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The study on the relationships among film fans' willingness to pay by film crowdfunding and their influencing factors

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ABSTRACT

The present study examined the relationship between film fans' willingness to pay by film crowdfunding (WPFC) and the incentives of film crowdfunding (FC) in China, which include material and non-material rewards. Moreover, this paper examined the mediating effects of film fans' perceived conveniences and risks of film crowdfunding platforms (FCPs) and the moderating effect of fans' individual characteristics such as gender, age, monthly income, monthly investment, and monthly expenditure on watching movie on the relationship between WPFC and incentives of FC. An online questionnaire was developed to investigate film fans in China, and 505 valid reports from film fans with a monthly expenditure for movies higher than zero were included in the data analysis. Structural equation modeling showed that most Chinese fans tend to sponsor projects published in FCPs, and their WPFC were affected by perceived values of non-material feedback but not by perceived values of material feedbacks. Moreover, film fans' perceived risks of FCP have significant mediating effects on the relationship between WPFC and incentives of FC, whereas their perceived convenience of FCP did not have a significant mediating effect. Furthermore, film fans' gender, age, monthly income, monthly investment, and monthly expenditure for watching movies had a moderating impact on these relationships.

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1. Introduction

With the rapid development of the Internet and Big Data, an innovative marketing mode focusing on loyal consumers of films (i.e., film fans) has gained its popularity. Accordingly, an increasing number of film crowdfunding (FC) projects have been initiated and operated. FC refers to a film financing alternative where the donors are mostly film fans who are active in the online crowdfunding platform. More specifically, with FC, contributors (e.g., film fans) can donate, pre-order products, or invest in film projects they are interested in (European Union, 2017, 2015). The first case of

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FC was conducted in 2009 in the United States, known as “CRYSTAL ANTLERS UNTITLED MOVIE”. Later on, there were successful cases conducted in China as well (see the website of Kickstarter). For example, *Veronica Mars* is an American TV series released between 2004 and 2007, and the film version of *Veronica Mars* was fundraised through Kickstarter (i.e., a crowdfunding platform in the United States) in 2013. Through film crowdfunding, more than 90,000 sponsors provided over 570 million US dollars for this project (with a target of 190 million US dollars). In 2014, the animated film *One Hundred Thousand Bad Jokes* initiated a film fundraising in DemoHour, which is a film crowdfunding platform (FCP) in China. As a result, more than 5,000 sponsors provided over RMB 1.37 million (with a target of RMB 1.00 million). Between 2015 and 2016, the documentary *The Verse of Us* initiated a film screening fundraising in Elemeet, another FCP in China. Eventually, 1000 screenings were made, and more than 100,000 people watched the film. Accordingly, Moon and Hwang (2018) found that the financial sustainability of creative-cultural industries could be effectively improved by crowdfunding.¹

FC has been an important financing source for film founders, and a driving force to build a multi-system of film distribution and exhibition. Governments, film founders, and researchers also think highly of FC. Therefore, the present study aims to investigate film fans’ willingness to pay through film crowdfunding (WPFC), and the factors that might affect this willingness. In the film industry, major financing sources include bank loans pledged by copyright, private equity financing, movie funds, co-productions, and FC (Council of the European Union, 2014). Compared with other financing sources, FC has the advantage of allowing film founders to fund directly through the Internet, without the involvement of intermediaries (Agrawal, Catalini, & Goldfarb, 2014; Belleflamme, Omrani, & Peitz, 2015; Braet, Spek, & Pauwels, 2013, 2018; Daly, 2018; DeFillippi & Wikström, 2014; Gerber & Hui, 2013; Loriguillo-López, 2017; Mollick, 2014). Most of the previous works of literature about FC focused on its status, modes, problems, and socio-economic influencing factors, whereas less literature has discussed other essential drivers of successful crowdfunding, for example, film fans’ WPFC and factors affect their WPFC. According to Loriguillo-López (2017), Hobbs, Grigore, and Molesworth (2016), Koçer (2015), and Sørensen (2012), the factors influencing film fans’ WPFC include demonstration, interaction, precise information, networking, social participation, legal regulations, business models, and intellectual property.

Several fields of research, such as media entrepreneurship, media startups, and film industry, are closely related to FC. In terms of media entrepreneurship, some papers argued that a new financing source and a new business model, like FC, may contribute to successful entrepreneurship (Achtenhagen, 2017; Hass, 2011; Hoag, 2008; Hörisch, 2018). In addition, Khajeheian (2017a, 2017b) found that several factors may affect the development of media entrepreneurship, such as customer type, opportunity, benefit, organization form, market needs, media offer, innovation, resource, process, and value proposition. Khajeheian and Tadayoni (2016) also suggested that media entrepreneurship may benefit from crowdfunding, as it allows higher accessibility to crowd creativity and social values. Ferrier (2013) found the drivers of a successful media entrepreneurship include market research, audience analysis, and the

entrepreneurial landscape/startup culture (e.g., key players, new products, delivery innovations, technological disruptions, and financial options). Jenkins (2006) found that consumer participation is getting increasingly important in the process of value creation in the media industry.

With regard to the field of media startups, some literature argued that the learning curve and successful probability of media startups could be promoted by excellent business planning, pitching, and negotiating, which can be accessed from the seminars, courses, cohort peers, and mentors of FC. (Ferrier, 2013; Heydebrand & Miron, 2002; Valero-Pastor & González-Alba, 2018). Salamzadeh, Markovic, and Masjed (2019) found the imperatives of media start-ups in the future market include the segment-specific self-perception, a content manager, and partnership. Furthermore, there are four media divergences of distribution channels, content producers, audiences, and advertisers, which could be the exploitation of entrepreneurial opportunities. Salamzadeh and Markovic (2018) found that accelerators could shorten the learning curve of the media start-ups with seminars and courses, co-working space, divided teams, cohort peers, and mentorship.

In terms of research about the film industry, previous studies have frequently found the promotion of the film industry could help the growth of GDP, value-adding of related industries, employment, cultural consumption, citizen's awareness and social and cultural inclusion (Fanea-Ivanovici, 2019; Tera Consultants, 2014). FC has proven to be one of the most popular financing methods in film industry, and it brings long-tail welfare of films as the funders are from all over the world and this may help to diversify the consumers in terms of gender, ethnicity, political opinions and so on (Booth, 2015; Herbert, 2018; Hobbs et al., 2016; Koçer, 2015; Loriguillo-López, 2017; Papadimitriou, 2017; Sørensen, 2012). Solidoro and Viscusi (2020) found that the film industry is shifted from a supply-led value to a demand-led value; its points are the values co-creating across borders and the role redefining of intermediaries, gatekeepers and experts. Fanea-Ivanovici (2019) studied the crowdfunding attitude of Romanian filmmakers and their perceived suitability of FC projects, and the main results were: (1) Romanian film production mostly relied on public and private funding; (2) Romanian film was mostly funded with more than two funding sources (e.g., FC); (3) most filmmakers and film fans had little knowledge and awareness about FC.

Based on a literature review and interviews with experts, two factors were considered to affect film fans' WPFC, that is, film fans' perceived convenience and risks of FCP, and their perceived incentives of FC, which include material and non-material rewards from FC. According to the film industrial economic theory, related studies of film fans' WPFC can provide the film-makers with information about the preferences and behavioral patterns of film consumers (De Vany, 2003; Lewis, 2002). Moreover, as an innovative financing approach, FCP diversified the existing industrial economic model by enabling direct investment from consumers, so that the "supply creates demand" mode is transferred to a "demand creates supply" mode. Jenkins (2006) investigated fans' consuming behaviors towards films such as *Survivor*, *American Idol*, *Star Wars*, and *Harry Potter*, and found that fan economy could reduce the production and distribution costs of films. Braet et al. (2013) argued that FCP was an essential commercial tool for smaller films. Mollick (2014) found the key factors that

might affect the dynamics of crowdfunding project included the goal of the project (e.g., funding level, the number of funders and backers), the founders' Facebook friends, the category of the projects, the update frequency of information, review of the projects, and duration of the projects. Scott (2015) found that the application of the fan economy was important in FC. Ye (2014) believed that the key of fan economy lies in social capital and trust, self-organized network and word-of-mouth recommendation, and consumer-driven consumer to business e-commerce.

According to the theory of fan economics about FC, the incentives of FC partly come from film fans' affections towards films, one of the non-material rewards of FC. The non-material rewards of FC include the premiere ticket, the script in pdf format, and the pre-purchase of film DVD, which indicates that compared to material rewards, non-material rewards may have far more utility for film fans (Cheal, 1988; Illouz, 2007). These rewards may come from the cast and crew of the film, community, and FCP. Firstly, the cast and crew of a film, which includes the actors and directors, can effectively reduce the searching cost of fans, and therefore shift the film demand curve to the right and reduce the elasticity of the film demand curve (Muniz & O'Guinn, 2001). In terms of community, film fans could express and exchange their opinions, explanations, and comments on films in communities. Therefore, information can be efficiently exchanged between film founders and fans, which may effectively reduce the transaction cost of making a film (Schouten, McAlexander, & Koenig, 2007). Accordingly, McAlexander, Schouten, and Koenig (2002), Sheth and Parvatlyar (1995) found that a brand community can bring benefits such as being brand missionaries of marketing message, increasing the probability of forgiving product or service failures, reducing customers' willingness to switch brands, motivating customers to provide feedback, enabling a stronger market for licensed products and brand extensions, and attracting more long-term investments. By meeting the long-term demand of film fans, the FCP allows film founders to gain more consumer surplus and, thereafter, increase the market size so that film-makers can attract more capital from film fans and reduce their financial risks (Hills, 2015; Jenkins, Ford, & Green, 2013). According to Galuszka (2015), there are five new roles that fans could play in film-making, that is, sponsors, co-creators of value, stakeholders, investors, and filters. Rogers (2009) found many film actors, directors, and screenwriters of Tamil Nadu have also been politicians through their fan club networks.

An expanding number of film founders and researchers aim to promote the WPFC of film fans, especially in China. However, due to economic and cultural issues, the abovementioned FCPs have almost stopped operating. Thus, this paper tries to explore the factors affecting film fans' WPFC in China. According to Corley and Gioia (2011), researches are expected to have both theoretical and practical contributions; these contributions include the originality (incremental or revelatory) and utility (scientific or practical) of a study, among which practical utility refers to the process of solving practical problems through achieving research goals. Moreover, Whetten (1989) argued that the common element in advancing theory development is to find the gap between conventional ideas and empirical evidence emerging from the quantitative and qualitative data. Based on these concepts, the present study may have several theoretical and practical contributions as follows. First, this paper can

provide more information about the practical utility of FCPs, and further develop the film fan economic model by taking into account factors affecting WPFC. As a limited number of papers have explored film fans' willingness to invest in films through crowdfunding, this paper investigated film fans' WPFC for film production and distribution, as well as their WPFC for watching the film on-demand in the theater.

Second, given that previous studies rarely included fan economy as a factor affecting film fans' WPFC, this paper discussed the influence of fan economy (e.g., fans' emotions and non-material rewards of FC) on the incentives of FC. More specifically, the present study compared the impacts of material rewards on film fans' WPFC with the impacts of non-material rewards on WPFC, and come up with the idea that film has emotional and experiential values to film fans. Third, revealed from a literature review, FCPs may have a mediating effect, and help to facilitate the communication between film founders and consumers, especially the non-mainstream pluralistic preferences of film fans. However, no published study has discussed the practical effect of this mediating role. Therefore, this paper considered the convenience and risk of FCP as the mediators in the relationships between the film fan's WPFC and their perceived material and non-material rewards of FC. Fourth, whereas most literature about FC adopted the methods of literature review and case study, this paper used structural equation modeling to investigate the relationships between film fans' WPFC and factors affecting their WPFC. Fifth, this paper includes film fans' individual characteristics, such as gender, age, income, investment, and expenditure for watching movies as moderators. The film founders could, therefore, specify their marketing strategies, material and non-material rewards of FC based on film fans' characteristics. For example, Greenberg and Mollick (2017) found that female founders of crowdfunding had a higher probability of successful investment than males, and female sponsors tended to support more activist choices.

Based on the above discussion, this paper analyzes Chinese film fans' WPFC and how material and non-material rewards of FCs may affect their WPFC. Moreover, this study investigates the moderating effects of film fans' individual characteristics. To this end, an online questionnaire was handed out in China, and partial least square structural equation modeling (PLS-SEM) was used for data analysis. Unfortunately, little literature discussed the relationship between sponsors' individual characteristics and their willingness to pay for crowdfunding projects. For example, Mohammadi and Shafi (2018) found that there were gender differences in the behavior of equity-crowdfunding investors. Likewise, Barasinska and Schäfer (2014) also found significant associations between the gender of borrowers and crowdfunding success.

The rest of this paper is organized as hereunder. [Section 2](#) presents a literature review and hypotheses about the association between film fans' WPFC and incentives of FC. In [Section 3](#), the methodology was explained, and results about the association between film fans' WPFC and FC incentives, as well as the moderating effects of film fans' characteristics are discussed. [Section 4](#) provides the discussion, conclusions, and suggestions for future research.

2. Literature review and hypotheses

Based on a literature review and the online survey, four reasons may explain the rapid increase of Chinese film founders' intention to fund through FC. First, the film industry has undergone rapid development, especially in China. In 2017, the box office in China (RMB 55.91 billion) was the second-highest at the global level. The average annual geometric growth rate in China between 2002 and 2017 was 31.21%, which was much higher than the average annual geometric growth rate in United States (less than 5.0%, Chen & Wang, 2018; China Film Association, 2018, 2017, 2007). Second, compared with FC, it is more challenging to get funding from other types of investors. For example, the independently-made animated film "Big Fish & Begonia" was at first deemed as a film with low expected return and high risk, and therefore did not attract enough funding. As a result, the crew initiated a film distribution fundraising in DemoHour. Surprisingly, more than 3,000 sponsors provided over RMB 1.58 million through FC (with a target of RMB 1.20 million). Third, the fan economy increased fans' enthusiasm to invest in films through FCP. For example, *One Hundred Thousand Bad Jokes* and *No Zuo No Die* were two films primarily funded by enthusiastic fans. Fourth, there are Horizontal Alliances to ensure investments through FCP. For example, FC projects, such as *Tiny Times 3*, *Tiny Times 4*, *Wolf Totem*, and *Impossible*, were initiated on Alipay, and investment insurance contracts set their return plans. Also, FC projects such as *The Golden Era* were initiated on "Baidu Finance," and their return plans were set by trust contracts (Chin, Jones, McNutt, & Pebler, 2014; Daly, 2018; Galuszka & Brzozowska, 2017; Scott, 2015).

This paper aims to investigate the relationships between the film fan's WPFC and their perceived material and non-material values of FC. Based on a literature review, the present study developed a structural equation model to test the hypotheses. In this model, the film fan's WPFC is taken as the dependent variable, and the independent variables are the film fan's perceived material and non-material values of FC. Furthermore, film fans' perceived conveniences and risks of FCP were included as mediators, and film fans' individual characteristics such as gender, age, monthly income, monthly investment expenditure, and monthly expenditure for watching movie were included as moderators.

Unfortunately, as far as we know, no existing questionnaire is available to measure film fans' WPFC. This paper, therefore, developed a questionnaire based on the suggestions of Hinkin (1995, 1998), Churchill (1979), and economics, statistics, and psychology theory. The process of developing a questionnaire includes four stages: domain specification, item generation, item purification, and pilot data collection. At the stage of domain specification, we decided to include measures of WPFC, PMV, PNMV, PC, PR, and the sponsors' individual characteristics to achieve the purposes of this article. At the stage of items generation, the related items were developed with a literature review, interviews with experts, web texts, and case study. The focus is to match the items of the questionnaire with the conceptual constructs and to include sufficient items to enhance the reliability and validity of the measurements. In the design of the pre-questionnaire, there were 65 items included for each construct. At the stage of item purification, factor analysis was used to test the content validity,

and face validity of the items, and thereafter items with ambiguous meaning were modified according to the suggestions of the experts.

At the stage of the pilot data collection, the focus is on investigating whether the items are clear and understandable. Based on the results, some test items were deleted, and eventually, only 19 items per construct were included in the final questionnaire to make the investigation more effective. For example, the question “Do you know film crowdfunding?” was included in the pre-questionnaire, whereas 95% of respondents have chosen yes. Therefore, this question was deleted. Another example question in the pre-questionnaire was, “Have you ever donated through film crowdfunding?”; however, as 97% of respondents said No, this question was also deleted. Furthermore, this paper included a table of explanation of FC related terms for the interviewees, such as the monetary rewards of FC (e.g., the dividends of the film) and the non-monetary rewards (e.g., the premiere ticket of film.²; Porter, 2011)

The film fan’s WPFC is measured by their WPFC for film production and distribution (WPFC_p), and their WPFC for watching the film on-demand in the theater (WPFC_O). And WPFC_p and WPFC_O are both formative indicators. Unfortunately, previous studies mainly focused on the probability of conducting successful crowdfunding cases, and no published study has discussed the effect of film fans’ WPFC. For example, Solidoro and Viscusi (2020) investigated the case of *Movieday.it*, and it mainly profits from holding user-driven cinema events to enable consumers’ engagement in the production, promotion, access, and showing of films. Fanea-Ivanovici (2019) and Davis, Hmieleski, Webb, and Coombs (2017) found that due to film fans’ strong acceptance of FC, FC projects are more likely to receive funding than other projects. Mollick (2014) conducted an analysis of successful crowdfunding cases by using logistic regression. Agrawal, Catalini, and Goldfarb (2011) discussed the performances of crowdfunding cases by assessing their investment amount, geographic distance, number of investments in the same entrepreneur, and position in funding cycle at first investment.

Film fans’ perceived material rewards of FC (PMV) were measured on a Likert scale (from Agree to Disagree). The following items were included as PMV: (1) monetary rewards (PMV₁) that fans would like to obtain from FC (e.g., dividends); (2) actors of the film (PMV₂), as some film fans tend to sponsor FC due to the actors of the film; (3) director of the film (PMV₃), as some film fans tend to sponsor FC due to the director of the film. PMV₁, PMV₂, and PMV₃ are all formative constructs. Likewise, film fan’s perceived non-monetary rewards of FC (PNMV) were also measured on a Likert scale (from Agree to Disagree). PNMV were measured with the following items: (1) non-monetary rewards without cost (PNMV₁), including premiere ticket, the pre-purchase of film DVD, acting as film roles, the visit of the film scene, and the thanks in the film credits; (2) type of film (PNMV₂), such as whether it is an action movie, comedy, drama or animations; (3) the script of the film (PNMV₃). Similarly, PNMV₁, PNMV₂, and PNMV₃ are formative constructs. Supporting these measures, Gerber, Hui, and Kuo (2012) found the motivations of founders of FC included the seeking of rewards, supporting the creators, and social networking (Belleflamme et al., 2015; Chen & Wang, 2018; Daly, 2018; Hobbs et al., 2016; Mollick, 2014; Tekeoğlu, 2015). Fanea-Ivanovici (2019) found the rewards offered by

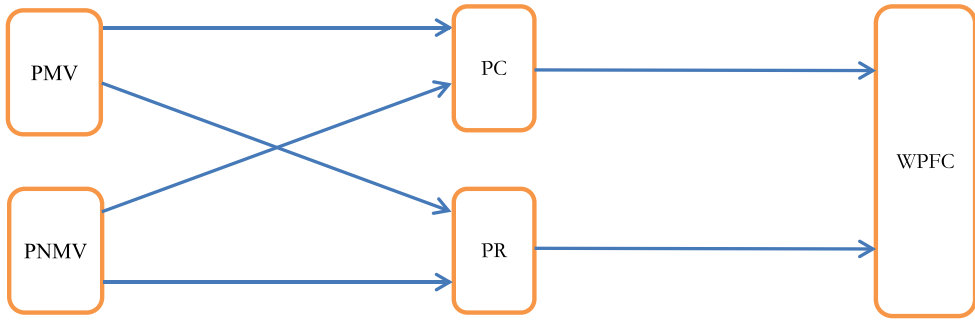
the FC projects included film-related experience or byproducts (e.g., mugs, T-shirts, posters, badges, DVDs, and invitations to the premiere), public acknowledgment, and the roles, ideas, opinions, suggestions from the film.

According to previous literature, in order to reduce the searching costs of a good film, film fans are more likely to go to the cinema and support their favorite types of films, actors, directors, and scripts. In accordance with this finding, this study investigated the top 50 films with the highest global box office up until 2015 and looked into the types of these movies. The results showed that, among the films being investigated, the most popular types of movies are adventure, action, fantasy, and science fiction movies (ranking by the number of films in this type). However, in terms of the box office in China, in 2017, action movie was the only type with more than ten films in the top 25. Joye and Walle (2015) acknowledged the importance of fans in the creative and economic process of the film adaptation. Joshi (2015) found that movie stars could lower the volatility of movie revenues by reducing search costs and attracting a built-in fan base (Chen & Wang, 2018).

Film fan's perceived conveniences (PC) of FCP was also measured on a Likert scale (from Agree to Disagree), and the measurement includes (1) convenience of connecting to financial goods (PC_1), which considers whether FCP could help funders to find the targeted FC project with financial goods easily, such as lending-based, and equity-based FCs; for example, the film *Tiny Times 4.0* and *Wolf Totem* started FC in combination with investment insurance, and the FC project of *The Golden Era* was combined with trust contracts; (2) understanding and operating convenience (PC_2), which focuses on whether a FCP is clearly designed and easy to understand and operate; (3) monitor convenience (PC_3), which measures whether FCP could monitor and provide information about the quo stat of the FC projects, as most FC projects would be overdue due to the uncertainties in the process of film production and distribution. PC_1 , PC_2 , and PC_3 are formative indicators as well. In support of these measures, for example, Cho and Kim (2017) found the updates on the advancement and schedule of the FC project might be paramount for campaign success. Mollick (2014) found that over 75% of crowdfunding projects of delivering products were delayed. Therefore, the monitor function provided by FCP might be one of the perceived conveniences of film fans. Accordingly, Agrawal et al. (2011) argued that the online platform of crowdfunding could monitor the progress, provide input, and gather information.

Respondents' perceived risk (PR) of FCP was also measured on a Likert scale (from Agree to Disagree) and includes (1) risk of misunderstanding (PR_1), as most people are not familiar with the operational mode of the equity-based or reward-based projects in FCP; (2) privacy risks (PR_2), which evaluates the risk of exposing personal financial information shared in FCP; (3) credit risks (PR_3), as there is no guarantee for projects in FCP (Braet et al., 2018; Tekeoğlu, 2015; Valanciene & Jegeleviciute, 2013). PR_1 , PR_2 , and PR_3 are formative indicators. European Commission (2016) found that the risks of crowdfunding include the liquid risk, platform associated with technical risks, and cyber-attacks.

The moderators are individual characteristics such as the respondents' gender (G), age (A), monthly income (MI), monthly investment expenditure (MIE), and monthly



Methodology: PLS-SEM (variance based SEM).
 H_1 : the coefficient on the path of $PMV \rightarrow WPFC \neq 0$.
 $H_{1\alpha}$: the coefficient on the path of $PMV \rightarrow WPFC = 0$.
 H_2 : the coefficient on the path of $PNMV \rightarrow WPFC \neq 0$.
 $H_{2\alpha}$: the coefficient on the path of $PNMV \rightarrow WPFC = 0$.
 H_3 : the coefficient on the path of $PC \rightarrow WPFC \neq 0$.
 $H_{3\alpha}$: the coefficient on the path of $PC \rightarrow WPFC = 0$.
 H_4 : the coefficient on the path of $PR \rightarrow WPFC \neq 0$.
 $H_{4\alpha}$: the coefficient on the path of $PR \rightarrow WPFC = 0$.

Figure 1. The methodology, hypothesis and research architecture.

expenditure for watching movie (MIW). G, A, MI, MIE, and MIW are formative indicators as well. In order to have a comparable sample size across groups in multi-group analysis, several cut-offs were used in the present study to divide the total sample into two groups. For example, respondents were divided into male and female groups (for gender). More specifically, the total samples were divided into groups by whether a respondent was older than 25 years old or not (for age), had a monthly income higher than RMB 2,500 or not (for Monthly Income), had a monthly investment larger than RMB 750 or not (for Monthly Investment), and had a monthly expenditure for watching movie higher than RMB 50 or not (for Monthly Investment).

3. Methodology and results

3.1. Aim of research

This paper studies the relationships between film fans' WPFC and their perceived material and non-material value of the FC. Furthermore, the present study investigated the mediating effects of film fans' perceived conveniences and risks of FCP, and the moderating effects of film fans' individual characteristics.

3.2. Hypotheses

Based on the above discussion, the methodology, hypotheses, and research designs are illustrated in Figure 1. Considering the magnitude consistency of each variable, WPFC is modified as $\ln(WPFC + 1)$. The paths of the model (Hypotheses) are:

$$\ln(WPFC + 1) = \beta_1 PMV + \epsilon_1 \tag{1}$$

$$\ln(\text{WPFC} + 1) = \beta_2 \text{PNMV} + \epsilon_2 \quad (2)$$

$$\ln(\text{WPFC} + 1) = \beta_3 \text{PC} + \epsilon_3 \quad (3)$$

$$\ln(\text{WPFC} + 1) = \beta_4 \text{PR} + \epsilon_4 \quad (4)$$

$$\ln(\text{WPFC} + 1) = \beta_5 \text{PMV} + \beta_6 \text{PNMV} + \beta_7 \text{PC} + \beta_8 \text{PR} + \epsilon_5 \quad (5)$$

where ϵ_1 , ϵ_2 , ϵ_3 , ϵ_4 , ϵ_5 are residual variances. Equations (1) and (2) tested the hypotheses (H_1 , H_2) that PMV and PNMV had significant effects on WPFC ($\text{PMV} \rightarrow \text{WPFC}$, $\text{PNMV} \rightarrow \text{WPFC}$), and H_1 , H_2 were supported by literature of fan economic theory and hedonic pricing theory. Specifically, according to the hedonic demand theory, film fans' WPFC could be increased by the PMV and PNMV of FC and could be reflected by the embodied characteristics (PMV or PNMV) of FC (Li & Li, 2018; Nelson, 1978). Similarly, Equations (3) and (4) tested the hypotheses (H_3 and H_4) that the mediators have significant effects on the dependent variables ($\text{PC} \rightarrow \text{WPFC}$, and $\text{PR} \rightarrow \text{WPFC}$), and H_3 , H_4 were supported by literature of fan economic theory and hedonic pricing theory as well. More specifically, as suggested by the hedonic demand theory, film fans' expected WPFC would be modified by the PC and PR of FCP, and thereafter be reflected by the embodied characteristics (PC or PR) of FCP (Reis & Silva, 2006; Rosen, 1974).

The moderating effects of individual characteristics of respondents were tested by comparing the coefficients of the paths $\text{PMV} \rightarrow \text{WPFC}$, $\text{PNMV} \rightarrow \text{WPFC}$, $\text{PC} \rightarrow \text{WPFC}$, and $\text{PR} \rightarrow \text{WPFC}$ across different groups made based on fans' gender, age, income, investment, and expenditure for watching movie. Based on a literature review, some important covariates were added in the model, such as online interaction between creators and backers on FC (Colombo, Franzoni, & Lamastra, 2015), the securities law about investor protection and capital formation (Surowiecki, 2004), the fundraising amount target of FC (Barasinska & Schäfer, 2014), and FC sponsors' perceived content and knowledge of financial products (Jancenelle, Javalgi, & Cavusgil, 2018).

3.3. Method

In data analysis, SPSS 13.0 and Smart PLS 3.0 were used to construct structural equation models by PLS-SEM (variance-based SEM). We selected respondents with a monthly expenditure for movies significantly higher than zero, and in total, 505 valid respondents were included in the analysis. Variance-based structural equation modeling outperforms other models in terms of convergence, identification, and factor indeterminacy and was therefore used in the present study (Hair, Sarstedt, Ringle, & Mena, 2012; Henseler, 2010); Furthermore, this model requires no specific assumption about indicator distribution (as WPFC, PMV, PNMV, PC, or PR) (Hair, Risher, Sarstedt, & Ringle, 2019; Reinartz, Haenlein, & Henseler, 2009), and has strong theoretical support and accuracy in prediction (Richter, Sinkovics, Ringle, & Schlägel, 2016; Sarstedt, Ringle, Henseler, & Hair, 2014).

Table 1. Descriptive statistics, reliability and validity test of the variables.

Variable	Item	Approval ratio	Loading	α	CR	AVE
WPFC	$\ln(\text{WPFC}_p + 1)$	76.63% (the mean of WPFC _p is RMB 429.13)	0.84	0.71	0.87	0.77
	$\ln(\text{WPFC}_o + 1)$	79.41% (the mean of WPFC _o is RMB 46.46)	0.91			
PMV	PMV ₁	44.36%	0.79	0.67	0.82	0.60
	PMV ₂	42.38%	0.73			
	PMV ₃	34.65%	0.79			
PNMV	PNMV ₁	59.60%	0.73	0.23	0.66	0.40
	PNMV ₂	85.74%	0.54			
	PNMV ₃	46.73%	0.60			
PC	PC ₁	51.88%	0.83	0.82	0.89	0.73
	PC ₂	51.89%	0.88			
	PC ₃	52.87%	0.86			
PR	PR ₁	96.44%	0.49	0.33	0.69	0.44
	PR ₂	42.97%	0.73			
	PR ₃	44.95%	0.74			

3.4. Descriptive statistics

The descriptive statistics show that (1) 39.41% of the respondents were males; (2) the average age of respondents was 25.48 years old; (3) the average monthly income of the respondents is RMB 2,506.93; (4) the average monthly investment of the respondents is RMB 752.48; (5) the average monthly film expenditure of the respondents is RMB 48.85.

Revealed from the descriptive statistics (see Table 1), an overwhelming number of film fans in China tend to invest in FC projects. However, these fans are unfamiliar with FC and FCP, and more surprisingly, they are unfamiliar with the perceived material and non-material value of FC as well. From Table 1, the reliability and convergent validity of the variables were acceptable. The factor loadings (Loading), Cronbach's alpha (α), composite reliability (CR) and average variance extracted (AVE) of WPFC, PMV, PNMV, PC, and PR are sufficient for further data analysis, although Cronbach's alphas for some factors (PNMV, PR) are a bit lower. Due to parsimony consideration, the discriminant validity of variables was not presented in the table. However, the correlation coefficients between study variables are lower than the square root of AVE of the variable. Further, from Table 2, the Variance Inflation Factor (VIF) values of all the variables are lower than five, and the Tolerance values are all higher than 0.2, indicating no serious collinearity among variables (Table 2).

More than three-quarters of respondents indicated they had WPFC. The average score of WPFC for film production and distribution is RMB 429.13, and the average score of WPFC for watching the film on-demand in the theater is RMB 46.46. For most respondents, their main motivation to sponsor FC is related with film type, a non-monetary reward. Action movies and animated movies are most popular among FC sponsors. Meanwhile, more than half of the respondents are motivated by the convenience of FCP. Accordingly, D'Amato (2014) found that fans might still sponsor and support a film project even without any incentive. Notably, Cecere, Le Guel, and Rochelandet (2017) found that the amount of money contributed by funders in non-equity crowdfunding was positively associated with their altruism, but negatively associated with monetary incentives of crowdfunding.

Table 2. Tolerance and VIF values for the collinearity test on the indicators of PMV, PNMV, PC, and PR.

Dependent variable		$\ln(\text{WPFC}_p + 1)$	$\ln(\text{WPFC}_o + 1)$		
Adjust R^2		0.064	0.036		
Independent variable		β	β	Tolerance	VIF
Constant		4.399***	3.379***		
PMV	PMV ₁	-0.651***	-0.230*	.509	1.964
	PMV ₂	-0.145	0.057	.658	1.520
	PMV ₃	0.029	-0.186	.633	1.579
PNMV	PNMV ₁	0.191*	0.151*	.755	1.324
	PNMV ₂	0.155	0.041	.949	1.053
	PNMV ₃	-0.067	0.050	.817	1.224
PC	PC ₁	0.705***	0.192	.483	2.069
	PC ₂	-0.185	-0.027	.411	2.436
	PC ₃	-0.083	0.046	.455	2.199
PR	PR ₁	-0.370	-0.207	.854	1.171
	PR ₂	0.140	0.129	.811	1.232
	PR ₃	0.370	0.094	.821	1.218

* $p < 0.05$, *** $p < 0.001$.**Table 3.** The model evaluation of structural equation model.

Path	Original	Mean	T-value
PMV \rightarrow PC	0.71	0.71***	32.92
PMV \rightarrow PR	0.20	0.20***	5.68
PNMV \rightarrow PC	0.03	0.02	1.00
PNMV \rightarrow PR	-0.04	-0.05	0.76
PC \rightarrow WPFC (H_3)	0.02	0.02	0.75
PR \rightarrow WPFC (H_4)	-0.47	-0.47***	17.13
PMV \rightarrow WPFC (H_1)	-0.08	-0.08**	2.67
PNMV \rightarrow WPFC (H_2)	0.02	0.02	0.75
PMV \rightarrow PC \rightarrow WPFC	$R^2 = 0.21$		
PNMV \rightarrow PR \rightarrow WPFC			

** $p < 0.01$, *** $p < 0.001$.

3.5. Procedures

The standard bootstrapping procedure is applied to the structural equation model with 1000 cases and 2000 samples, to estimate the coefficients of paths hypothesized in H_1 , H_2 , H_3 , H_4 . Revealed from the results (see Table 3), respondents' perceived material values of FC and perceived risks of FCP had significantly negative effects (-0.08 and -0.47) on their WPFC, but not on their perceived non-material values of FC and perceived conveniences of FCP. In short, H_1 and H_4 are supported, whereas H_2 and H_3 are rejected. In addition, the respondents' perceived material values of FC had a significantly positive association with their perceived conveniences of FCP and their perceived risks of FCP. In contrast, respondents' perceived non-material values of FC had no significant association with the dependent variables. Interestingly, respondents' perceived non-material values of FC and conveniences of FCP had a positive effect on their WPFC, but had negative effects on their perceived material values of FC and risks of FCP. These results might indicate that film fans in China care more about the non-material values of FC than the material values of FC. Fans who highly value the conveniences of FCP, and highly doubt the stagnant situation of FCP in China at present, tended to have lower WPFC. Accordingly, Belleflamme, Lambert, and Schwienbacher (2014) found crowdfunders regard community benefits

Table 4. Multi-group analysis of respondents' gender.

Variable/path/model	Coefficient or Mean				Difference = Mean(M) – Mean(F)
	Male (M)		Female (F)		
	Original	Mean	Original	Mean	
WPFC _p	RMB 387.25		RMB 456.36		-RMB 69.11
WPFC _o	RMB 44.48		RMB 47.74		-RMB 3.26
PMV → PC	0.75	0.75***	0.68	0.68***	0.07***
PMV → PR	0.27	0.26***	0.14	0.15***	0.11***
PNMV → PC	0.07	0.06*	-0.02	-0.02	0.08***
PNMV → PR	-0.07	-0.08	-0.07	-0.06	-0.02
PC → WPFC	0.06	0.06*	-0.01	-0.01	0.07***
PR → WPFC	-0.40	-0.40***	-0.52	-0.52***	0.12***
PMV → WPFC	-0.06	-0.06*	-0.08	-0.08**	0.02
PNMV → WPFC	0.03	0.04	0.04	0.03	-0.01
PMV → PC → V	R ² = 0.16		R ² = 0.27		
PNMV → PR → V					

*p < 0.05, **p < 0.01, ***p < 0.001.

Table 5. Multi-group analysis of respondents' age.

Variable/path/model	Coefficient or Mean				Difference = Mean(O) – Mean(Y)
	Age > 25 (O)		Age ≤ 25 (Y)		
	Original	Mean	Original	Mean	
WPFC _p	RMB 382.56		RMB 446.64		-RMB 64.08
WPFC _o	RMB 35.29		RMB 50.65		-RMB 15.36***
PMV → PC	0.77	0.77***	0.69	0.69***	0.08***
PMV → PR	0.26	0.26***	0.19	0.19***	0.07***
PNMV → PC	-0.02	-0.02	0.05	0.04*	0.06***
PNMV → PR	-0.19	-0.19***	0.07	0.06	0.17***
PC → WPFC	0.14	0.15***	-0.03	-0.03	0.18***
PR → WPFC	-0.63	-0.63***	-0.40	-0.40***	-0.23***
PMV → WPFC	-0.05	-0.05	-0.10	-0.10***	0.05***
PNMV → WPFC	0.12	0.12	-0.03	-0.02	0.14***
PMV → PC → V	R ² = 0.37		R ² = 0.16		
PNMV → PR → V					

*p < 0.05, ***p < 0.001.

(e.g., their perceived conveniences of FCP) as an important composite of FC utility. Agrawal et al. (2011) also argued that crowdfunding could eliminate most distance-related economic frictions.

3.6. Data analysis

The same procedure explained above was used to investigate the moderating effects of respondent's individual characteristics such as gender, age, monthly income, monthly investment, and monthly expenditure for watching movie on the association between the respondent's WPFC and FC incentives. Results from multi-group analyses of respondent's gender, age, monthly income, monthly investment, and monthly expenditure for watching movies are presented in Table 4–8.

To summarize, from Table 9, the results showed that respondent's gender, monthly income, monthly investment, and monthly expenditure for watching movies might have significant moderating effects on the paths hypothesized in H1, H2, H3, and H4. As an implication, the content design, marketing, and promotion of the FC

Table 6. Multi-group analysis of respondents' monthly income.

Variable/path/model	Coefficient or Mean				Difference = Mean(R) – Mean(P)
	Income > RMB 2,500 (R)		Income ≤ RMB 2,500 (P)		
	Original	Mean	Original	Mean	
WPFC _p	RMB 478.82		RMB 456.36		-RMB 69.11
WPFC _o	RMB 35.29		RMB 47.74		-RMB 3.26
PMV → PC	0.67	0.67***	0.74	0.74***	-0.07***
PMV → PR	0.21	0.21***	0.18	0.18***	0.03
PNMV → PC	-0.06	-0.06	0.10	0.09***	-0.15***
PNMV → PR	-0.13	-0.12	-0.01	-0.02	-0.10***
PC → WPFC	0.12	0.12***	-0.04	-0.04	0.16***
PR → WPFC	-0.57	-0.57***	-0.42	-0.42***	-0.15***
PMV → WPFC	-0.04	-0.04	-0.11	-0.11***	0.07***
PNMV → WPFC	0.06	0.06	1.03×10^{-3}	4.67×10^{-3}	0.06
PMV → PC PR → WPFC	R ² = 0.31		R ² = 0.18		

***p < 0.001.

Table 7. Multi-group analysis of respondents' monthly investment.

Variable/path/model	Coefficient or Mean				Difference = Mean(IB) – Mean(IL)
	Investment > RMB 750 (IB)		Investment ≤ RMB 750 (IL)		
	Original	Mean	Original	Mean	
WPFC _p	RMB 378.07		RMB 460.98		-RMB 82.91
WPFC _o	RMB 45.04		RMB 47.34		-RMB 2.30
PMV → PC	0.70	0.70***	0.72	0.72***	-0.02
PMV → PR	0.10	0.10**	0.27	0.27***	-0.17***
PNMV → PC	0.05	0.05	0.02	0.01	0.04
PNMV → PR	-0.26	-0.26***	0.01	0.01	-0.27***
PC → WPFC	0.03	0.03	-0.01	-0.01	0.04
PR → WPFC	-0.48	-0.48***	-0.46	-0.46***	-0.02
PMV → WPFC	-0.03	-0.03	-0.13	-0.13***	0.10***
PNMV → WPFC	0.13	0.13***	-0.01	-3.47×10^{-3}	0.13***
PMV → PC PR → WPFC	R ² = 0.23		R ² = 0.21		

p < 0.01, *p < 0.001.

Table 8. Multi-group analysis of respondents' monthly expenditure to watch film.

Variable/path/model	Coefficient or Mean				Difference = Mean(F) – Mean(NF)
	Film expenditure > RMB 50 (F)		Film expenditure ≤ RMB 50 (NF)		
	Original	Mean	Original	Mean	
WPFC _p	RMB 458.23		RMB 379.78		RMB 78.45
WPFC _o	RMB 49.63		RMB 34.11		RMB 15.52***
PMV → PC	0.68	0.68***	0.80	0.80***	-0.12***
PMV → PR	0.20	0.20***	0.09	0.09***	0.11***
PNMV → PC	0.02	0.01	0.10	0.10***	-0.09***
PNMV → PR	0.09	0.07	-0.52	-0.52***	0.59***
PC → WPFC	0.06	0.06	0.02	0.02	0.04
PR → WPFC	-0.37	-0.37***	-0.75	-0.75***	0.38***
PMV → WPFC	-0.04	-0.04	-0.05	-0.05	0.01
PNMV → WPFC	-0.03	-0.03	0.39	0.39***	-0.42***
PMV → PC PR → WPFC	R ² = 0.13		R ² = 0.55		

***p < 0.001.

Table 9. The significance on moderating effects of respondents' individual variables.

	Gender	Age	Monthly income	Monthly investment	Monthly expenditure to watch film
PMV → WPFC	○	○	○	○	×
PNMV → WPFC	○	○	×	○	○
PC → WPFC	×	○	○	×	×
PR → WPFC	×	○	○	×	○

Note: ○ means it has a significant moderating effects of respondents' individual variables.

×

project and FCP may consider film fans' individual characteristics to attract more funding. Table 4 shows that the positive association between WPFC and their perceived conveniences of FCP was stronger among males than females, whereas the negative association between WPFC and their perceived risks of FCP was weaker among males. Moreover, there is no significant moderating effect of gender in the association between WPFC and perceived material of FC, as well as in the association between WPFC and perceived non-material values of FC. As presented in Table 5, the positive association between WPFC and their perceived conveniences of FCP and non-material values of FC, and the negative association between WPFC and perceived risks of FCP, were stronger for film fans who are older than 25 years old. However, the negative association between WPFC and perceived material values of FC was weaker in the over 25-year old group. Revealed from Table 6, the positive association between WPFC and perceived conveniences of FCP, and the negative association between WPFC and their perceived risks of FCP were stronger among fans with more monthly incomes, whereas for this group the negative association between WPFC and perceived material values of FC was weaker. No significant moderating effect of monthly income was found in the association between WPFC and perceived non-material values of FC. As presented in Table 7, the negative association between WPFC and perceived material values of FC was weaker among film fans with more monthly investment, but the positive association between WPFC and perceived non-material values of FC were stronger. However, no moderating effect of monthly investment was found in the associations between WPFC and perceived conveniences and risks of FCP. According to Table 8, the negative association between their WPFC and perceived risks of FCP and the positive association between WPFC and perceived non-material values of FC were stronger for film fans with less monthly expenditures to watch film (Table 9).

4. Discussion and conclusions

With the rapid development of the film industry, financial tools, Internet, and communication technology, the number of successful cases of FC is expanding in various countries. However, most FCPs in China is still under development. Besides, the effect of the Fan Economy has become an important topic that governments, film industries, and researchers all concern. The purpose of this paper is to explore the relationship between film fans' WPFC and FC incentives (e.g., material and non-material rewards). Moreover, this paper examined the mediating effect of perceived conveniences and risks of FCPs in the relationship between film fans' WPFC and FC incentives. Furthermore, the moderating effects of film fans' individual characteristics

such as gender, age, monthly income, monthly investment, and monthly expenditure for watching movies on the relationships between film fan's WPFC and FC incentives were also examined.

According to the literature review, most of the previous studies focused on the fundraisers' characteristics in successful FC cases, whereas little literature has discussed the effect of sponsors' perceived material and non-material values of FC. Besides, no published study examined the mediating effect of perceived conveniences and risks of FCPs. According to the results, three-quarters of respondents in China tended to fund FC projects. The respondents had a mean investment of RMB 429.13 in WPFC for film production and distribution, and a mean of RMB 46.46 for watching film on-demand in the theater. Some film fans were not familiar with material and non-material rewards of FC and the conveniences and risks of FCP. However, other film fans did care about the non-material rewards of FC. These results indicate that more attention might be paid to film fans' emotions about the non-material rewards of FC to promote successful FC.

According to our results, Film fans' WPFCs were negatively affected by their perceived material values of FC and risks of FCP, but not by their perceived non-material values of FC and conveniences of FCP. Moreover, Film fans' perceived material values of FC have a significantly positive association with their perceived conveniences and risks of FCP, whereas their perceived non-material values of FC have no significant relationships with their perceived conveniences and risks of FCP. The respondent's gender, age, monthly income, monthly investment, and monthly expenditure to watch films would moderate the associations between their perceived material and non-material values of FC, their perceived conveniences, and risks of FCP, and their WPFC.

Plausible explanations of the abovementioned results are discussed below. First, more than 75% of film fans are willing to pay for FC. Second, film fans who are willing to pay for FC seem to prefer non-material rewards of FC over the material rewards of FC. Third, Film fans' perceived material and non-material values of FC include the type, actors, director, and script of the film, and there may be individual differences. Fourth, Film fans' WPFC would negatively affect their perceived risks of the FCP, but positively affect their perceived risks of the FCP. Fifth, FCPs in China is still under development.

The present study also provides practical suggestions for FC project founders, FCP operators, and governments. First, to improve the acceptance of FC projects in China, the content design and market promotion of FC and FCP are suggested to consider the influencing factors of Chinese film fans' WTP. Second, in the content design and market promotion of FC and FCP, more attention seems to be needed on the non-material rewards of FC instead of material rewards of FC. As Galuszka and Bystrov (2014) found, the motivations that drive the contributors to musical crowdfunding are fandom, love of music, and profit-earning. However, to guarantee the long-term investment of film fans, the providers of FC projects are suggested to differentiate their content design strategies about the non-material rewards of FC according to the individual characteristics of film fans. For example, for female fans, the marketing strategy of FC may focus more on non-material rewards or the type

and script of the film. Third, in the content design and market promotion of FC and FCP, attempts should be made to lower film fans' perceived risks of the FCP, and promote film fans' perceived conveniences of the FCP. Likewise, different strategies should be made depending on the individual characteristics of film fans. Fifth, FC could be further encouraged in China to promote the diversification of the film industry and the export of Chinese culture. Moreover, the operating mode of FCP should be more closely related to FC's incentives of film fans, especially the non-material rewards of FC.

Although the findings may be preliminary, the present study has made several theoretical contributions. First, as film fans were found to have a strong willingness to invest in the production and distribution of films through crowdfunding, the present study confirmed the presence of consumers' long-tailed demand for films. This indicates that the trend on the value chain of the film industry may be demand-led (Solidoro & Viscusi, 2020). Second, as film fans' WPFC may be affected by the non-material rewards of FC projects but not by their material rewards, the present study highlighted the importance of film fans' emotional and experiential values. Third, film fans' WPFC may also be affected by the conveniences and risks of FCP, such as the transaction cost of FC. This finding provides some explanations about why FCPs are still under development in China and calls for future research looking into this issue. Fourth, the present study found that the individual characteristics of film fans may affect the association between WPFCs and FC incentives, and further supported the consumers' long-tailed demand for films. These findings also call for more research in this field.

However, several limitations should be taken into account when interpreting the findings from this study. Accordingly, we also provide suggestions for future research. First, this paper did not consider how drivers of successful FC cases may affect WPFC. Future research is therefore encouraged to include drivers of successful FC cases in other countries, such as personal networks of crowdfunders, the quality of FC project, the geography location of FC project, community and cultural constructs, the trust and perceived knowledge of the funders (Agrawal et al., 2011; Josefy, Dean, Albert, & Fitz, 2017; Mollick, 2014). Second, this paper did not consider film fans' FC experience and how it may affect WPFC; future research may further explore the relationships between customers' WPFC and experience of FC, as more experience of FC could mitigate sponsors' concerns about information asymmetry of project quality and founder credibility, and thereafter enhance their WPFC. This is vitally important for Chinese FCPs, as Chinese customers generally have little experience with FC and therefore have less motivation to sponsor FC (Courtney, Dutta, & Li, 2017).

Third, there are various types of material rewards of FC projects, and the present study only included several basic material rewards. As a suggestion, the compositional use of crowdfunding and other financial instruments in the film industry may be further explored. FCPs could be combined with other financial approaches to promote the effectiveness of funding films (Braet et al., 2018). Fourth, this paper did not discuss the relationships between FC project initiators and contributors. Researchers may further explore the relationships between the group of fans, the cast and crew of the film, the types of FC, the scale of the fans, and the role played by contributors

(Chin et al., 2014; Scott, 2015; Smith, 2015). Fifth, although films could be an important export carrier of Chinese culture, at present, there is little successful export of Chinese films. One of the plausible reasons may be that Chinese films are not appropriately marketed in other countries. Therefore, this paper suggests that filmmakers and Chinese governments pay more attention to adopt different marketing strategies for films and FC in different countries. Likewise, Solidoro and Viscusi (2020) suggested that FCP should collaborate more frequently with filmmakers to decide the film's content, pricing, and marketing decision support system. Fanea-Ivanovici (2019) found the major barriers of FC for film fans were the awareness and skepticism about FC, and the drivers of a successful FC were the reputation and network of filmmakers and the permanent communication with fans.

Notes

1. The website of Kickstarter for “CRYSTAL ANTLERS UNTITLED MOVIE” is <https://www.kickstarter.com/projects/videothing/crystal-antlers-untitled-movie>.
2. The experts of this paper are one government official, one crowdfunding expert, and one film expert.

Disclosure statement

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Appendix: Questionnaire: Film fans' willingness to pay by film crowdfunding

1. Your Individual Characteristics:
 - (1) What is your gender? Male Female
 - (2) What is your age? _____
 - (3) What is your monthly income? _____
 - (4) What is your monthly investment? _____
 - (5) What is your monthly film expenditure? _____

2. Your Willingness to Pay by Film Crowdfunding
 - (1) How much would you want to pay for the purpose of film production and distribution? _____
 - (2) How much would you want to pay for the purpose to watch the film on-demand? _____

3. Your Perceived Material Rewards of Film Crowdfunding
 - (1) Do you agree to pay by film crowdfunding for the monetary rewards that you could obtain from film crowdfunding (as dividends)?
 Very Agree Agree No comment Disagree Very Disagree
 - (2) Do you agree to pay by film crowdfunding for the actors of the film?
 Very Agree Agree No comment Disagree Very Disagree
 - (3) Do you agree to pay by film crowdfunding for the director of the film?
 Very Agree Agree No comment Disagree Very Disagree

4. Your Perceived Non-Material Rewards of Film Crowdfunding
 - (1) Do you agree to pay by film crowdfunding for the non-monetary rewards that you could obtain from film crowdfunding, which include premiere ticket, the pre-purchase of film DVD, the act of some film roles, the visit of the film set, and the thanks in the film credits?
 Very Agree Agree No comment Disagree Very Disagree
 - (2) Do you agree to pay by film crowdfunding for the type of film, such as action movie, comedy, drama or animations?
 Very Agree Agree No comment Disagree Very Disagree
 - (3) Do you agree to pay by film crowdfunding for the script of the film?
 Very Agree Agree No comment Disagree Very Disagree

5. Your Perceived Conveniences of Film Crowdfunding Platform
 - (1) Do you agree film crowdfunding platform could help you to find the target film crowdfunding project with financial goods easily?
 Very Agree Agree No comment Disagree Very Disagree

(2) Do you agree film crowdfunding platform is clearly designed and easy to understood and operate?

Very Agree Agree No comment Disagree Very Disagree

(3) Do you agree film crowdfunding platform could monitor and provide information about the quo stat of the film crowdfunding projects?

Very Agree Agree No comment Disagree Very Disagree

6. Your Perceived Risk of Film Crowdfunding Platform

(1) Do you agree most people are not familiar with the operational mode of the equity-based or reward-based projects in film crowdfunding platform?

Agree No comment Disagree

(2) Do you agree there is the risk of exposing personal financial information shared in film crowdfunding platform?

Agree Disagree

(3) Do you agree there is no guarantee for projects in film crowdfunding platform?

Agree Disagree