face-to-face, offline, and geographically restricted, crowdfunding eliminates physical investment boundaries

¹⁰Xie et al. (2016, p. i).

¹¹People's Bank of China (2014, pp. 173–176).

¹²People's Bank of China (2014, p. 172).

¹³Xie et al. (2016, p. 30).

¹⁴People's Bank of China (2014, p. 188).

and thereby provides an attractive alternative for formal and informal creditors. All potential depositors or crowdfunding investors respectively are subsumed under *the crowd*, which I use as a synonym for *crowdfunders*. Thirdly, the Chinese *crowdfunding platforms* (*CFPs*), their influence and motivation for providing crowdfunding services are also analysed in order to identify their role and crowdfunding's overall function in China. Last but not least, the Chinese government is another important stakeholder for crowdfunding's development. By contrasting its attitude towards TIF and crowdfunding and analysing where these attitudes stem from, I appraise where crowdfunding's future will lead to. In the end, by comparing TIF and crowdfunding in China, and their role for their respective stakeholders—PIs, crowdfunders, CFPs, and the Chinese government—I can estimate to what extent crowdfunding could become a game changer for informal finance in China.

From the context outlined above, the following research questions are derived:

- Which role does crowdfunding take in the spectrum of China's financial sector?
- Which features does crowdfunding in China hold in comparison to the Original crowdfunding (OCF) (i.e. Western crowdfunding) *concept* and in the context of China's internet industry, particularly its social media and e-commerce sector?
- Which function does crowdfunding fulfil in China in contrast to Traditional informal finance?

Crowdfunding in China started out as a form of informal finance. Whilst (equity) crowdfunding belonged to the grey or rather informal area of finance, it was officially included in the formal financial sector with the introduction of draft regulations in December 2014. These draft regulations particularly serve a certain form of crowdfunding, which I denominate as *e-commerce crowdfunding*. Crowdfunding in China is highly integrated into e-commerce and social media, and thereby becomes more seizable for Chinese authorities. With the support of established e-commerce corporates and advanced social media providers, financial transactions can be more easily monitored, which amongst others is one reason for the authorisation of crowdfunding by the government. As *e-commerce crowdfunding* is not just the dominant form of crowdfunding in China, but at the same time quite unique in the world, it is the focus of this thesis. Yet, other forms of crowdfunding in China are also elaborated.

Prior to identifying crowdfunding's role in China and evaluating whether it could indeed replace traditional forms of informal finance, the general role of financial institutions is depicted. Furthermore, parameters which start-ups and entrepreneurs base their financial decisions on are illustrated. Finally, the underlying reasons, why Chinese private enterprises utilise informal finance are analysed. In particular, the preceding questions of this research are:

- What is the function of financial mediators and of formal versus informal institutions?
- Which factors do entrepreneurs base their financial decisions on?
- Why do Chinese entrepreneurs prefer informal finance?
- Why could they choose crowdfunding in the future?

1.2 Theory 5

1.2 Theory

In order to approach the above mentioned research questions, a theoretical framework is used to locate crowdfunding in China within the range of formal and informal finance. Specifically, I intend to understand how and why institutions evolve, why they change over time and what their underlying function is, both in general (for all kinds of financial institutions worldwide) and for Chinese financiers in particular. This research is therefore based on findings of New Institutional Economics (NIE). In contrast to neoclassical economics, NIE assume imperfect economic actors with bounded rationality and ethics. The focus of interest in NIE are institutions, which are "expectations that may be socially disciplined and which refer to behaviour patterns of one or several individuals". Scholars of NIE analyse interactions between entities, organisations, companies, and individuals; they see institutions as instruments compensating for the bounded rationality of human beings. Moreover, they evaluate the impacts of institutions on human behaviour.

Institutions provide the structure for exchange that (together with the technology employed) determines the cost of transacting and the cost of transformation. How well institutions solve the problems of coordination and production is determined by the motivation of the players (their utility function), the complexity of the environment, and the ability of the players to decipher and order the environment (measurement and enforcement 17).18

Economic actors typically need to balance risks and transaction costs. The former can be reduced by spending resources ex ante and ex post of a transaction in order to decrease information asymmetries. However, such measures can be very costly and can reduce the attractiveness of a transaction. Yet, alternatively, they have to face higher risks. Institutions create stability and reduce overall uncertainty by providing a framework to our daily life. With the instalment of institutions, transaction costs and therefore risks can be diminished. In this thesis, the NIE perspective is used to evaluate the pros and cons of crowdfunding for its respective Chinese stakeholders and eventually explain crowdfunding's rise in China.

As crowdfunding is progressively accepted by Chinese market players, i.e. PIs, crowdfunders, CFPs, and the Chinese government, I assume that this financial instrument is capable of reducing uncertainties and providing the actors with some benefits. Yet, in order to make a profound judgement, the underlying motivations of the respective actors need to be analysed as well as the environment in which crowdfunding is embedded in China, the transaction costs which each player needs to face, and also the capabilities each stakeholder has, which enable them to deal

¹⁵Own translation from Picot et al. (2002, p. 57): "sozial sanktionierbare Erwartungen, die sich auf die Handlungs- und Verhaltensweisen eines oder mehrerer Individuen beziehen".

¹⁶Picot et al. (2002, pp. 43–57).

¹⁷According to North (1990), measurement (i.e. information research) and enforcement (i.e. monitoring) are those actions which afford transaction costs.

¹⁸North (1990, p. 34).

¹⁹North (1990, p. 3).

with the complexities of the environment. This is because a single institution unfolds within its institutional context, but never as an isolated entity. ²⁰ Even though North (1990) states that institutions provide "a stable (but not necessarily [an] efficient) structure"²¹ for transactions, I argue that institutions eventually evolve to those specifications which include the least transaction costs; and this in turn can be equalised with highest efficiency. In this context, Aoki (2007) claims that institutional change derives from situations of crises that lead to an equilibrium shift. These situations can be evoked through "changes in the activated sets of individual choices due to the accumulation and development of skills, learning, innovationinduced new action possibilities [...] [or through] changes in technological and environmental conditions that result in different physical consequences for the same action choices [...], [or through] new laws or fiats which are enacted as consequences of the game in the political domains". 22 In fact, with the advent of crowdfunding in China, a PI's choice of finance has been expanded, and with the publication of draft regulations on equity crowdfunding the entire situation further has been altered. In the end, crowdfunding and its features could evoke some institutional change in China.

This work builds upon several strands of NIE, foremost on transaction cost and principal agent theory. Moreover, I apply the concept of transaction cost economics to classify crowdfunding within China's financial spectrum. Besides, this research further relies on findings of behavioural economics, informal finance and specific crowdfunding literature. Insights from literature on entrepreneurs' choice of finance help me to locate crowdfunding within the broad range of financial alternatives. Additionally, by analysing literature on informal finance, particularly on informal finance in China, crowdfunding and its features are contrasted to TIF in China. Furthermore, earlier findings on crowdfunding²³ are used to assess the outcomes of this research and make statements on crowdfunding in China. Based on the theoretical framework of NIE, behavioural finance, informal finance, and crowdfunding literature, I try to draw a comprehensive picture of crowdfunding in China.

1.3 Research Design and Methodology

As research on crowdfunding, particularly on crowdfunding in China, is still scarce, this work uses a qualitative approach, which aims to provide insight into the scope of crowdfunding in China and its relation to TIF. In addition to an evaluation of existing literature on crowdfunding, including scientific but also non-academic

²⁰Picot et al. (2002, p. 12).

²¹North (1990, p. 6).

²²Aoki (2007, p. 19 ff.).

²³These are predominantly findings on crowdfunding in the West.

sources like blogs, periodicals and internet websites, this research mainly relies on expert interviews and participatory observation. The original research design also incorporated a quantitative analysis based on a survey among PIs and crowdfunders; however, the achieved sample size of this survey was too small and therefore the results could only be analysed in qualitative terms. Still, in the end, the data collected from various sources provide a first detailed overview of the multifaceted picture of crowdfunding in China.

The literature analysis was based on scientific and non-scientific sources in English, Chinese and German. Western sources were predominantly obtained from online databases and libraries as well as from conferences like e.g. *the Crowddialog*. ²⁴ Chinese sources, on the other hand, were obtained from the database *China academic journals* through *CrossAsia*, ²⁵ collected from book stores on-sight in China or provided from Chinese research institutes. As scientific works, particularly Chinese sources, were hardly existing before 2014, this work also relies on blogs, newspaper articles, guide books and other non-academic sources.

This work further refers to data gathered during conferences in Europe and China, which I either attended personally or from which I received first hand reports from a peer, Personally, I participated in several for a like the German Crowdfunding Network (GCN) and the European Crowdfunding Network (ECN) in order to also grasp the developments of crowdfunding outside of China. As crowdfunding is becoming popular amongst practitioners, but also amongst scholars, the number of conferences on crowdfunding or related topics is simultaneously increasing. Institutions like the GCN and the ECN have been established in order to bundle common interests, to represent these in front of politicians and other interest groups, to distribute knowledge and to promote the development of crowdfunding. At the 2015 ECN Crowdfunding Convention in Paris I exchanged views with several Chinese participants, who had earlier also attended the 2015 World Crowdfunding Conference (WCC) in Guiyang, China. These second-hand information were very valuable because, as a non-Chinese participant, I would not have been entitled to follow the main sessions of the WCC, even if I had visited the conference in person. Thus, for this work and the overall understanding of the concept of crowdfunding in China, informal information derived from Chinese crowdfunding actors was crucial.

Furthermore, this work is based on a field study during which I conducted semi-structured expert interviews with Chinese PIs as well as with founders and employees of Chinese CFPs. In total, this field research comprised of 5 months in China, separated into three research sequences: In August/September 2013, I spent 7 weeks in Beijing and 1 week in Tibet; in April/May 2015, I interviewed probands in Beijing, Shanghai, Shenzhen, and Guangzhou; in September 2015, I made follow-up interviews in Beijing. Some follow-up conversations were also conducted

²⁴For more information on this conference see http://www.crowddialog.de/.

²⁵For more information see http://crossasia.org/.

via email, WeChat²⁶ and Skype. The first Chinese probands were contacted via Sina Weibo,²⁷ and thereafter most interview partners were introduced to me via previous contacts. Overall, the interviewees were quite cooperative and ready to share sensitive information in their mother-tongue. In the end, the success of the field research relied, amongst others, on my language skills as the majority of the semi-structured interviews were conducted in Chinese.

In order to get a better idea of the actual processes of a Chinese crowdfunding campaign, I additionally set up my own crowdfunding campaign on a Chinese CFP and emulated the role of a PI. Thereby, I learned the prerequisites for a setup of such a campaign, how a Chinese CFP can support PIs, and which dynamics eventually can lead to a successful crowdfunding in China. Although this experiment has been far from representative for a typical crowdfunding campaign in China as variables like the project category, the nationality of the PI, the pre-set target sum etc. were not controlled and thus may have led to several biases, it provided a good insight into the perspective of PIs in China and the daily work of a Chinese CFP. Eventually, by setting up my own crowdfunding campaign on a Chinese CFP, I gained a better idea of the crowdfunding dynamics in China.

The original research design also included a regression analysis based on the quantitative evaluation of a questionnaire, which should have given more insight into the motivational drivers of PIs and crowdfunders for applying crowdfunding. This questionnaire has been formulated on the basis of literature research. During my second research stay in China, I distributed a sample questionnaire to PIs, which thereafter was further amended, and which I intended to distribute on a larger scale via Chinese CFPs. However, as only few CFPs were willing to distribute the questionnaire via their channels and therefore the overall return rate stayed below expectations, the questionnaire was only evaluated on a qualitative basis. As a result, the research design of this dissertation is a mixture of theoretical and empirical analysis, relying on literature research, semi-structured expert interviews, participatory observation, and the qualitative evaluation of a questionnaire.

Crowdfunding and in particular crowdfunding in China is a very dynamic phenomenon which is still in a state of constant change. When I started my research, in 2013, there were hardly any publications on crowdfunding in China. By 2015, crowdfunding has become a topic of interest for PIs, crowdfunders, CFPs and also the Chinese government. Yet, at that time Chinese crowdfunding still relied on draft regulations, its stakeholders waited for their official implementation and further regulations were expected—not least due to the developments of Peer-topeer lending (P2P) in China.

²⁶WeChat, or its Chinese equivalent Weixin [微信], is an Application (app) invented by the Chinese internet company *Tencent*. Amongst many other functions, this app includes an instant messenger. WeChat is further analysed in Sects. 4.4.2.2 and 5.3.4.

²⁷ Sina Weibo, or its Chinese equivalent Xinlang Weibo [新浪微薄] is one of China's most popular micro blogs.

Whilst in 2013, P2P was non-existent in China and consequently not relevant at all, it has become a huge topic by 2015. By then, P2P platforms have mushroomed and absorbed large amounts of capital. At the same time, there have been already several cases of fraud of tremendous scale. Against this background, my research on crowdfunding in China, which intentionally excluded P2P from the very beginning, appears of less weight. However, these developments could not be foreseen in 2013. Moreover, the relevance ranking of crowdfunding and P2P in China is likely to shift again if P2P fails in the long run.

Ultimately, crowdfunding in China (like P2P) has been and is still under continuing change. As it is hard to hit a moving target, this thesis focusses on the evolution of crowdfunding in China from 2011 until the end of 2015. Yet, I have used some sources from beyond that time (e.g. with regard to e-commerce and social media in China) in order to stress my findings and make statements on the potential future development of crowdfunding in China.

1.4 Structure of This Work

Following this introduction, which has depicted the motivational background and the methodological approach of this work, Chap. 2 sets the theoretical foundation of this research. It presents a detailed discussion of NIE and the benefits of applying such an approach to crowdfunding. Furthermore, it illustrates the range of entrepreneurial finance and locates crowdfunding within the financial spectrum. Moreover, different types of entrepreneurs are highlighted. In addition, it discusses the role of classic financial intermediaries and introduces the theory of financialisation, which explains the changing role of formal financial intermediaries. The chapter further analyses informal financial intermediaries and introduces *ROSCAs* as a benchmark for formal and informal financial institutions. Finally, it refers to the FinTech industry and the evolution of internet finance, of which crowdfunding is a subcategory.

Chapter 3 deals with the *Original concept of crowdfunding (OCF)*, which has been established in the West. A definition of crowdfunding is provided, and its origins but also its modifications are elaborated. Furthermore, this chapter includes a literature review of both Western and Chinese sources. Subsequently, the phenomenon of crowdfunding is embedded within the theoretical context. Crowdfunding is analysed in terms of its principal-agent-relationships, the involved transactions and transaction costs. It is evaluated in terms of transaction cost economics and contrasted to other financial institutions, particularly to a commercial bank and a ROSCA. Ultimately, the choice for crowdfunding is de-constructed in terms of its underlying features.

The following Chap. 4 focusses on China's institutional, societal and economic environment for crowdfunding. In a first step it analyses China's financial sectors, i.e. the formal and informal one, and also its FinTech sector; it secondly illustrates China's internet industry. Therein, the role of the Chinese government is stressed.