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Influence factors for reward-based crowdfunding in China-JD Crowdfunding

In Partial Fulfillment of the Requirements

for the Bachelor of Science in Finance

by

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May, 2020

ABSTRACT

Crowding investing usually refers to a kind of cooperative behavior of people on the Internet, which gathers certain funds to support a certain effort initiated by other people or organizations. Crowdfunding thought is reconstructing the traditional business system. China will become the largest crowdfunding market in the world, which will provide new impetus for the transformation and upgrading of China's economic system. According to other existing research about Kickstarter in the USA and the data from the platform, JD crowdfunding, author analyze the influence factors of the crowdfunding platform in China. This paper only analyzes the influence factors for reward-based crowdfunding projects. Then, compare with other research about crowdfunding platform projects, there are lots of advanced things that the Chinese crowdfunding system should learn from the USA. Post-sale service, project category, social media show the different influences in China and the USA.

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Introduction

Crowdfunding describes group cooperation, where people raise funds through the Internet to support projects initiated by others. It has been nine years since the beginning of crowdfunding in China was founded at 'roll call time' (the first crowdfunding platform) in July 2011. China has a population of nearly 1.4 billion, a workforce of 900 million, 70 million enterprises and individual businesses, most of which are small and medium-sized enterprises. Besides, Crowdfunding supports diverse fundraising intentions, from disaster donations to book publishing, from the support of artists' fanatical fans to political campaigns, fundraising, and entrepreneurship. According to the data of the Ministry of Commerce, as of the end of 2017, there were 66 million real market entities in China. The data released by the State Administration for Industry and commerce also shows that as of September 2017, there were 29.0723 million real enterprises in China, an increase of 116.5% over the 13.428 million at the end of September 2012. In such a large number of enterprises, the vast majority of them are small and medium-sized micro-enterprises, which are generally faced with the problem of financing. The capital problem has become the main factor restricting the growth of the majority of small and medium-sized micro-enterprises. Financing difficulties of small and medium-sized enterprises seriously restrict the sustainability of economic development in China. As a new financing way, standard reward-

based crowdfunding can give a better environment for small-size enterprises to gain capital.

Crowdfunding now mainly has six modes: reward-based crowdfunding, equity crowdfunding, donation crowdfunding, royalty crowdfunding, debt crowdfunding, and property crowdfunding.

Reward-based crowdfunding refers to the crowdfunding model in which investors invest in projects or companies in the early stage and obtain products or services. In the case of equity crowdfunding, the main goal of investors is to obtain non-monetary rewards, such as souvenirs or products just released and manufactured. In China, JD Crowdfunding, Taobao Crowdfunding, Suling Crowdfunding are the typical platform. Kickstarter is the most famous comprehensive incentive crowdfunding platform in the United States founded in 2009.

Equity-based crowdfunding refers to that the company transfers a certain proportion of shares to ordinary investors, and the investors obtain future income by investing in the company. This mode of financing based on the Internet channel is called equity crowdfunding.

Donation crowdfunding refers to the type of crowdfunding that publishes public welfare fund-raising projects and raises funds through the Internet. It is different from equity crowdfunding, which is usually initiated by individuals or non-profit organizations. Generally, supporters have no material return.

In 2015, the new royalty-based crowdfunding model in the United States spread to China, but the meaning of royalty in China and the United States is different. China's right of return generally means that investors do not enjoy the equity but enjoy the right of dividend. Only when the enterprise is profitable can dividends be distributed. In the United States, the field of finance or economics, royalty refers to a kind of privilege use equity agreement. It refers to a crowdfunding model in which the investor invests in the enterprise or the project, and the investor does not hold the equity of the enterprise, but enjoys the share income, and obtains the possible economic benefits through the operation of the enterprise. Generally speaking, once the future project generates sales revenue, regardless of whether there is profit or not, the project sponsor needs to provide a certain proportion of sales revenue to investors as a return.

Debt-based crowdfunding refers to that investors invest in the project or company, obtain a certain proportion of creditor's rights, obtain interest income and recover the principal in the future.

Property-based crowdfunding refers to crowdfunding through the Internet, acquisition of physical assets, a realization of exit through asset appreciation to obtain investment income, or operating income through the operation. Real right crowdfunding has a wide range of application scenarios, such as car crowdfunding, disposal of non-performing assets, real estate crowdfunding, agricultural products crowdfunding, art crowdfunding, etc.

This paper in the following will go to talk about the literature review of the current research in reward-based crowdfunding. Second, the author will develop the research hypotheses and a research model. Third, the author will present the research result or any other potential outcomes. Forth, the author will give some suggestions for current crowdfunding platforms and sponsors of projects. Finally, this paper will discuss some limitations of this study.

Literature review

American scholar Jeff Howe and Mark Robison first used the word crowdsourcing in June 2006 to define it as crowdsourcing describes group cooperation matters, people raise funds through the Internet to support projects initiated by others; furthermore, Kleinman et al. (2008) gives a good definition: "Crowdsourcing refers to a profit-seeking enterprise outsourcing the specific mission necessary for the production or sell their products to the public for public collection through the Internet. Incentives contribute to the process of company production are free or far below the value of the subscription to the company. Namely, profit-oriented companies create value by using consumers voluntarily and almost gratis workgroups. Ethan Mollick in 2012, the concept of crowdfunding was defined more rigorously: financiers directly seek financing through the Internet platform in the form of physical or equity returns for investors, and investors provide financial support for

business models with a small amount. (Mollick, 2012) Financing is done through such an intermediary as the Internet platform. With the development of technology, some platforms have shifted from Internet PC to mobile APP. Financing is for the majority of investors.

The academic studies which discuss the factors that influence the success of reward-based crowdfunding are limited. Nevertheless, many authors talk about the factors in the preparation time and the campaign period for crowdfunding.

First, faced with the problem of insufficient cash flow and asymmetric information of investors on the quality of enterprises, the biggest challenge faced by entrepreneurs is to attract external capital for enterprises, especially in the early period of a company (Cosh, Cumming & Hughes, 2009). Being short of operational history and credit/loan history may lead to the challenge of access to credit (Stemler, 2013).

According to Glaeser and Shleifer 2001, they find that the non-profit project is easier to get the goal fund. Moreover, Mollick summarized that social network size plays an important role. (Mollick, 2014). Researcher found that the social media buzz, durations of campaign (in days), the number of project description, the popularity index, social networking, the number of the project of sponsors, delivery time, the number of embedded videos, the link to a homepage, the number of FAQ (answered question in project's FAQ section) and the reward levels for notation influence the probability to get the

target fund in a crowdfunding project. They collected the data from platform Kickstarter (the biggest reward-based crowdfunding website in the USA. (Kunz, M. M., Bretschneider, U., Erler, M., & Leimeister, J. M. 2017). Also, The number of comments on the project is also important. Antonenko, Lee, and Kleinheksel (2014) point out that close communication can have a positive impact on successful projects on the project website, and can respond quickly to problems, publish their problems and provide frequent status updates.

An interesting finding, two authors analyzed the difference between the social media buzz on Twitter and Facebook (Hong, Y., Hu, Y., & Burtch, G. 2015). They use the data from Indiegogo (a popular crowdfunding website in the U.S) and found that Twitter has an advantage in private goods production while Facebook is more influential on supply public goods.

The environmentally-oriented crowdfunding is a worthy area to analyze but the author failed to evaluate the environmental benefits realized in the campaign period. (Hörisch, 2019) he mentioned these kinds of founder's lack of information of disclosure for the subsequent real environmental effect and lack the subsequent implementation.

The entrepreneur's social network also impacts the crowdfunding project. The authors used the database from two different websites in China (Demohour: the earliest crowdfunding website in China) and U.S (Kickstarter) to examine the founder's social capital structure, relational and cognitive

social capital have significant influence to crowdfunding performance. They found that social capital may be more influential in China than it is in the U.S; the obligation is more influential in China than in the U.S. (Zheng, H., Li, D., Wu, J., & Xu, Y. 2014)

At different levels of crowdsourcing, supporters can receive both material incentives (Vukovic, 2009) and non-material incentives (Kazai, 2011) through social recognition. Recording the number of rewards that supporters appreciate for supporting projects can lead to conclusions about the motivation of supporters to participate. Steinberg (2012) believes that motivation is the most important motivation for participation.

In China, some authors showed that trust management greatly improves fund-raising performance through central (entrepreneur's credibility) and peripheral (entrepreneur-sponsor interaction). Peripheral routes (the interaction between entrepreneurs and sponsors) show much higher results than central routes (entrepreneurs' credibility). Intrust institutions, personal dynamic message interaction is more effective than static historical success records. In addition to the main impact, the results also show that previous successful crowdsourcing records of entrepreneurs positively mitigate the impact of the interaction between entrepreneurs and sponsors on fund-raising performance. (He et al 2016)

Entrepreneurial legitimacy provided by the founder is also important to successful reward-based crowdfunding. Frydrych et al showed high funding

goals mean that project sponsors or entrepreneurs need more efforts to legalize the funds they apply for. Transparent and persuasive funding goals seem important to project sponsors. A longer fundraising period may expose the uncertainty of the project; the projects in creative categories seem to be easier to get enough fund; from their entrepreneurship perspective, the visual pitch has the significant role in reward-based crowdfunding (Frydrych, D., Bock, A. J., Kinder, T., & Koeck, B. 2014)

Research model and hypotheses

▪ Hypotheses

Based on the above literature review, the influencing factors of the project sponsor mainly include financing target, raised funds, project achievement rate, remaining days, whether there is video, the number of introduction pictures, number of project updates, and whether the project sponsor has a license. Investors decide whether to support or not by browsing the information such as the amount of attention, the number of supporters, whether the sponsor provides the post-sale service, the number of discussions and the amount of support per person of the projects on the website. Show on following table 1

behavior subjects	influence factors	value	description
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project sponsor	financing target	true value	Minimum funds required to complete the projects
	raised funds	true value	Funds raised for the projects
	project achievement rate	true value	Raised funds/target amount
	remaining days	true value	Remaining Days to invest in the project
	whether there is a video	yes—1	Is there any video to introduce projects
		no—0	
	number of introduction pictures	true value	the number of pictures to introduce projects
	number of project updates	true value	the updates times
whether the sponsor has a license	yes—1	license for the special project	
	no—0		
investor	amount of attention	true value	Number of people concerned about a product crowdfunding project
	number of supporters	true value	Number of backers in a product crowdfunding project
	number of discussions	true value	number of comments under the campaign
	amount of support per person of the project	true value	number of supporters
platform	whether the sponsors are social	yes—1	Whether the crowdfunding platform uses social networks to promote the project
		no—0	

Considering the cultural differences and the design differences for the platform, the author needs to delete some variables.

Ha: The number of project dynamic updates has a positive impact on the successful financing rate of crowdfunding projects.

The number of free supporters for projects refers to the number of times that supporters support crowdfunding projects without requiring a return.

Supporters may support the project for free because of their interest in the project idea or their incentive to the project sponsor. Users of the crowdfunding website can pay attention to the project sponsors they are interested in and become fans of the project sponsors. Therefore, the number of fans of the sponsors refers to the number of fans that the project sponsors are concerned by users of the crowdfunding website. The more free support times and sponsors' fans indicate that the project and project sponsors are more supported and welcomed by supporters. By improving supporters' perception of the quality of crowdfunding projects, their support intention is enhanced, which is conducive to the successful financing of crowdfunding projects.

Hb: the number of free supporters has a positive impact on the successful financing of crowdfunding projects.

Hc: the number of sponsors' fans has a positive impact on the successful financing of crowdfunding projects

Hd: The number of pictures has a positive impact on the successful financing of crowdfunding projects.

He: Project description with video has a positive impact on the successful financing of crowdfunding projects.

In the process of product crowdfunding project financing, due to the limitation of potential investors' understanding of the project and product information, there is a problem of adverse selection. However, vivid information expression can stimulate people's cerebral cortex and deep memory. The financier will convey the project information to potential investors through video, pictures and other ways to enhance them. Our willingness to invest. When potential investors browse the web, video, and pictures can not only show the project information vividly to attract the public's attention, deepen the impression of the visitors on the project, but also make potential investors understand the project information more comprehensively and reduce the information asymmetry in the financing process.

Hf: The number of return options has a positive impact on the successful financing of crowdfunding projects.

The number of return options refers to the number of different price gears set by the sponsors of crowdfunding projects to meet the needs of different supporters (consumers). The research of Moutinho et al. (2013) shows that the number of reward options is the key factor of crowdfunding success. The more reward options, the more likely crowdfunding supporters (consumers) are to find suitable and satisfactory support gears. Minimum return is the minimum amount of investment that a crowdfunding supporter can make in a crowdfunding project. Cumming et al. (2014) research show that the lower the

minimum return, that is, the lower the investment threshold, the more decentralized the risk of loss caused by the default or fraud of crowdfunding projects faced by crowdfunding supporters, and the more likely they are to participate in crowdfunding projects. Minimum return support refers to the number of people who support the minimum return options of crowdfunding projects. To some extent, the number of minimum return supporters indicates the recognition degree of the return value corresponding to the lowest level of crowdfunding and the risk of loss after the proponent weighs. Therefore, the more the number of return options and the minimum number of return support, the more conducive to improve the supporters' sense and recognition of the quality of crowdfunding projects, enhance their support intention, and improve the success rate of project financing. However, the higher the minimum return level is, the greater the minimum loss of project default or fraud faced by supporters, and the greater the perceived risk of supporters for the project, which is not conducive to the success of public project financing.

Hg: Negative impact of minimum return on successful financing of crowdfunding projects.

Hh: The number of minimum return supporters has a positive impact on the successful financing of crowdfunding projects.

The target quota of a product crowdfunding project is the budget cost of the project sponsor, which should be similar to the actual cost required. If the

target amount of financing is relatively large, it means that potential investors need to bear more risks. Because most rational people will avoid the risks, the possibility of investment will be reduced.

Hi: The target financing amount hurts the successful financing of crowdfunding projects.

▪ Research Model

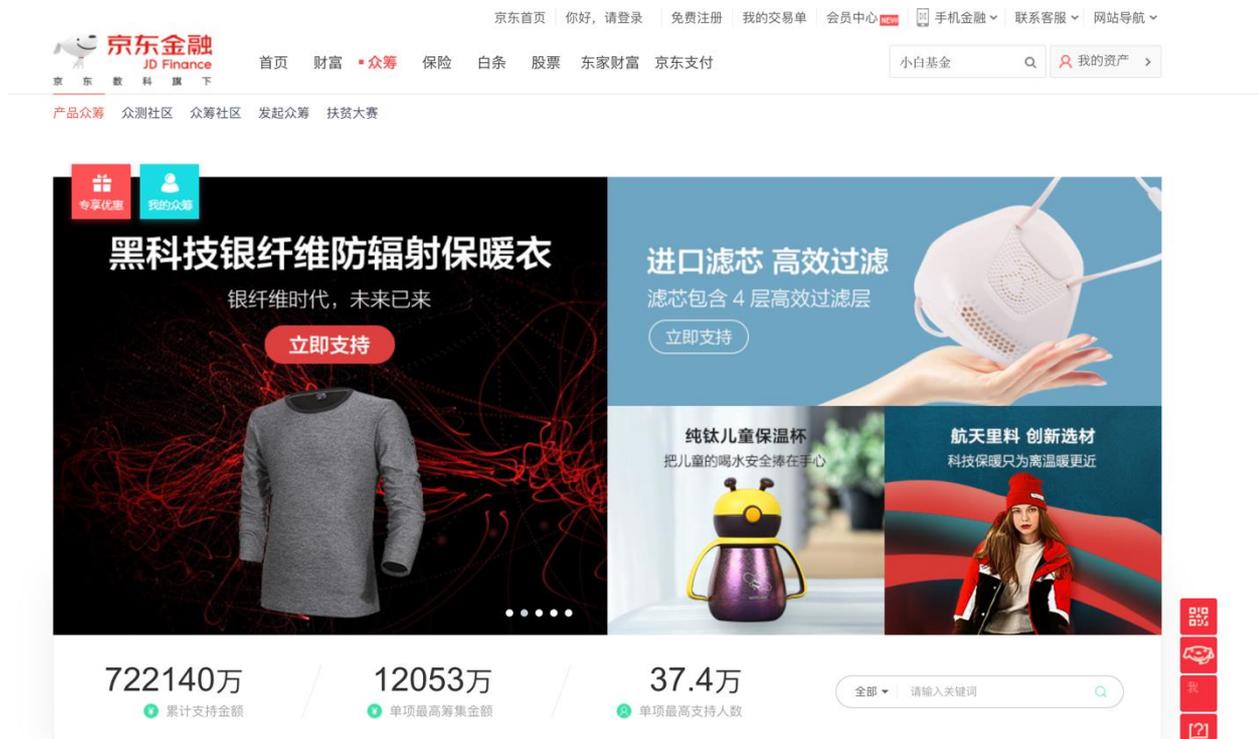
In this paper, the binary regression model of logistics is used to demonstrate that y value is 1 when the crowdfunding project is successful and 0 when financing fails. Through the establishment of the logistic model, specifically, study which factors have a significant impact on the successful financing of crowdfunding projects. The logistic model of this paper is as follows:

$$\text{Log}\left(\frac{P}{1-P}\right) = \alpha + \beta_0 \text{updates} + \beta_1 \text{free_sup} + \beta_2 \text{fans} + \beta_3 \text{images} + \beta_4 \text{video} + \beta_5 \text{rewards} + \beta_6 \text{min - inv} + \beta_7 \text{min-inv-sup} + \beta_8 \text{ln-goal} + \mu$$

Where, P is the probability of successful financing of crowdfunding project
y = 1, is a constant term, u is the random interference term of the model, β_1 (I = 0,...), 7) is the partial regression coefficient of each explanatory variable.

Data collection

Initially, the author wants to collect data from <https://z.jd.com> (The following picture shows the web page.). JD Crowdfunding was established in 2014 by JD cooperation, which is a famous website for reward-based crowdfunding in China.



However, the data required involves some personal privacy, it cannot be obtained directly from the database in JD Crowdfunding. The empirical analysis data (data in China) in this paper mainly comes from the crowdfunding platform. In the analysis, the "Web Crawler" technology is used to automatically collect and export the transaction data on the crowdfunding platform.

This paper collected the data of JD crowdfunding project information from 2017 to July 1, 2018. There are 515 samples in total. Two samples with too small target financing amount (less than 100 yuan) and one sample with a too large number of free support (more than 10000 yuan) are excluded. The remaining 512 samples are used for data analysis. Among them, there are 302 successful financing projects and 210 failed financing projects. The success rate of project financing is 58.98%.

Through the collection and statistics of product crowdfunding project data on the "JD crowdfunding" platform, the empirical analysis is carried out with the help of SPSS software.

JD adopts the financing rule of "all or nothing". If the final financing amount reaches or is higher than the target financing amount, the financing amount will be handed over to the project sponsor or returned to the supporters. Therefore, this paper takes the success of project financing as the explanatory variable. If the actual financing amount is greater than or equal to the target financing amount, the successful financing of the project is defined as 1; otherwise, the financing failure is defined as 0.

Research analysis and results

▪ **Descriptive Statistics**

Make descriptive statistics on the overall samples and the success and failure sample data of JD crowdfunding. Com and other projects. See Table 1 for the

results. It can be seen from Table 1 that there is a large gap between the maximum number of free supporters, the number of sponsors' fans, minimum return and minimum return support in the overall sample. The mean value of each explanatory variable (except the minimum return variable) of a successful project is generally higher than that of a failed project.

variables	all projects			success	fail
	Mean	Minium	Maximum	Mean	Mean
Updates	4.787	0	61	7.348	1.105
Free_sup	70.775	0	3983	118.695	1.862
Fans	43.227	0	1152	69.318	5.705
Images	14.078	0	69	16.969	9.924
Video	0.654	0	1	0.675	0.624
Rewards	6.061	1	27	6.681	4.895
Min_inv	67.622	1	2599	67.102	68.371
Min_inv sup	220.646	0	57087	367.861	8.938
LN Goal	9.238	5.298	13.816	9.42	8.976

▪ Collinearity Test

(II) the collinearity test is used to analyze the variable correlation of the sample population data to obtain the correlation coefficient between the explanatory variables. See Table 2 for the results. From the following Pearson

correlation coefficient table, it can be seen that the problem of collinearity among explanatory variables is not serious, and the next step of regression analysis can be carried out.

	Updates	Free sup	Fans	Images	Video	Rewards	Min- inv	Min- inv sup	LN Goal
Updates	1								
Free sup	0.013	1							
Fans	0.313	0.221	1						
Images	0.495	-	0.182	1					
Video	-0.035	0.024	0.036	0.010	1				
Rewards	0.360	0.161	0.160	0.314	0.036	1			
Min- inv	-0.014	-	-	0.065	0.122	-0.148	1		
Min- inv sup	0.030	0.123	0.055	-0.017	0.054	-0.035	0.021	1	
LN Goal	0.213	0.260	0.233	0.248	0.107	0.277	0.166	0.028	1

▪ Regression Analyze

Variables	Model 1	Model2	Model 3
Updates	0.270***(0.000)	0.136(0.195)	0.195***(0.000)
Free_sup	0.212***(0.000)	0.205**(0.035)	0.180***(0.000)
Fans	0.023(0.142)	0.028*(0.080)	0.022**(0.019)
Images	0.107**(0.013)	0.103***(0.007)	0.105***(0.000)
Video	0.061(0.922)	-0.335(0.508)	-0.431(0.196)
Rewards	0.226**(0.028)	0.045(0.640)	0.112*(0.074)
Min- inv	-0.001(0.822)	0.005**(0.010)	0.001(0.328)
Min- inv_sup	0.037***(0.001)	0.020*(0.078)	0.026***(0.000)
LN Goal	-		
	0.816***_0.001)	-0.499***_0.002)	-0.588***_0.0000
C	1.305(0.481)	-2.655***_0.000)	1.117(0.330)
Observations	302	210	512
Pseudo R<unk>	0.696	0.612	0.613

Note: the value in brackets is the p value corresponding to the regression coefficient, ** represents $P < 0.01$, * represents $P < 0.05$, * represents $P < 0.1$

▪ Results

From the regression results in Table 4, we can see that the number of free support, the number of pictures and the number of minimum return support are significant in each model, and are significant at the level of 1%. Therefore, hypotheses B, D, and H are all verified. The free support mode of the crowdfunding project can show the interest of supporters to a large extent. The number of minimum return supports indicates that supporters are recognized by supporters after weighing the risk of the return value and minimum loss amount corresponding to the minimum return gear. Rich project picture information can enable supporters to obtain intuitive perception and experience of the project, and all three can improve support. The perception of project quality can enhance the purchase intention of support and promote the success of cultural and creative crowdfunding project financing. Therefore, the empirical results are in line with expectations.

The variable of the target financing amount is significant in the regression results of each model, and it is significant at the level of 1% in the three models. Hypothesis I is verified. If the target financing amount preset by the sponsors of crowdfunding projects is too high, more supporters and investment amount are required for successful financing, higher quality requirements are required for the originality of cultural and creative

crowdfunding projects, satisfaction of return value and other projects, and the difficulty of successful financing is increased. When the supporters face too high a target amount of financing, they will increase the risk perception of the loss of time cost caused by the failure of financing, which is not conducive to the success of the financing. Therefore, the target financing amount harms the financing success rate, and the empirical results are in line with expectations.

The number of dynamic updates, the number of fans of sponsors, and the number of return gear are significant. Two of the three regression model results are significant. Hypothesis a, hypothesis C, and hypothesis f are all verified. The dynamic update of project information can show the progress of the crowdfunding project in time, reduce the uncertainty of supporters on the project, and improve the perceived quality of the project. To some extent, the number of sponsors' fans indicates the popularity of the crowdfunding projects initiated by the sponsors. The more fans the sponsors have, the more likely the sponsors are to launch high-quality and popular crowdfunding projects. Therefore, the more fans the sponsors have, the more favorable it is to promote the recognition of the project by the supporters.

The more the number of return price stalls, that is, the more kinds of the product price and return a combination of crowdfunding projects, the higher the possibility that supporters can find their satisfactory support price stalls,

which is conducive to improving supporters' perception of project quality.

Therefore, the empirical results are in line with expectations.

Video and minimum returns are not significant in the regression results of the model, fail to pass the hypothesis test, and hypothesis E and hypothesis G are not verified in the sample data in this paper. Video is not significant in all three models, model 1 has a positive impact on Financing success, model 2 and model 3 have a negative impact, which is inconsistent with the expected assumption. The lowest return is only significant in model 2. Model 1 has a negative impact on Financing success. Model 2 and Model 3 have a positive impact, which is inconsistent with the expected assumption. It can be seen from Table 2 that the average values of video and minimum return in successful project samples, failed project samples and sample population are very close, which shows that video and the minimum return price of projects are commonly used in the description of projects, so that the hypothesis of video and minimum return fails to pass the test, and more samples or other cultural innovations can be used in the future Project data of Italian crowdfunding platform to verify the hypothesis.

Conclusion

▪ Contributions

This paper talks about the influence factors of reward-based crowdfunding in China, empirically studies the specific influencing factors of the successful

financing of crowdfunding projects through the logistic regression model, to further understand the operation of the crowdfunding financing mode from a quantitative perspective. The conclusions of this paper are as follows:

(1) the number of dynamic updates, the number of fans of sponsors, the number of pictures, and the number of return files have a significant impact on the successful financing of cultural and creative crowdfunding projects. The dynamic update coefficient, the number of sponsors, the number of pictures and the number of return files are all conducive to improving the perceived quality of the supporters of the crowdfunding projects, thus positively affecting the successful financing of cultural and creative crowdfunding projects.

(2) for the first time, this paper focuses on the variable of the number of free supporters in crowdfunding projects and finds that the number of free support times positively affects the successful financing of cultural and creative crowdfunding projects. To a large extent, the number of free support times can reflect the interest and support degree of supporters for crowdfunding projects.

(3) the financing target amount of the project is significant and has a negative impact on the financing success rate of cultural and creative crowdfunding projects. When the target financing scale is large, more crowdfunding supporters and investment amounts are needed. The creativity of cultural and creative crowdfunding projects is required to be novel and popular with the supporters, but the projects that meet the requirements are

often less. Therefore, the high target financing amount is not conducive to the successful financing of cultural and creative crowdfunding projects.

▪ **Limitation**

There are some limitations to this study. First, all the data is collected from the JD crowdfunding platform. The crowdfunding projects of this website cannot represent all crowdfunding projects in China. Second, the research sample is 512 projects, the sample is small. To improve the external effectiveness of the study, more data on the crowdfunding platform should be collected to verify the hypothesis. Third, the cultural differences among people in different countries and regions, the conclusion of this paper is still limited. Follow-up scholars can collect data from other countries and regions in the world to expand and verify this model. Second, The prediction ability of this model is limited, and more research variables and hypotheses need to be included, such as project novelty, which is a dimension of project quality.

Bibliography

- Agrawal, A. K., Catalini, C., & Goldfarb, A. (2011). *The geography of crowdfunding* (No. w16820). National bureau of economic research.
- Ahlers, G. K., Cumming, D., Günther, C., & Schweizer, D. (2015). Signaling in equity crowdfunding. *Entrepreneurship theory and practice*, 39(4), 955-980
- Belleflamme, P., Lambert, T., & Schwienbacher, A. (2013). Individual crowdfunding practices. *Venture Capital*, 15(4), 313-333.
- Belleflamme, P., Lambert, T., & Schwienbacher, A. (2014). Crowdfunding: Tapping the right crowd. *Journal of business venturing*, 29(5), 585-609.
- Bi, S., Liu, Z., & Usman, K. (2017). The influence of online information on investing decisions of reward-based crowdfunding. *Journal of Business Research*, 71, 10-18.
- Gerber, E. M., Hui, J. S., & Kuo, P. Y. (2012, February). Crowdfunding: Why people are motivated to post and fund projects on crowdfunding platforms. In *Proceedings of the International Workshop on Design, Influence, and Social Technologies: Techniques, Impacts and Ethics* (Vol. 2, No. 11, p. 10). Northwestern University Evanston, IL.
- Hong, Y., Hu, Y., & Burtch, G. (2015). How does social media affect contribution to public versus private goods in crowdfunding campaigns?.
- Lawton, K., Marom, D., & Lawton, K. (2012). *Crowdfunding Revolution*. McGraw-Hill Publishing.
- Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of business venturing*, 29(1), 1-16.
- Yuan, Y., & Chen, L. (2017). *Report of the Development of Chinese Crowdfunding*. Shang Hai, China: Shanghai Jiao Tong University Press.

Zheng, H., Li, D., Wu, J., & Xu, Y. (2014). The role of multidimensional social capital in crowdfunding: A comparative study in China and US. *Information & Management*, 51(4), 488-496.

He, W., Xu, G., Zheng, H., Hung, J. L., Qi, Z., & Xu, B. (2016). The role of trust management in reward-based crowdfunding. *Online Information Review*.

Mollick, E. (2012). The dynamics of crowdfunding: Determinants of success and failure. *Journal of Business Venturing*, 29(1), 1-16.

Mollick, E. R., & Kuppuswamy, V. (2014). After the campaign: Outcomes of crowdfunding. *UNC Kenan-Flagler Research Paper*, (2376997).

Kleemann, Frank, G. Gunter Voss and Kerstin Rieder. 2008. "Un(der)paid Innovators: The Commercial Utilization of Consumer Work through Crowdsourcing." *Science, Technology & Innovation Studies* 4:1, 5-26.

Vismara, S. (2019). Sustainability in equity crowdfunding. *Technological Forecasting and Social Change*, 141, 98-106.

Kunz, M. M., Bretschneider, U., Erler, M., & Leimeister, J. M. (2017). An empirical investigation of signaling in reward-based crowdfunding. *Electronic Commerce Research*, 17(3), 425-461

Hörisch, J. (2019). Take the money and run? Implementation and disclosure of environmentally-oriented crowdfunding projects. *Journal of Cleaner Production*, 223, 127-135.

Frydrych, D., Bock, A. J., Kinder, T., & Koeck, B. (2014). Exploring entrepreneurial legitimacy in reward-based crowdfunding. *Venture Capital*, 16(3), 247-269.

Cosh, A., Cumming, D., & Hughes, A. (2009). Outside entrepreneurial capital. *The Economic Journal*, 119(540), 1494-1533.

Stemler, A. R. (2013). The JOBS Act and crowdfunding: Harnessing the power—and money—of the masses. *Business Horizons*, 56(3), 271-275.

Kuppuswamy, V., & Bayus, B. L. (2017). Crowdfunding creative ideas: The dynamics of project backers in Kickstarter. *A shorter version of this paper is in "The Economics of Crowdfunding: Startups, Portals, and Investor Behavior"-L. Hornuf and D. Cumming (eds.)*.

Vukovic, M., Lopez, M., & Laredo, J. (2009, November). Peoplecloud for the globally integrated enterprise. In *Service-Oriented Computing. ICSOC/ServiceWave 2009 Workshops*(pp. 109-114). Springer, Berlin, Heidelberg.

Kazai, G. (2011, April). In search of quality in crowdsourcing for search engine evaluation. In *European Conference on Information Retrieval* (pp. 165-176). Springer, Berlin, Heidelberg.

Steinberg, D. (2012). *The Kickstarter handbook: Real-life crowdfunding success Stories*. Quirk Books.