Nascent ventures competing for start-up capital: matching reputations and investors

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Abstract

Although nascent ventures have not yet developed a performance-based reputation, the individual reputations of their founders, based on the performance of their earlier ventures, can function as important signals to investors. Selection system theory distinguishes between different types of reputations as well as different types of investors, in order to analyze how particular types of reputations affect the investment behavior of particular types of investors. The empirical setting of this paper is the Dutch film industry, in which we study the impact of different types of reputations of producers and directors on the investment decisions of the three main investors.

Keywords: Reputation, Nascent ventures, Selection system theory, Investors, Film
1. Executive summary

Nascent ventures first compete to acquire essential resources, especially investment capital, before they can compete in product markets. This paper studies the decision making behavior of investors with respect to nascent ventures, and in particular the role that the reputation of the nascent venture plays in determining the size of the investment. Of course, nascent ventures cannot yet have a performance-based reputation. However, the nascent venture’s founding members are likely to have individual reputations derived from the performance of earlier ventures in which they have been involved. In turn, investors can evaluate the viability of the current nascent organization on the basis of the individual reputations of these founding members.

While earlier studies focused on the general effects of corporate or individual reputations on attracting investment capital, a major contribution of this study is to distinguish between different types of reputations and different types of investors, and then analyze how particular types of reputations have an effect on particular types of investors. We do this by applying selection system theory, which is an approach to understanding competitive processes by focusing on the identity of the decision makers whose evaluations determine the outcome of these competitive processes. The three basic types of selectors are: market selectors, peer selectors and expert selectors.

This tripartite classification allows us to categorize types of reputations on the basis of their sources. First, if a reputation is based on success in consumer markets, for example (end-) consumers’ quality perceptions of a specific brand of shampoo, it can be linked to market selection. Second, a reputation type can be linked to expert selection if it originates from expert judgments. An example is a credit rating agency
such as Moody’s. Third, if the reputation is based upon success among peers, for example winning an award at the ‘Oscars’ where the jury largely consists of other filmmakers, it can be linked to peer selection.

At the same time types of investors can be categorized by considering both the characteristics and the goals of the investors making the investment decisions. First, if investors back a venture because they primarily hope that many consumers will like and buy the product they can be identified as market selectors. Second, if investors are (industry) peers of the founding members of the new venture they can be identified as peer selectors. Third, if they are neither market nor peer selectors they can be categorized as expert selectors. This tripartite categorization opens the way to the main argument of this paper: nascent organizations will be more successful in attracting investment capital from an investor if their founding members have performance-based reputations of a type that matches the type of the investor.

In the empirical section of this paper we test this argument by studying the impact of the reputations of producers and directors on the investment decisions of the three main investors in the Dutch film industry: distributors, television broadcasters and the Film Fund. We find support for our main theoretical argument, namely, distributors, representing market selection, are indeed affected by market reputations, although only those of producers. Broadcasters, representing expert selectors, attach the greatest importance to expert reputations of directors but not producers. Reputations of non-matching types can even have a negative impact on the willingness of investors to provide investment capital. Only the Film Fund’s investment behavior does not show results that confirm our hypotheses.

Although the Dutch film industry has many case-specific aspects, the arguments in this paper seem applicable to nascent ventures competing for
investments in other contexts in which the founding members of new ventures have performance-based reputations. The results of this study could create awareness among entrepreneurs about the benefits of matching different types of reputations of the key founding members of nascent venture with the types of investors and their respective evaluation criteria. In turn, this could help new entrepreneurs to improve their chances of finding adequate financing by composing the founding team in such a way that the particular reputations of its’ members have the greatest positive impact on investors’ willingness to provide start-up capital.
2. Introduction

An adequate resource base (Brush, Greene, Hart and Haller, 1993; Davidson and Honig, 2003; Parker and van Praag, 2006), and especially adequate financing (Ueda, 2004) is essential for entrepreneurs. Entrepreneurs who are setting up new ventures can attempt to access different sources of investment capital, ranging from family members (e.g. Bates, 1997) to venture capitalists (VCs) (e.g. Franke, Gruber, Harhoff and Henkel, 2006). In order to find external financing for their nascent venture, entrepreneurs have to favorably impress potential investors. This suggests that entrepreneurs should be able to benefit from knowing the particular evaluation criteria that potential investors use in their investment decisions. A number of earlier studies analyzed the evaluation criteria that are used in the decision making process of particular types of investors, especially VCs (Hall and Hofer, 1993; Franke, Gruber, Harhoff and Henkel, 2006, 2008; Petty and Gruber, 2010).

Hall and Hofer (1993) found that the characteristics of the founding members of a new venture did not seem to play a role in VCs evaluations. However, Franke et al. (2006) found that similarities between the personal characteristics of VCs and members of new ventures lead to a bias in the selection process. They found that especially educational background and professional experience biased this selection process. Additionally they assert that this similarity has a positive effect on evaluations of start-up teams. Our study builds on these earlier studies by showing how different types of reputations of a new venture’s founding members influence the investment behavior of different types of investors in relation to this new venture.

Earlier research shows the importance of corporate reputation on the behavior of stakeholders in general (Fombrun and Shanley, 1990), and investors in particular
(Stuart, Hoang and Hybels, 1999; Certo 2003; Higgins and Gulati, 2006). This creates a problem for an entrepreneurial venture that is nascent and in the stage of acquiring financial capital, since it will not yet have a corporate reputation at the organizational level. However, the key individuals setting up the new venture can have individual-level reputations derived from the performance of other organizations in which they are, or have been, involved. Our study focuses on the effect of performance-based reputations of a new venture’s founding members on different types of potential investment capital providers. We build specifically on studies that investigate the impact of top management team characteristics on investor behavior (Tyebjee and Bruno, 1981; Gorman and Sahlman, 1989; Muzyka et al., 1996; Cohen and Dean, 2005; Franke, Gruber, Harhoff and Henkel, 2006, 2008; Beckman, Burton and O’Reilly, 2007; Pollock, Chen, Jackson and Hambrick, 2010).

Reputations, however, are multidimensional constructs (Fombrun and Shanley, 1990; Rhee and Valdez, 2009), and the evaluation of reputations can vary across different stakeholders (Fisher and Reuber, 2007). In this study we therefore distinguish between different types of reputational signals. These are an expression of evaluations by different types of selectors, namely: market reputation signals, peer reputation signals, and expert reputation signals. We study the relationship between these three types of reputations and these three matching types of investors by employing selection system theory (Wijnberg and Gemser, 2000; Wijnberg, 2004; Priem, 2007; Gemser, Leenders and Wijnberg, 2008).

Selection system theory distinguishes between three basic types of selectors: market, peer and expert. The theory aims to explain the outcome of competitive processes by identifying the dominant type of selector in a particular competitive arena, as well as the ways in which selectors and selected interact. It is possible to
identify to which type of selector particular investors in new ventures belong. This paper focuses on the question whether investors, that can be identified as particular types of selectors – market, peer or expert –, are indeed more strongly influenced by reputational signals – market, peer and expert – that are of a matching type.

Earlier studies applied selection system theory to study competition in product markets. For example, how winning or being nominated for an award impacts box office revenues of mainstream or art-house films (Gemser et al., 2008). Employing selection system theory to better understand the financing stage further tests the usefulness of this framework and also extends the theory itself.

Our empirical setting is the Dutch film industry, where producers and directors attempt to find investment capital for their film projects. Many earlier studies focused to the determinants of competitive success in the film industry (e.g. Eliashberg and Shugan, 1997; Basuroy, Chatterjee and Ravid, 2003). However, these studies focused predominantly on the last stage of the competitive process, when the film has been made and competes for ticket sales at the box office. Our study will be the first to focus completely on the first stage of acquiring the necessary investment capital needed to produce the film in the first place. Selection system theory offers an appropriate framework to differentiate between types of investors and explain their investment behavior.

Film distributors, in their role as film investors, can be classified as *market selectors*, because they try to predict what the market, in terms of end-consumers likes. Therefore the question arises: do distributors attach a disproportionate weight to the *market reputation* of filmmakers in terms of their past films’ box-office success? A subsequent question in the context of this investment decision is: do distributors differentiate between the market reputations of the producer versus that of the director?
of the proposed film project? Moreover, how do distributors – being market selectors – value a reputation among peers? A reputation, for example, that derives from being nominated or winning an award, constitutes a peer reputation when the jury consists of other filmmakers.

In the theory section we review the literature on selection system theory and reputation, on the basis of which a number of hypotheses will be proposed. This will be followed by a description of the research setting and the data. The paper will be rounded off with a conclusion where we discuss the limitations of our study, the implications of our findings, and possible interesting areas for future research.

3. Theory and hypotheses

3.1. Setting up new ventures

There are a myriad of factors that determine whether individuals will attempt to set up an entrepreneurial venture. However, before a new venture can compete in the eventual product market, it first needs to convince stakeholders that it is a legitimate venture (Delmar and Shane, 2004) that is worthy of receiving crucial resources, especially investment capital. This means that the process of becoming a successful entrepreneurial organization consists of two stages. In the first stage, the nascent venture has to compete for factors of production or the opportunity to actually produce something by finding adequate resources. In the second stage, the new venture has to compete for end-users or consumers based on what is produced in the first stage.
These two stages often can be neatly distinguished in highly innovative and uncertain industries such as the creative industries (Caves, 2000). Particularly the film industry is characterized by one-off project organizations that are set up to produce a single product (Jones, 1996). Distinguishing between these two stages does not necessarily mean that the second stage always follows the first. There are examples of nascent firms that use (conditional) commitments from customers to convince investors to provide capital, but even in those settings where the stages overlap, it can still make sense to distinguish between the two competitive processes, precisely to get a better understanding of why and how, in these circumstances, customer commitments could be considered start-up resources (Aldrich and Martinez, 2001; Reuber and Fischer, 2005). This paper will focus on the competition of finding adequate resources to start production. We will do so by applying selection system theory.

3.2. Selection system theory

Selection system theory (Wijnberg and Gemser, 2000; Wijnberg, 2004; Priem, 2007; Gemser, Leenders and Wijnberg, 2008) analyzes competitive processes by focussing on the evaluations that attribute value to products and producers. In each competitive arena there are the competitors or selected and the individuals or firms whose evaluations of products and producers determine the performance differentials between the selected. These are referred to as selectors. Usually, the focus in selection system theory is on how evaluations influence the behavior of customers in the final product market. However, the theoretical framework can just as well be applied to the situation in which (potential) producers compete for initial resources
for setting up new ventures, and how external quality evaluations influence the behavior of resource-providers, such as investors.

Selection system theory distinguishes between three ideal types of selection systems. Market selection is when the consumers themselves are the selectors, peer selection is when other producers are the selectors, and expert selection is when evaluations by third parties -who are neither producers nor consumers- are the decisive factor in determining which producers are successful. For example, everyday consumer goods such as detergents are usually market selected, academics compete in a peer selection environment, and bidders at an art auction base their consumer behavior largely upon the opinions of experts (e.g. is the painting by Rembrandt or just “from his school”).

It is important to note that the term expert only denotes an individual’s type of role in the exchange process between the product or producer that is evaluated. It does not necessarily mean that someone has more knowledge than others about the evaluated product. In order to identify someone as an expert selector, it is necessary that this person is a selector. This means that his or her opinions must have a real impact on customer behaviour, as well as the outcome of the competitive process among producers. Additionally this person cannot at the same time be one of the producers or consumers involved in this competitive process when the evaluation takes place.

For example, if a former entrepreneur has become a full-time advisor of a government agency awarding subsidies to software entrepreneurs, this person is considered an expert selector in respect to the competitive process in the software industry. Also, a television celebrity can be identified as an expert selector in the competitive process concerning over-the-counter (OTC) drugs if the opinions of this
celebrity cause large numbers of consumers to buy particular drugs. This person is even considered an expert if his or her pharmaceutical knowledge of OTC drugs is minimal or wrong.

There are three possible complications to this basic model of selection systems: actual selection systems can be a mix of the above-mentioned ideal-types, competitive processes can proceed in multiple stages with its own set of selectors, and decision makers who may look like selectors of one type can actually be representing selectors of another type.

First, it should be emphasized that the aforementioned selection systems are ideal types. Particular competitive processes can be governed by a combination of selection systems in which selectors of different types operate alongside each other. For instance, Mol and Wijnberg (2007) argue that new musicians can become better-known by simultaneously benefiting from becoming a support act to an established artist (representing peer selection), as well as from being granted air time by radio DJs (representing expert selection).

Second, it is possible that the complete selection system consists of multiple stages. Since, there is competition for the opportunity to actually compete in the relevant market, new venture entrepreneurs must initially compete for financial resources from investors in the capital market before they can actually compete in (end-) consumer markets. The decision-makers in the financing stage (Ueda, 2004) may well be of a different type and have different preferences than the decision-makers in the second stage (i.e. where the products enter the market). Using Hsu and Hannan’s (2005) terminology, the audiences can be significantly different in the two stages. In that case, entrepreneurs may need to possess different types of reputations in each of the two stages in order to favorably impress the selectors.
Third, the apparent selectors may be representing the real selectors. These apparent selectors evaluate not on the basis of their own preferences, but as ‘representatives’ of the preferences of others. Representation in this case is not meant in a formal sense, rather it suggests that the competitive success the ‘representative’ selector derives from his or her ability to correctly guess or predict the preferences of the party that the selector represents. This situation often occurs between subsequent stages in a value system. If market selection dominates the competitive process in the final stage, distributors and retailers – under the assumption that they lack the market power or means to effectively shape or influence consumer taste (Mol, Wijnberg and Carroll, 2005) – select products to match the preferences of their consumers and not their own. For example, a furniture retailer buys furniture with the expectation that customers, in turn, will buy the furniture. However, if the furniture retailer’s buyers guess wrong revenues will be lost to the competition.

One can consider these two complications in combination by applying them to the decision making process of financial capital providers. If a bank, for example, values a client’s creditworthiness based on expert rating agencies, then decision making in this stage is dominated by expert selection. However, if a bank is more impressed by a product’s potential, and therefore bases their investment decision on a guess of how well consumers will respond, then this stage is represented by market selection, even though the bank is typically not a market selector for that particular product.

3.3. Reputation and selection
Many studies show that reputations of individuals and/or organizations are quality signals (Podolny, 1993) that serve to impress stakeholders and are valuable in acquiring resources (Stuart, Hoang and Hybels, 1999; Certo, 2003; Higgins and Gulati, 2006). Signals that can be used as proxies of missing information are important determinants of the outcome of competitive processes (Shapiro, 1983; Podolny, 1993; Rindova, Petkova, Williamson and Sever, 2005). For producers, reputational signals based on past performance (Fombrun and Shanley, 1991; Rindova, Petkova and Kotha, 2007) are of great importance because they can influence the behavior of audiences (Hsu and Hannan, 2005). The importance and value of reputations increases when competitive processes take place under conditions of high uncertainty and imperfect information (Shapiro, 1983).

New ventures, especially if they are still in the process of being founded, will not have reputations at the firm level. Since investors are often approached by the founding members of the nascent organization for financing, this implies that the individual reputation of founding members can serve as a quality signal. Earlier studies show that the reputations of core organizational members, such as CEOs (D’Aveni, 1990), top management teams (Cohen and Dean, 2005; Higgins and Gulati, 2006), other board members (Certo, 2003; Musteen, Datta and Kemmerer, 2010) or prestigious affiliates (Pollock, Chen, Jackson and Hambrick, 2010) have an impact on a firm’s ability to attract investment capital, particularly with respect to start-up teams of new ventures (Tyebjee and Bruno, 1981; Gorman and Sahlman, 1989; Muzyka et al., 1996; Franke et al., 2006, 2008).

A performance-based reputation is a multidimensional construct (Fombrun and Shanley, 1990; Rhee and Valdez, 2009) that besides past market success can be based on many signals from many different sources. These signals include contests
(Rao, 1994), awards (Anand and Watson, 2004; Gemser, Leenders and Wijnberg, 2008) reviews (Basuroy, Chatterjee and Ravid, 2003; Eliashberg and Shugan, 1997), ratings (Podolny, 1993), and even the mere volume of media attention (Pollock and Rindova, 2003; Rindova, Petkova and Kotha, 2007).

Reuber and Fisher propose that, depending on the complexity of the purchase process and the extent to which the product is customized, the importance of reputational signals could be more or less restricted to certain domains of endorsement which are more or less relevant to specific audiences (2005) or stakeholders (Fisher and Reuber, 2007). Pollock et al. (2010) look at the differential effects of various sources of reputations when they distinguish between different types of prestigious affiliates of a new venture as well as the additive value of each affiliation in attaining investment capital. Selection system theory allows us to combine, extend and further operationalize the arguments of Reuber and Fisher’s (2005), Fisher and Reuber (2007) and Pollock et al. (2010), because it suggests that the relative importance of each type of reputational signal depends on the competitive environment and its concomitant selection system – market, peer or expert – in which the selected firms or individuals operate.

The selectors whose decisions determine which nascent ventures will be successful in the competition for start-up capital are the decision makers in the organization that provide investment capital. Franke et al. (2006) studied the rating behavior of venture capitalists with respect to the business proposals that they accept. They find that VCs prefer start-up teams whose members have similar professional backgrounds in terms of having work experience in either small or large firms and similar background in professional training. This tendency of investors to favor ventures with management teams that are similar to themselves in the above-
mentioned respects, suggests that investors might also favor ventures whose members score highest along the reputational dimensions that are most important to the selectors themselves.

To test this suggestion, the first step is to identify to which type of selectors the decision makers belong to. In environments where the decision makers are – or represent – market selectors, reputation in the eyes of consumers will count heavily. Such a market reputation could be derived from a number of possible market-reputational signals, such as opinions on consumer forums or previous sales to consumers. In environments dominated by expert selectors, past performance, as perceived and rated by experts, should constitute the most significant part of a reputation. In environments where peer selectors dominate, peer-reputational signals should play a decisive role. In academia, for example, peer-reputational signals, such as a citation index score, can inform investment decisions such as hiring new faculty. We would expect that a reputation of a particular type – market, expert and peer – will be more important if the decision makers can be identified as belonging to a type of selector that matches the type of reputation.

Hypothesis 1a:

The market reputation, compared to the other types of reputation, of a founding team member of an entrepreneurial venture, has the strongest effect on obtaining investment capital if the investors are market selectors.
Hypothesis 1b:

The expert reputation, compared to the other types of reputation, of a founding team member of an entrepreneurial venture, has the strongest effect on obtaining investment capital if the investors are expert selectors.

Hypothesis 1c:

The peer reputation, compared to the other types of reputation, of a founding team member of an entrepreneurial venture, has the strongest effect on obtaining investment capital if the investors are peer selectors.

In the next section we present an empirical study in which selectors of different types are confronted with reputational signals of different types.

4. Data and method

4.1. Research setting and data

The empirical setting of our analysis is the Dutch film industry. Our focus is on the roles of film producers and film directors, whose track records or reputations are important in the search for investment capital. The film industry is characterized by project-based organizations (PBOs). A PBO is a temporary organization that is disbanded once the task for which it was specifically set up is completed (Jones, 1996). The film industry is characterized by high sunk cost and high demand uncertainty (Caves, 2000). Performance-based reputations are relatively valuable in
such uncertain environments because they seem to offer at least an indication of the likelihood of future success.

In our analysis Dutch films are operationalized as films with a theatrical release by producers and directors that have a Dutch nationality or who have attended the Dutch Film Academy, the main film school in the Netherlands. This resulted in 271 films that were released in Dutch film theaters between 1992 and 2009. The 76 films released between 1992 and 1998 are used for constructing independent – market, peer and expert – reputation variables. The remaining 195 films released between 1998 and 2009 are used for analyzing actual investment behavior for each type of investor. Investment data were collected at the Dutch Film Fund, a government agency that is responsible for implementing the policy of the Ministry of Education, Culture and Science to stimulate the production of Dutch films. The Film Fund invested in 161 of the films released between 1998 and 2009, and keeps a record of the investments of the other main investors in these films. These are the public television broadcasters and the film distributors. After deleting the 20 cases for which the investment of the broadcaster or distributor was missing, our final sample amounts to 141 films.

4.2. Dependent variables

Our study analyzes the effect of performance-based reputations of founding members – producers and directors – of new film projects on investors. In the Netherlands there are three crucial film investors that each have the opportunity to participate as an investor. Each one can be identified as (mainly) representing one of the three types of selectors: market selectors, expert selectors and peer selectors.
First, film distributors are predominantly interested in the future market performance of the films for which they provide capital. They will attempt to guess the taste of the final consumers that buy tickets at the box-office (Eliashberg, Weinberg and Hui, 2008). They can therefore be considered to represent market selectors.

Second, state supported public television broadcasters invest in films on the basis of the decisions of experts – see below for further details – and investment from this source can, as a result, be considered to be governed by expert selection.

Third, the Dutch Film Fund is a public institution that aims to promote the quantity, quality and diversity of Dutch films. The decision of the Film Fund to invest in certain films is based on the advice of an advisory committee in which peers – in other words, other filmmakers – dominate. This selection environment can therefore be described as peer selection.

4.2.1. Distributor investment (market selection)

The distributor investment is the absolute size of the minimum guarantee (MG) of a film distributor. Distributors invest in film productions by providing so-called minimum guarantees (MG) in exchange for the distribution rights. The MG is an upfront compensation for expected future earnings that producers can directly invest in the production of a film. The investment decision of a distributor is driven by their evaluation of a film project’s future earnings in the market. Distributors can therefore be considered to act as representatives of market selectors, even if they themselves might not want to view any of the films they distribute.
4.2.2. Broadcaster investment (expert selection)

The broadcaster investment is the absolute size of the public television broadcaster’s investment. The broadcaster’s investment decision can be classified as performed by agents that in the framework of selection system theory can be identified as experts. Public broadcasters are largely financed by the state, and in return have to abide by strict content rules that control the quality and share of national cultural productions. The investment decision is based on the evaluation of the potential merits of a film project by drama experts and executives within the broadcasting organization itself and in the closely-related CoBO and Stifo funds (for more details see Appendix A).

4.2.3. Film Fund investment (peer selection)

The Film Fund investment is the absolute size of the Film Fund subsidy. The overall mission of the Film Fund is to stimulate Dutch film production, emphasizing both quality and diversity, and creating a favorable climate for Dutch film culture (Nederlands Fonds voor de Film 2009a). In selecting projects the Film Fund draws on an external advisory committee that is largely composed of professionals from the Dutch film industry that can be considered to be peers (other filmmakers) of the applicants. This committee assists the Film Fund by giving advice on which projects the Film Fund should support. Next, the Film Fund administrators decide on the basis of the advice of this committee. Investment decisions, in other words, are predominantly based on peer selection, although the committee also includes other types of selectors. Table 1 shows that a majority of advisory committee members are peer selectors. The committee, however, also includes a few film distributors and film
theatre managers (who can be classified as market selectors) and a few expert selectors.

- TABLE 1 AROUND HERE -

4.3. Independent variables

In order to measure the effect of reputations in the investment stage we operationalized reputation as the average performance of an actor’s previous three films. Our data on individual film characteristics are all related to the release year. There is, however, on average a two year time lag between the capital investment decision and the eventual release of a film in the theaters. In the meantime a film is produced, marketed and distributed. For example, for a film released in 2004 the investment decision is likely to be made in 2002. We therefore coded the reputation at the time of the investment decision of a film released in 2004 as the average performance of the last three films made before 2002. In the cases where producers or directors have made two or more films in the same year, we coded the average performance of those films.

In addition, producers and directors making their first film do not have a track record. This means that they either do not have a reputation or – and more likely – they have a reputation that we are incapable of measuring. Someone, for example, may have had a career in neighboring industries such as television or theatre before he or she made the switch to film. Others may have just started their careers after graduating from the Film Academy, but the short films they have made for their final exam may already be known to investors. This makes it unlikely that these new
entrants should be considered as having no reputation. We therefore coded new entrants in the film industry as having an average reputation for each type: market, expert and peer.

4.3.1. Market reputation

Box office success is an often used construct for measuring market performance of films (see for example Sorenson and Waguespack, 2005; Delmestri, Montanari and Usai, 2005). For each film we used the cumulative box office revenues in terms of ticket sales over all consecutive years that each film ran in the theatres. The market reputation of producers and directors is the average box-office performance of his or her last three films before the investment decision. Box office data of films released in the time period 1992-2009 were obtained through the Dutch Film Distributors Association.¹

4.3.2. Expert reputation

The expert reputation of producers and directors is based on the average film critics’ reviews of their last three films at the time of the investment decision of the focal film. Critics’ reviews have been used in earlier studies of the film industry as a construct to measure artistic merit of individual films (Eliashberg and Shugan, 1997; Basuroy, Chatterjee and Ravid, 2003; Ebbers and Wijnberg, 2010)). Critics’ reviews are measured by the number of stars on a scale from 0 to 5. The more stars, the more positive the critic’s review. We used the average of all the star rated film reviews in the four largest national newspapers – Algemeen Dagblad, Volkskrant, NRC Handelsblad and Telegraaf – to rate the expert performance of individual films, and in

¹ Nederlandse Vereniging van Filmdistributeurs (NVF).
turn, expert reputations. The review data in these newspapers are collected by and published in the Filmkrant, a Dutch magazine dedicated to film.

4.3.3. Peer reputation.

Peer reputation is derived from the average number of awards a producer or director has won at the Dutch Film Festival for his or her last three films prior to the current film for which investment is needed. Winning – or being nominated for – awards is considered to be an important quality signal contributing to reputation (Anand and Watson, 2004), the effects of which on performance in the film industry have been studied before (Gemser, Leenders and Wijnberg, 2008). The Dutch Film Festival is the most important film festival in the Netherlands, and awards that are won at this festival are considered to contribute to peer reputation since the members of the jury are fellow filmmakers. Peer reputation of producers is derived from the award category ‘Best Film’, and peer reputation of directors from the category ‘Best Director’.

4.4. Control variables.

First, the budget of a film is expected to be an important predictor of the size of the investment of the Film Fund, the broadcaster and the film distributor. The higher the budget, the more investment capital is needed to produce the film. Budget data were provided by the Film Fund.

Second, the experience of film professionals, in our case producers and directors, could be an important predictor of the size of the investment. Experience is measured as the number of years since an individual made his or her debut in the
industry. This experience is measured in relation to the particular role they perform in the film for which they search investment capital. Film professionals that have been active for many years are more entrenched in industry networks, which can increase their legitimacy (Cattani, Ferriani, Negro and Perreti, 2008), while inexperienced professionals suffer from a liability of newness (Freeman et al., 1983). For Film Academy graduates, experience is measured as the number of years since graduation. For those individuals that did not graduate from the Film Academy we took the year of their first film credit on IMDb as their debut year.

Third, we included two variables to control for the budget of the previous film project of producers and directors. Large budget film projects are more prestigious, and at the same time may also be an indication of experience. The latter might give investors a lower perception of risk and more confidence in the chance of success of the focal project.

Finally, we included a genre dummy for comedy films. The comedy dummy includes (romantic) comedies and romantic films. Comedies are a difficult genre to export to foreign markets since they are often very culture specific (Friedman, 2004). Dutch film investors could therefore be expected to fill this gap in the Dutch film market.

5. Results

5.1. Seemingly unrelated regression

We conducted a seemingly unrelated regression (SUR) analysis to test our hypotheses. SUR allows us to estimate a similar specification for each type of
investor in a single procedure. In other words, instead of estimating three separate models for market, peer and expert selection, we performed one single SUR regression including all three types of selectors or investments. By estimating the specifications jointly in SUR – instead of estimating the coefficients on an equation-by-equation basis – one gains efficiency since the error terms across the equations are expected to be correlated (Zellner, 1962). Before interpreting the results we checked for multicollinearity. There were no multicollinearity problems since we found no significant variance inflation factor (VIF) values (Mean VIF = 1.41 and largest VIF = 1.68).

Table 2 provides the descriptive statistics and correlations. With respect to the dependent variables, it should be noted that the average distributor investment – market selection – is €143,612. The average amount of a television broadcaster’s investment – expert selection – is €577,637. Finally, the average Film Fund investment – peer selection – is €505,186. This shows that in absolute investment share the television broadcaster is the most important investor of the three, followed by the Film Fund and the film distributor.

Table 3 shows that the residuals of the regressions of three dependent variables are indeed significantly correlated (p < 0.05). This supports our choice for applying SUR. Table 4 shows the results of the SUR analysis estimating the investment size of three types of investors or selectors.
First, model 1 ($R^2 = .55, p < 0.001$) tests hypothesis 1a stating that a *market* (compared to peer or expert) *reputation* has the strongest positive effect on the investment size of a distributor or *market selector*. With respect to the control variables, we see that a film project's budget and the fact that it is a comedy both have a positive and significant effect on the willingness of the distributor to invest. We find partial support for hypothesis 1a since there is a positive effect when the type of reputation matches the type of selector, but only with respect to the market reputation of the producer ($\beta = .25, p < 0.01$), not the director. It is interesting to note that the distributor, as market selector, does not seem to take into account any of the reputation signals of the director. There is no significant effect of either market reputation (past box-office success), expert reputation (past reviews) or peer reputation (past awards) with respect to the director. More importantly, the non-matching peer reputation of a producer actually has a negative and significant effect ($\beta = -.13, p < 0.05$) on the investment size of the distributor / market selector.

Second, model 2 ($R^2 = .45, p < 0.001$) tests hypothesis 1b that there is a strongest positive relation between *expert* (compared to market or peer) *reputation* and the investment size of the broadcaster that can be classified as *expert selector*. With respect to the control variables we see that only the size of the budget has a positive and significant effect on the size of the broadcaster investment. Most importantly, however, we find partial support for hypothesis 1b since there is a positive effect when the type of reputation matches the type of selector (expert) with respect to the expert reputation of the director ($\beta = .20, p < 0.05$). In addition, it is
interesting to note that broadcaster or expert selector also seem to take into account another non-matching type of reputation of the director since there actually is a weakly significant negative effect of a director’s market reputation ($\beta = -.16, p < 0.1$).

Third, model 3 ($R^2 = .36, p < 0.001$) tests hypothesis 1c that there is a strongest positive relation between peer (not market or expert) reputation and the investment size of the Film Fund that predominantly constitutes a peer selector. With respect to the control variables we see that the controls for the current film’s budget and the size of the budget of a director’s previous film have a positive and significant effect on the size of the investment. We do not, however, find support for hypothesis 1c. In other words, we find no positive effect on the size of the investment of the Film Fund, when the type of reputation matches the type of selector (peer). This applies to both the peer reputation of the director and the peer reputation of the producer. In addition, none of the non-matching types of reputation of neither the producer nor the director have an effect on the willingness of the peer selector / Film Fund to invest in their projects.

5.2. Robustness checks and alternative model

We performed a number of robustness checks. First, we ran three separate ordinary least squares (OLS) regressions for market, expert and peer selection, to compare the coefficients of these three models with our SUR regression. We found the coefficients to be exactly the same while the significance scores of the OLS regression were lower. This is what we expected since SUR produces more efficient coefficients by taking into account the correlation in the error terms of the three separate models (Zellner, 1962).
Second, we ran a SUR regression where, instead of the absolute investment size, we used the relative size of the investment. This was done by dividing the absolute investment of each particular type by the absolute budget of the film. This led to three dependent variables for relative investment size for all three types of investors. With respect to the main variables, the results only affected our findings related to hypothesis 1b or expert selection and reputation. While the expert reputation of the director became slightly less significant (p = 0.051, instead of p < 0.05), the expert reputation of the producer became weakly significant as well (p < 0.1). This provides additional support for hypothesis 1b. All other types of reputation that did not match the type of selector – market and peer – were not significant.

Third, we ran the analysis after recoding new entrants in the film industry with a different reputation score. Instead of coding them with an average reputation, we coded them as 0.5 times the average reputation, to take the possibility into account that new entrants’ reputations are systematically below average. This slightly affected the main findings related to hypothesis 1b concerning expert selection. While the sign and significance of the expert reputation of directors remained to same, the effect of expert reputation of the producer also became significant (p < 0.01). In other words, this model provided full support for hypothesis 1b. Of the non-matching types of reputations the only change we found was a positive and significant effect for expert reputation of the director (p < 0.05) in relation to peer selection by the Film Fund.

Fourth, we ran a SUR regression with the reputations of producers and directors based solely on the success of their previous single film instead of the last three films in our main model. The results linked to our hypotheses were only slightly different with respect to market selection or the investment by the distributor (model 1), where the positive effect of market reputation of the producer became less
significant (from $p < 0.05$ to $p < 0.1$). We also found a number of interesting effects for non-matching types of reputation. First, with respect to market selection we found that the negative effect of peer reputation of the producer became insignificant, and instead found a positive significant effect ($p < 0.01$) of the peer reputation of the director. Second, with respect to expert selection (model 2), we found that the market reputation of the producer turned positive and significant ($p < 0.01$). Finally, in comparison with peer selection (model 3) we found a positive and weakly significant effect for the expert reputation of the director ($p < 0.1$).

Fifth, we included interaction effects between different types of reputations (market, peer and expert) to see how scoring well on more than one type of reputation simultaneously influences investor behavior. We indeed found a few significant interactions but these did not affect the results linked to our main hypotheses.

Finally, we ran the same analysis with only those cases in which all three investors participated ($n = 96$). This did not affect our results with respect to the matching type of reputations and selectors. It did weaken the significance levels (still all $p$ levels $< 0.05$), but that is likely to be related to the lower power of this regression.

6. Discussion

In our empirical case we studied the value of market, expert and peer reputation of directors and producers, in obtaining investment capital for film projects from three main investors. These three investors, the film distributor, television broadcaster, and the Film Fund, can be described as belonging (mainly) to one of the types that selection system theory distinguishes, namely: market, expert and peer. We
argued that the positive effect between reputations and the size of the investment in a new venture would be the strongest when the type of reputation matches the type of selector and tested three hypotheses, one for each type of reputation.

The results supported the three hypotheses to a markedly different extent. The first hypothesis (1a) about the effect of market reputation was partially confirmed. More specifically, we found clear confirmation of what the theory led us to expect concerning the effect of the market reputation of producers on the behavior of distributors (market selectors). We also found that the peer reputation of the producer had a weakly significant negative effect. In combination with the negative effect of market reputation of the producer in obtaining investment capital from broadcasters, this suggests that the match between the type of reputation and the type of selector is not only important in a positive sense but also in a negative sense. This is especially visible when the type of reputation does not match with the type of selector and actually decreases the appreciation by this selector. Concerning the reputation of the director however, we found no statistically significant effect regardless of type. This may indicate that distributors leave the judgment about the qualities of the director to the producer. As long as a producer has a positive track record of picking new film projects that sell enough tickets at the box-office, the distributor trusts that this producer will collaborate with those directors that help her/him to achieve similar results in the future.

The hypothesis about expert reputation (1b) was also partially confirmed by the data. We found that the expert reputation of a director significantly helps the new venture in which they are involved to obtain investment from public television broadcasters (expert selectors). Contrary to what we expected, we did not find a positive effect for the expert reputation of producers. A possible explanation could be
related to the different roles and concomitant responsibilities of directors versus producers (Baker and Faulkner, 1991). In the film industry the director is predominantly responsible for the artistic aspects of the film and since expert evaluations mainly focus on these aspects, it is possible that the expert reputation of a producer is given less weight by the expert selectors. This is in line with what we found regarding the market reputation of a producer in hypothesis 1a, since the producer’s role and responsibilities are mostly related to the commercial aspects of the film project.

The third hypothesis (1c) is the only one that was not supported by our results. Peer reputation does not seem to increase the size of the subsidies received from the Film Fund, where decisions are predominantly based on advisory committees consisting of peers. In addition, none of the non-matching types of reputations had a significant effect on the investment by the Film Fund. This can be explained by the fact that while we identified the Film Fund as a peer selector, there are also representatives of other selection systems (market and expert) among the decision makers and this might have diluted the effects of the particular types of reputations.

A first possible explanation for the inconclusive results concerning the effects of peer reputation on the Film Fund investment could be that market and expert selectors, although a minority in the Film Fund’s advisory committee, play a greater role than their numbers would suggest. In addition, it is uncertain to what extent the Film Fund’s administrators, who might also be characterized as expert selectors, influence the selection of film projects during the advisory process. An alternative explanation could be that the actual peers who are members of the advisory committee usually are chosen from the ranks of successful filmmakers. As we have seen above, of the three investors studied, the expert-selecting broadcasters are the
most important in terms of film investment share. This could have led to a filtering dynamic in the film industry towards filmmakers with high expert reputations who, although being peers, also attach a relatively high value to expert reputation.

Another possible explanation could be that the Film Fund, apart from its’ other aims, would like to legitimize its’ existence by subsidizing projects that without support would not have been produced. Directors and producers who have already won the highest Dutch filmmakers award – and thus score high on peer reputation as it is measured in this study – could be assumed to have less trouble getting new projects financed through other sources, and therefore the Film Fund might be less willing to subsidize them. In this way, the positive effects of a high peer reputation would be at least partially cancelled out, leading to the inconclusive results that we have found.

7. Conclusion

The core objective of this paper was to differentiate between different types of performance-based reputations and study the extent to which these different types of reputations have an impact on the decision making processes of different types of investors towards new ventures that are still in the process of being set up. The importance of corporate reputation in attracting investment capital has been firmly established (Stuart et al., 1999; Certo, 2003). In addition, the reputation of key individuals or core members affiliated with an organization has been found to play a similar role (Tyebjee and Bruno, 1981; Gorman and Sahlman, 1989; Muzyka et al., 1996; Cohen and Dean, 2005; Franke et al., 2006, 2008; Beckman, Burton and O’Reilly, 2007; Pollock et al., 2010).
Our study builds on Reuber and Fisher (2005) who argued that reputation often is domain-specific and Pollock et al. (2010) who found a distinction between the signaling effects towards investors of different types of prestigious affiliates of new ventures. We especially extend Franke et al. (2006) who focus on the similarity between investors and the core members of new ventures. We used the framework of selection system theory (Wijnberg and Gemser, 2000; Wijnberg, 2004; Priem, 2007; Gemser et al., 2008) which suggested the general argument of this paper that particular types of reputations matching the evaluation criteria and preferences of particular types of selectors, will prove to be more valuable to the selected. In this context we understand the concept of value similarly to how Barney understands the value of a resource as far as it serves to “exploit opportunities or neutralize threats in a firm’s environment” (Barney, 1991: p. 106).

Selection system theory also served to distinguish and categorize the types of reputations and the types of investors. This way we could test a number of specific hypotheses about the value of different types of reputations in the competition for investment capital from different types of investors.

First of all, we distinguish between different types of reputations of founding members of new ventures and different types of investors. Second, we show that the ability to raise investment capital by these founding members is affected by the match between their reputation types – market, expert and peer reputations – and the types of investor – market, expert and peer selectors. We found the strongest positive effect between the market (as opposed to peer or expert) reputation of founding members of new ventures and the size of the investment they receive from market selectors. In addition, we found a similar relationship between expert reputation and investors, characterized as expert selectors. In some cases, reputation types that did not match
the type of investor actually had a negative effect on investors’ willingness to provide capital to the nascent venture.

Our study has a number of limitations pointing the way forward towards areas for future research. Our empirical study relied on data collected by the Film Fund. We could therefore only study the behavior of the investors included in this data set and not other sources of investment, such as investments in projects by the film makers themselves and/or other private investors. Explaining investments from these sources would be a useful extension of our project, although collecting the requisite data is difficult. We also did not include other variables that could explain the behavior of investors, such as the quality of the script and star presence of actors and actresses. The former is hard to measure and we did not have any information about stars having been contracted at the time the investment decisions were made.

Second, we studied the Dutch film industry over a limited time period. Comparison studies using data from other industries and/or in other countries would be of evident interest, to provide further tests of the arguments advanced in this paper as well as of the usefulness of selection system theory as an explanatory framework. An especially interesting industry to further test our theory could be biotech. The biotech industry, similar to the film industry, is also very risky because of high sunk costs in new product development, a strong reliance on outside (venture) capital, difficult to predict consumer demands, and a strong reliance of investors on top management as a signal of the new venture’s potential (Higgins and Gulati, 2006).

Third, this paper focused on one stage of the competitive process among new ventures - the competition for investment capital. It is clear that if a nascent organization does not survive this phase it will not be able to compete in the second phase of the product market. However, another possible next step could be to study
both stages simultaneously. In the second stage a study on the effects of the same types of performance-based reputations on success in the product market could be beneficial. This would enable to study the extent to which the investment decisions of different types of investors are good predictors of eventual success in the product market (Baum and Silverman, 2004).

Fourth, it would be interesting to focus more on interactions or the extent to which non-matching reputational signals increase or decrease the effect of the reputations of the matching types. In addition, these interactions would also be interesting with respect to different type investors since Steier and Greenwood (1995) found that investment decisions are dependent on the prior investment decisions of other investors in the new venture. Unfortunately, we did not have information about the temporal sequence of the investment decisions by the different types of investors in our empirical setting. Future studies could further build on these findings by studying when, and in what order, the investment decision by one particular type of investor – market, expert or peer – is dependent on the prior investment decision of the other types of investors in the same new venture.

The general argument of this paper has clear practical consequences for the management of nascent ventures. If a particular type of reputation of a particular founding member determines the willingness of investors of a matching type to provide investment capital to the new venture, then this can help entrepreneurs to make more optimal decisions. These can include for example, decisions about their own investments in building particular types of reputations, or about the costs and benefits of enlarging the founding team with members who can contribute reputations that make the new venture more attractive to particular investors.
Acknowledgements

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References

H. Aldrich and M. Martinez. 2001. Many are called, but few are chosen: an evolutionary perspective for the study of entrepreneurship. Entrepreneurship: Theory and Practice 25 (4), 41–56.


Certo, S. T. 2003. Influencing the initial public offering investors with prestige:
Signaling with board structures. Academy of Management Review 28(3), 432-446.


Eliashberg, J., Shugan, S. M. 1997. Film critics: Influencers or predictors? Journal of
Marketing 61(2), 68–78.


Petty, J.S. and Gruber, M. 2010. In pursuit of the real deal: A longitudinal study of


Stichting Co-productiefonds Binnenlandse Omroep. 2009. CoBO: Co-productiefonds


Wijnberg, N. M., Gemser, G. (2000). Adding value to innovation: Impressionism and


Appendix A

The average direct share of public broadcasters is only 5% of a film’s budget. However, they have a gatekeeper role in providing filmmakers access to the CoBO and Stifo funds that on average invest another 22% of the total budget and access to these funds depends on or automatically follows broadcasters’ investment. First, the CoBO\textsuperscript{2} fund divides revenues received from cable companies in Germany and Belgium that carry Dutch television content, among Dutch broadcasting organizations. The CoBO fund does not make an independent value judgment of projects but automatically participates when a Dutch public broadcaster endorses a film project in which it participates as a co-producer with an independent film production company (Stichting Co-productiefonds Binnenlandse Omroep 2009). Second, the Stifo\textsuperscript{3} is a government agency that distributes part of the advertising income earned on public broadcasting channels. Their objective is to stimulate the production of artistically high quality audiovisual content by providing project subsidies exclusively to Dutch public broadcasters. The Stifo fund has an advisory committee of experts from the cultural sector that aid in selecting projects that will receive subsidies (Stimuleringsfonds Nederlandse Culturele Omroepproducties 2009). In this study the variable broadcaster participation therefore includes the additional capital from the CoBo and Stifo funds, which on average amounts to 27% of the total budget.

\textsuperscript{2} Co-productiefonds Binnenlandse Omroep
\textsuperscript{3} Stimuleringsfonds Nederlandse Culturele Omroepproducties (recently changed its name into Mediafonds)
<table>
<thead>
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<th>Role</th>
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<th>2009</th>
</tr>
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<td>Market selection</td>
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<td>3</td>
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<tr>
<td>Peer selection</td>
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<td>5</td>
</tr>
<tr>
<td></td>
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<td>3</td>
</tr>
<tr>
<td></td>
<td>Directing</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Editing</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Acting</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Expert selection</td>
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<td>2</td>
<td>2</td>
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<tr>
<td>Total</td>
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TABLE 2
Means, Standard Deviations, and Correlations

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<td></td>
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<td>.48</td>
<td>.48</td>
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<tr>
<td>5. Experience producer</td>
<td>11.58</td>
<td>7.45</td>
<td>.20</td>
<td>.19</td>
<td>.24</td>
<td></td>
<td></td>
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<tr>
<td>6. Experience director</td>
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<td>.23</td>
<td>.45</td>
<td>.35</td>
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<td>9. Comedy genre</td>
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<td>0.41</td>
<td>.07</td>
<td>-.04</td>
<td>-.10</td>
<td>.01</td>
<td>-.11</td>
<td>-.03</td>
<td>-.06</td>
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<td>-.10</td>
<td>-.04</td>
<td>.40</td>
<td>.11</td>
<td>-.05</td>
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<td>11. Market reputation director</td>
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<td>.29</td>
<td>.26</td>
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<td>.05</td>
<td>.05</td>
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<td>.37</td>
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<td>12. Expert reputation producer</td>
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<td>-.03</td>
<td>.17</td>
<td>.11</td>
<td>.00</td>
<td>-.27</td>
<td>-.08</td>
<td>.20</td>
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<td>.31</td>
<td>.06</td>
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<td>13. Expert reputation director</td>
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<td>.15</td>
<td>-.05</td>
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<td>-.01</td>
<td>.19</td>
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<td>14. Peer reputation producer</td>
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<td>-.02</td>
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<td>.43</td>
<td>.04</td>
<td>.41</td>
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<td>-.05</td>
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<td>-.02</td>
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</tbody>
</table>

\( ^n = 141 \)
\( ^* p < 0.05 \)
\( ^** p < 0.01 \)
TABLE 3
Correlation matrix of residuals of seemingly unrelated regression (SUR) analysis

<table>
<thead>
<tr>
<th></th>
<th>1. Distributor investment</th>
<th>2. Broadcaster investment</th>
<th>3. Film Fund investment</th>
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<td>2. Broadcaster investment</td>
<td>0.07</td>
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<tr>
<td>3. Film Fund investment</td>
<td>0.18</td>
<td>-0.14</td>
<td>1.00</td>
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</tbody>
</table>

Breusch-Pagan test of independence: 7.86 p < .05
TABLE 4
Results of seemingly unrelated regression (SUR) analysis of the impact of different types of reputations on different types of investors

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
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<tbody>
<tr>
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<td>Market selection</td>
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<td>Peer selection</td>
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<tr>
<td>(Distributor investment)</td>
<td>(Broadcaster investment)</td>
<td>(Film Fund investment)</td>
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<td>Control variables:</td>
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<td>Budget</td>
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<td>.45 ***</td>
<td>.36 ***</td>
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<td>Experience producer</td>
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<td>– .01</td>
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<td>Budget prior film producer</td>
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<td>Budget prior film director</td>
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<td>.25 **</td>
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<td>Comedy genre</td>
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<td>.01</td>
<td>– .01</td>
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<td>Main variables:</td>
<td></td>
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<tr>
<td>Market reputation producer</td>
<td>.25 **</td>
<td>.10</td>
<td>– .03</td>
</tr>
<tr>
<td>Market reputation director</td>
<td>.03</td>
<td>– .16 ^</td>
<td>.00</td>
</tr>
<tr>
<td>Expert reputation producer</td>
<td>– .01</td>
<td>.10</td>
<td>.10</td>
</tr>
<tr>
<td>Expert reputation director</td>
<td>– .02</td>
<td>.20 ^</td>
<td>.11</td>
</tr>
<tr>
<td>Peer reputation producer</td>
<td>– .13 *</td>
<td>.00</td>
<td>.05</td>
</tr>
<tr>
<td>Peer reputation director</td>
<td>.09</td>
<td>.08</td>
<td>– .04</td>
</tr>
<tr>
<td>R^2</td>
<td>.55</td>
<td>.33</td>
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<tr>
<td>Adjusted R^2</td>
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<td>.27</td>
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</tr>
<tr>
<td>F</td>
<td>12.94 ***</td>
<td>5.25 ***</td>
<td>5.25 ***</td>
</tr>
<tr>
<td>N</td>
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</table>

^ Standardized regression coefficients are reported.

Two-tailed test:  ^ p < .10,  * p < .05,  ** p < .01,  *** p < .001