How does the Strength of Network Ties affect Film Exports?*

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Previous studies argued that maintaining arms-length relationships or weak ties with partners improves performance while others emphasized in favor of strong ties and the roles of trust in relationships. We review the influences of both strong and weak ties, investigate the level of analysis issues in network research, and reexamine the relationships in the Korean film industry. Unlike previous studies, we propose a more refined framework at the project level. With the contingency approach, we argue that the impact of network ties depends on not only their strength but also project characteristics. We propose that strong ties positively affect projects with standard characteristics but negatively influence creative projects in the setting of the film exports. We measured the performance of exported films by two indexes, artistic and commercial success. Our tests show that strong tie networks improve the commercial performance of films (standardized project), while hamper the artistic performance (creative task). We discuss the implications for future research on the strength of network ties and the film industry.

Key words: Strong ties, Weak ties, Project level analysis, Film industry

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Ⅰ. Introduction

Which is more beneficial for network performance, strong ties or weak ties? This question has been one of the key issues in previous social network research (e.g., Rowley, Behrens, and Krackhardt, 2000; Uzzi, 1997). While previous studies investigated the impact of the network ties' strength, more recent studies suggest that its impact may depend on the network contexts and purposes (e.g., Hansen, 1999). However, previous studies did not clearly show when to utilize strong ties and when to leverage weak ties. Relying on this stream of research, we investigate when strong ties are more advantageous than weak ties, and vice versa.

We basically suggest that the impact of tie strength may depend on the nature of projects. We specifically examine how strong ties affect performance of film export at the project level. We propose that strong ties positively affect projects with standard characteristics but negatively influence creative projects in the setting of the film exports.

The motion picture industry provides a suitable setting for our analysis. The film export project is usually a combination of two separate sub-projects, film production and film distribution. Each sub-project is typically managed by temporary project teams in a network. Thus, we can measure its performance by artistic and commercial success respectively.

We first review the previous literature on the strength of network ties and the level of analysis issues in network research. We also introduce the characteristics of the research setting in the film industry. Then, relying on the theoretical and empirical findings in previous studies, we propose a new framework of strong network ties. We test hypotheses about several key variables in the setting of the film industry. Finally, we show the test results and implications for future research.

II. Literature Review

2.1 Strong Ties and Weak Ties in Network Research

Competition always accelerates race for knowledge and capabilities required to survive in markets (Gomes-Casseres, 1996). Previous research showed that strategic alliances and cooperation with competitors have meaningful influence to corporate behavior and performance (e.g., Powell, Koput, and Smith-Doerr, 1996). Additional resources accessed through alliances usually improve corporate performance especially when environment is demanding (Park and Mezias, 2005). Moreover, these inter-firm networks of ties provide opportunities for new technology development and/or businesses (Gulati, 1999). Due to these benefits, firms continuously search for and join 'learning alliances' so they can increase their capabilities through the knowledge of their partners in the network (Grant and Baden-Fuller, 2004).

Many studies on inter-organization networks focused on the strength of network ties and their influence on outcomes of social relationships (e.g., Ganovetter, 1973; Perry-Smith and Shalley, 2003). Granovetter (1973) first introduced the importance of weak ties in his sociology article. He defined the strength of network ties in various dimensions such as the amount of time, emotional intensity, intimacy, and reciprocity within relationships between network actors along a continuous spectrum of weak to strong ties. He proposed that weak ties act as bridges to heterogeneous networks, and provide novel information that is difficult to transfer inside the current network. Burt(1992) also argued that information transferred through strong ties are more likely to be redundant information. Consequently, weak ties are more likely to connect distant companies with diverse capabilities,

which will eventually lead to more opportunities (Granovetter, 1982; Ruef, 2002). These studies show that firms may maximize benefits by eliminating redundant ties and retaining only a selected set of ties that can bridge structural holes.

Another stream of research, however, recognized that strong ties lead to more efficient performance since they make it possible to transfer complex and highly tacit knowledge (e.g., Krackhardt and Stern, 1988). Strongly tied networks tend to include many organizations or individuals that have overlapping relationships with the same partners. Collaborations within strong tie networks create similar information over-flows and reciprocal relationships that help to establish trust between partners (Ahuja, 2000; Brass, Butterfield and Skaggs, 1998). Since trust allows firms to share critical knowledge that is impossible to transfer otherwise, strong ties may significantly improve corporate performance. Strong ties, for instance, enable firms to initiate new and sensitive joint R&D projects that are usually impossible without such ties (Mowery, Oxley and Silverman, 1996). Strong ties also allow organizations to better adapt to environmental changes as strong ties learn their well-connected environment better (Kraatz, 1998; Park and Mezias, 2005). Moreover, Nelson (1989) showed that members with higher number of strong ties had less conflict within the organization. Hite and

Hesterly (2001) argued that strong ties will play an important role at the initial stages of the growth of entrepreneurial firms when they help these firms to overcome various limitations of resource access.

The conflicting arguments of previous studies on the strength of network ties show that there is a research opportunity for a more comprehensive framework. Moreover, not only the theoretical research but also the empirical findings on the strong and weak ties provided somewhat mixed implications about what kinds of ties will lead to better performance (e.g., Ahuja, 2000; McEvily and Zaheer, 1999). In particular, some recent studies distinguish the different roles of strong ties and weak ties in various contexts (e.g., Hansen, 1999; Wong and Ellis, 2002). Hansen (1999) posited that weak ties may be better for identification of the location and usefulness of knowledge, while strong ties may be necessary for the transfer of complex and tacit knowledge. The implications of these studies, however, provide only limited implications for the organizations on building strong ties and weak ties because both ties are important for different reasons. Previous research does not clarify the specific situations when individuals or organizations should invest in strong tie or weak tie relationships. Through a contingency approach, we propose a more rigorous approach on when strong and weak ties are relatively beneficial for project

performance.

2.2 Level of Analysis in Network Research

Network research has explored various phenomena at the individual, dyad, firm, network, and multiple-levels of analysis (Borgatti and Foster, 2003). Since most network research topics lie at intersections between different levels, these multiple-levels of research seem inevitable (Capaldo, 2007). Some have proposed that we should distinguish between interpersonal level and inter-organizational level arguments (e.g., Rousseau, 1985). As a matter of fact, however, it is individuals who interact across organizational boundaries that generate organizational level performance in inter-organizational as well as interpersonal networks (Zaheer, McEvily, and Perrone, 1998).

Accordingly, we seek to address this issue by analyzing the strength of ties through a project level approach. The focus of the research is not at distinguishing interpersonal and inter-organizational levels of analysis but rather investigating the interaction of the two in a project setting. We investigate the following question: Why do some projects benefit from strong ties of networks, while others do not at the project level? We examine projects with different characteristics that are likely to affect the performance of network interactions. Consequently, this paper

emphasizes the interpersonal and inter-firm level issues when measuring the impact of tie strength. First, we introduce the research setting of the international film industry in which project characteristics can be clearly defined.

2.3 Film Industry

Two aspects of the film industry make it an appropriate setting for this research on the impact of strong network ties. First of all, aligned with the project-level analysis of the hypotheses, films are produced and distributed through project-based temporary networks of individuals and organizations (Faulkner and Anderson, 1987). By increasing the flexibility in production, this temporary project-based structure is assessed as the ideal form in correspondence to the uncertainty of the film industry (Bechky, 2006). Throughout the process of film production, individuals and firms such as director, actor, screenwriter, producer, investor, distributor, and movie theaters form a temporary project network to deliver a finished product to the audience. Generally, the production company is positioned at the center of the film production network and connects various participants throughout the investment, production, distribution and screening of the film, the four major processes in the value chain of the film industry (Caves, 2000). In addition, with respect to

the level of analysis of this research, film production and distribution is a project in which interactions are among individuals, organizations, or individuals and organizations. It is possible to take into account both the interpersonal and inter-organizational inter-action in a project level data analysis.

In addition, similarly with other products of the cultural industry, the success of a film can be measured in two uncorrelated aspects of artistic excellence and commercial appeal (Holbrook, 1999). In empirical research, the former, artistic excellence, was measured by industry recognition such as the Oscars and other awards, while the latter was measured by market performance such as box office data and/or video rentals (Holbrook and Addis, 2007). Along with the previous research, this study also follows the two-path model of motion picture success. As shown in Figure 1, the following hypotheses will be based on the view that the artistic success of a film relies heavily on the outcome of film production process, whereas the commercial success is more of an outcome of film distribution.

III. Hypotheses

The mixed results and arguments of previous studies on the strength of network ties reveal the need for a more comprehensive framework of explanation. The following section is devoted to developing hypotheses for further analysis, focusing on the effects of strong ties at the project level with the research setting in the global film industry. We argue that if the process of the project is standardized, strong ties will have positive impact on performance, while creative projects benefit more from weak ties. Two hypotheses are based on the argument that the level of creativeness of the project will determine the impact of strong ties on the success of the film. Although scholars have devoted increasing attention to network ties in inter-organizational settings in recent years, relatively little research has focused on the performance implications for project level interpersonal and inter-organizational ties. Figure 2 shows the basic arguments of the hypotheses that are proposed in an effort to address the
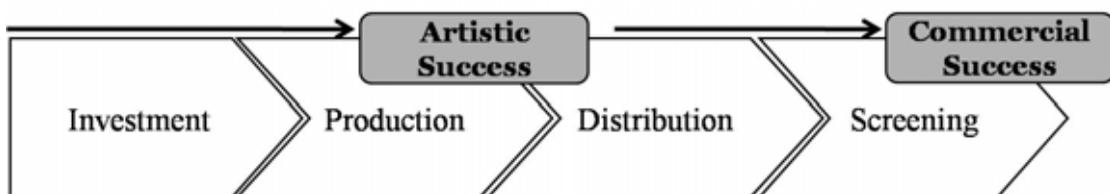
〈Figure 1〉 Two path model of film success
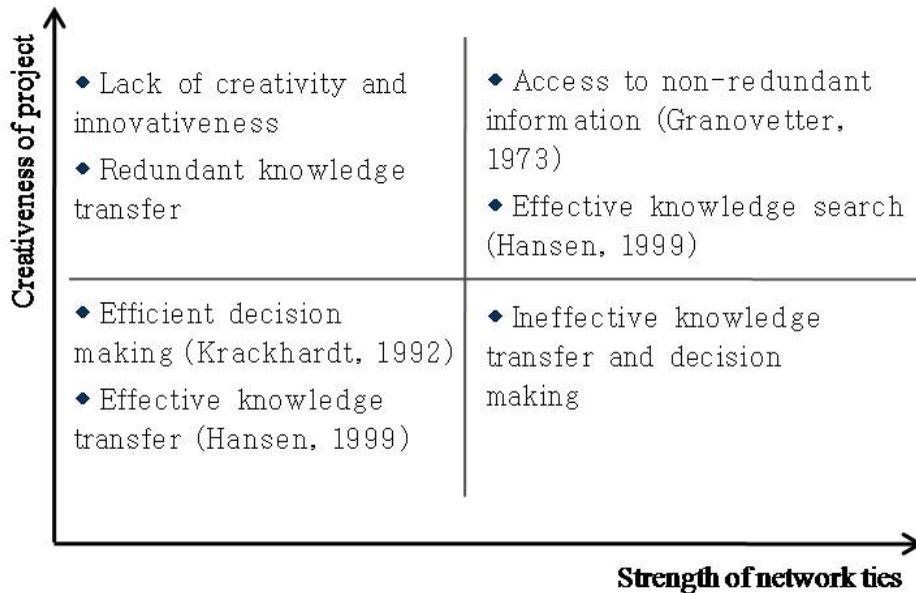
〈Figure 2〉 Creativeness of the project and the strength of network ties

shortcomings of previous literature.

3.1 Strong Ties in the Production Network

Gaining access to diverse networks and to non-redundant information provided by weak ties facilitates more diverse information relevant to the performance of individuals and organizations (Granovetter, 1982). Exposure to different aspects and new perspectives can enhance important skills, such as the ability to generate novel opportunities and to engage in flexible thinking (Hagedoorn and Duysters, 2002; Schilling and Steensma, 2001). Exposure to new approaches and technologies may stimulate individuals to pursue unexplored directions, to find unexpected knowledge, and to experiment with new ideas or basically to be creative (Kogut, 2000; Liebeskind, Oliver, Zucker and Brewer, 1996; Ruef, 2002). Thus, compared to strong tie networks, weak ties are more beneficial in creative outputs than strong ties.

Like many creative activities, film production needs many creative inputs such as a director, many actors and actresses, screenwriters, cinematographer, a production designer, special-effects experts, a composer, make-up specialists, costumers, and an editor (Caves, 2000). Among these experts, various project teams can be assembled to create a final product. A team may form long-term rela-

tionships to produce many films together, or individuals and organizations may produce only a single film before moving onto another project with different network members. If any given pair works together repeatedly, however, it is more likely that redundant knowledge will be transferred in the interaction which will eventually lead to the lack of creativity in film production. Meanwhile, the artistic success of a film heavily depends on the originality of the motion picture. For a film to be original, it requires creative talent to continuously invent unique storylines, styles and situations (Caves, 2000). From these aspects, we argue that strong network ties may hurt the creative performance of the film production and posit the following hypothesis:

H1: The strength of ties in the production network will have a negative relationship with the artistic success of the film.

## 3.2 Strong Ties in the Distribution Network

Larson (1992) posits the importance of strong ties for entrepreneurial firms in the context of a long-term perspective because strong ties create relational trust and reciprocity in information exchange between partners. Consequently, one of the most important characteristics about strong ties is the trust and the knowledge about the partner generated through experience (Jack, 2005). Dyads bonded by strong ties may easily deal with frequent contacts, recognize potential business developments and share available information and resources. Thus, when a project requires only a limited level of creativeness, partners with strong ties may match the firms' or the individuals' needs more efficiently than weak ties.

Unlike the film production process, the distribution process of a film consists of relatively more standardized activities, requiring not much creative inputs (Caves, 2000). While production deals with creating an artistic outcome, distribution is the commercialization process of a product (Scott, 2002). If the dyads have worked-out routines and have built mutual trust, it is cost efficient to stick together for upcoming projects rather than to look for new partners. In such projects, efficient decision making and effective knowledge transfer provided by strong ties may bring more benefits than the creativity and innovativeness provided by weak ties in a network.

H2: The strength of ties in the distribution network will have a positive relationship with the commercial success of the film.

The basic framework of the hypotheses 1 and 2 is illustrated in Figure 3.
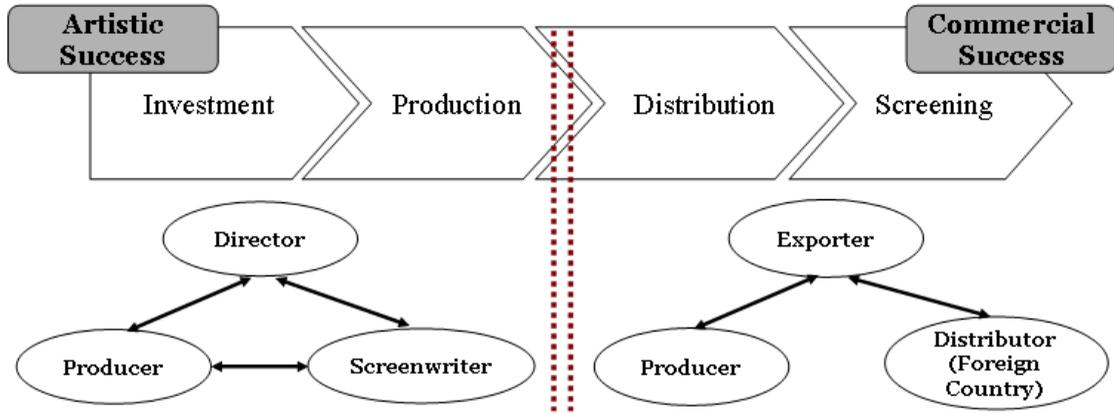
⟨Figure 3⟩ Framework of Hypothesis 1 and Hypothesis 2

Ⅳ. Research Design

4.1 Data

In order to test the hypotheses, this research analyzed all the Korean films exported to foreign countries and submitted to international film festivals during a 7 year period from 2000 to 2006. The overall data set contained 359 films that were exported to 60 countries which made up a total of 2045 film export cases during the 7 years. For each case of film export, data regarding the production company, director, screenplay writer, exporting company, and the distribution company in each country was also collected for analysis. The above data was collected mainly from *Hanguk Youngwha Yeongam (한국영화연감) 2000-2006*, an annual publication of the Korean Film Council, and some missing data were supplemented from the Korean Movie Database (kmdb.co.kr) on the Internet. In addition, to measure the dependent variables concerning film performance, box office data were collected from Box Office Mojo (boxofficemojo.com) and the number of wins and nominations from film festivals were collected from the International Movie Database (imdb.com). Due to the lack of box office data, only 88 cases from U.S.A., Japan, Hong Kong and France could be used for testing hypothesis 2 while 359 cases were used to testing hypothesis 1.

This study only considered the commercial success of film exports and artistic success of international film festival wins because domestic performance tend to heavily rely on the reputation and popularity of the actors and directors. By measuring international

performance, we could partially control for the impact of actors and directors on the success of films. For instance, in the case of commercial outcomes, Korean movie stars and directors are relatively unknown in foreign countries. Moreover, in the case of artistic performance, international film festivals have a tendency to access pure artistic merit of the movie product while some domestic film festivals have a bias towards popular filmmakers.

4.2 Measurement

4.2.1 Dependent Variables

Two dependent variables, *commercial success* and *artistic success*, were measured to test hypotheses 1 and 2, respectively.

ARTSUC: Artistic success of a film was measured by the number of awards and nominations received from international film festivals as listed on the International Movie Database. The database contained all significant international film festival figures excluding domestic ones. Since all winners were selected among approximately 5 nominees, the variable was measured as follows.

ARTSUC = Number of awards received * 5 + Number of nominations

Out of the 359 films in the sample, 226 films did not receive a single award or nomination, making the artistic success measure

'0'. Since this could affect the analysis, only 133 cases that received at least one nomination were used to test hypothesis 1. In future studies, for more rigorous analysis, other complementary measurements can be used to evaluate the relative artistic performance of the 226 films that did not receive any awards or nominations.

COMSUC: Commercial success of a film was measured by the gross profit that each film made in the exported country as recorded on the internet database, Box Office Mojo. This database did not provide full data for all the Korean films. Therefore, only 88 box office profit data from 4 countries, U.S.A., Japan, Hong Kong, and France, could be collected for the full 7 years of 2000-2007. Following previous research, we did a square root transformation to the box office profit data to control for the variance and the outliers in the numbers.

COMSUC = SQRT($ Box office gross profit)

4.2.2 Independent Variables

Production network tie strength: To measure the strength of production network ties, three dyads were identified in the production network: 'director and producer', 'producer and screenwriter', 'screenwriter and director'. The co-work of the dyads were counted only when it was included in the 2000-2006 sample that we collected.

DIRPRO: The strength of the 'director and producer' tie in the production network was measured by the number of times the dyad worked together before the certain film. For instance, if director A and producer B collaborated in film C and D's production before making film E, then the strength of the tie would be '2'.

PROSCR: The strength of the 'producer and screenwriter' tie in the production network was measured by the number of times the dyad worked together before the certain film.

SCRDIR: The strength of the 'screenwriter and director' tie in the production network was measured by the number of times the dyad worked together before the certain film.

Distribution network tie strength: The main players in the distribution process to foreign countries were identified as the producer, distributor (or exporter), and the re-distributor in the foreign country. Since the producer of the film and the re-distributor in the foreign country generally do not interact closely with one another, only two dyads were considered for measurement in this case: 'producer and exporter', 'exporter and distributor'.

PROEXP: The strength of the 'producer and exporter' tie in the distribution network was measured by the number of times the dyad worked together before the certain film.

EXPDIS: The strength of the 'exporter and distributor' tie in the distribution network was measured by the number of times the dyad worked together before the certain film.

4.2.3 Control Variables

Production network: With evidence from prior studies, two control variables that could influence the artistic success of the film were incorporated in the analysis. As mentioned above, one of the most influential factors in film success, the popularity of stars or directors could be excluded as a control variable in for both hypotheses testing because the setting of the research is the international film industry in which Korean actors and directors are relatively unknown.

DIREXP: This variable reflects the number of times a director has produced a film that has been released. Except for some exceptional first-time winners, the more experience a director has on film production, the more likely it is for him/her win an award at international film festivals. We counted the number of films the director participated in before producing a certain film. The only films included in the measurement were the ones in the sample.

COMDMY: Generally in the film industry, comedy films are released to target commercial success rather than artistic success in various film festivals. Thus, by creating a dummy variable (value '1' if the film is a comedy, and

value '0' if the film is any other genre), the probability that a comedy film will win less awards at international film festivals could be controlled.

Distribution network: The dependent variable for testing hypothesis 2 was the box office profit in each exported country. Due to the differences in the scale of the box office, dummy variables were included to control the impact of box office size on the profit of the film. Since Japan, Hong Kong, U.S.A., and France were included in the analysis, 3 variables were required to distinguish between the 4 countries. By controlling for Japan, Hong Kong and U.S.A., films exported to France could be automatically identified.

JAPEXP: This variable was coded '1' when the film was exported to Japan, and coded '0' otherwise.

HOKEXP: This variable was coded '1' when the film was exported to Hong Kong, and coded '0' otherwise.

USAEXP: This variable was coded '1' when the film was exported to the U.S.A., and coded '0' otherwise.

V. Results

5.1 Strong Ties in the Production Network

The descriptive statistics and correlations between for variables in hypothesis 1 are reported in Table 1. Since the samples for testing hypothesis 1 and hypothesis 2 were different, it was not possible to show all the variables in one table. For the 133 films included in the first sample, each film was exported to multiple countries, so the same film was included several times in the second sample. Therefore, each

〈Table 1〉 Descriptive statistics and correlations for testing hypothesis 1

Variable	Mean	Standard Deviation	1	2	3	4	5
1. ARTSUC	3.269	1.844	1.00	.	.	.	.
2. DIREXP	3.143	2.387	0.193*	1.00	.	.	.
3. COMDMY	0.098	0.298	-0.267**	-0.041	1.00	.	.
4. DIRPRO	1.331	0.756	-0.295**	0.192*	0.091	1.00	.
5. PROSCR	1.218	0.632	0.133	0.592**	-0.114	0.276**	1.00
6. SCRDIR	1.511	1.241	-0.163	0.505**	0.028	0.335**	0.292**

*. Correlation is significant at the 0.05 level.
**. Correlation is significant at the 0.01 level.

〈Table 2〉 Results of regression analysis for Hypothesis 1

Variable	Model 1	Model 2	Model 3	Model 4	Model 5
DIREXP	0.182*	0.245**	0.187†	0.352**	0.323**
COMDMY	-0.260**	-0.228**	-0.260**	-0.244**	-0.215**
DIRPRO		-0.322**			-0.273**
PROSCR			-0.007		0.065
SCRDIR				-0.334**	-0.248**
Adjusted R²	0.09	0.19	0.08	0.17	0.22

Standardized regression coefficients are shown.
† p < 0.1, *p < 0.05, **p < 0.01

〈Table 3〉 Descriptive statistics and correlations for testing hypothesis 2

Variable	Mean	Standard Deviation	1	2	3	4	5
1. COMSUC	682.932	802.395	1.00	.	.	.	.
2. JAPEXP	0.205	0.406	0.624**	1.00	.	.	.
3. HOKEXP	0.216	0.414	-0.156	-0.266*	1.00	.	.
4. USAEXP	0.148	0.357	-0.102	-0.211*	-0.218*	1.00	.
5. PROEXP	1.489	1.626	0.524**	0.091	-0.124	-0.086	1.00
6. EXPDIS	2.171	2.355	0.384**	0.228*	-0.015	-0.126	0.248*

*. Correlation is significant at the 0.05 level.
**. Correlation is significant at the 0.01 level.

hypothesis was tested using overlapping, but not identical, data sets.

Table 2 reports the findings from a series of basic regressions that test hypothesis 1. The best fitting model, Model 5, shows support for hypothesis 1. The strength of ties between the director and the producer, and the director and the screenwriter has negative impact on the dependent variable, artistic success of a film. The network tie between the producer and the screenwriter, however, did not show any significant relationship. The reason may be that the producer and the screenwriter do not interact as much as the other two dyads during the production of the film. Furthermore, the two

〈Table 4〉 Results of regression analysis for Hypothesis 2

Variable	Model 1	Model 2	Model 3	Model 4
JAPEXP	0.637**	0.632**	0.580**	0.590**
HOKEXP	0.021	0.090	0.014	0.080
USAEXP	0.037	0.091	0.06	0.098
PROEXP		0.486**		0.451**
EXPDIS			0.259*	0.151*
Adjusted R^2	0.37	0.60	0.43	0.62

Standardized regression coefficients are shown.
$^+$ $p < 0.1$, $^*p < 0.05$, $^{**}p < 0.01$

control variables, director experience and the comedy dummy, each had significantly positive and negative relationship with the artistic performance of the film respectively.

5.2 Strong Ties in the Distribution Network

With respect to the tests of the second hypothesis, descriptive statistics and correlation of all variables are reported in Table 3.

Results for hypothesis 2 are reported in Table 4. The results show that the strength of ties between the producer and the exporter, and the exporter and the distributor in the foreign country has significant impact on the commercial performance of the exported film. Model 1 reports the results of the basic regression with the control variables and Model 4 reports the full regression with all the independent variables.

VI. Conclusion

We hope that our study may contribute to the growing debate regarding the impact of strong ties on performance. Our findings show that the impact of the network ties is contingent upon the characteristics of the project, especially the level of creativity involved in the project. In particular, the level of creativeness required in the project may make the impact of strong network ties on its performance either positive or negative. The motion picture industry provided an especially interesting setting for this research in two aspects: first, the temporary project-based nature of film production and distribution, and second, the two dimensions of success, artistic and commercial success.

Our results seem to match the actual his-

torical development of the film industry, especially in the U.S.A. and South Korea. In the 1930s and 40s, the beginning of motion picture production in the Hollywood, the films were created all in one studio which possessed its own directors, actors, screenwriters, etc (Caves, 2000). As the industry evolved, however, these studios were dismantled and replaced by a system called "flexible specialization" where most film production activities were accomplished in a one-shot deal (Caves, 2000). Our empirical study shows that this transformation can be viewed as a change from strong tie networks to weak tie networks. Moreover, in the South Korea film industry, major firms are vertically integrating production, distribution and screening activities in the value chain (박영은 외., 2007). This can also be viewed as the increase of strong ties in the film distribution network. These changes in the two countries explain that why one country is doing better than the other in terms of artistic and commercial success.

There are, however, a few limitations in our study too. First of all, because of the lack of data, this study left room for future research with longer observation periods and more variables. For instance, scholars may collect more data regarding box office profit of additional countries for a more complete test of the hypotheses. Furthermore, it would be interesting to include more control variables such as experience of producers, performance of the previous films that the director and the actors participated in (Albert, 1998), which we could not include due to the limited budget for data collection. Finally, the measurements of tie strength in our study only incorporated one of many dimensions introduced in previous studies. For example, Granovetter (1973) originally proposed that the strength of dyadic ties should be operationalized in multidimensional aspects including the duration, frequency, and intensity of the relationship. In spite of these limitations, we believe that this study can give a new understanding of the film industry and triggers future research on the strength of network ties.

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네트워크 연결 관계의 강도가 영화 수출 성과에 미치는 영향

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요 약

본 연구는 네트워크 연결 관계의 강도(strength of network ties)가 성과에 미치는 영향이 프로젝트의 성격에 따라서 달라질 수 있다는 사실을 보이고자 한다. 기존 네트워크 연구들은 약한 연결 관계(weak ties)를 통해서 새로운 정보를 수집하는 것이 중요하다는 주장과 강한 연결 관계(strong ties)를 통해 파트너간에 신뢰를 쌓는 것이 지식 이전에 효과적이라는 상반된 주장을 하고 있다. 그러나 본 연구에서는 프로젝트가 창의성을 필요로 하는 정도에 따라 네트워크 연결 관계의 강도가 성과에 미치는 영향이 달라질 것 수 있다는 것을 검증하고자 한다. 영화 산업에서 프로젝트 팀 단위로 진행되는 제작 및 수출 과정을 두 가지로 분류하여, 제작과정은 창의성이 많이 필요한 프로젝트로 규정하였고, 제작된 영화를 수출(배급)하는 것은 창의성이 적게 필요한 프로젝트로 설정하였다. 그리고 이 두 가지 단계에서 발생하는 성과를 측정하기 위하여 영화 제작 과정까지의 성과는 예술적인 지표로, 수출(배급) 과정의 성과는 상업적인 지표를 활용하였다. 본 연구를 위하여 2000년부터 2006년까지 해외로 수출되었거나 해외 영화제에 출품된 한국 영화를 분석대상으로 설정하였다. 본 논문의 주장들을 검증하기 위하여 네트워크 연결 관계가 분석대상이 되는 영화들의 수출 및 영화제 수상 성과에 어떤 영향을 미치는지를 분석하였다. 본 연구는 실증 분석을 통하여 영화 제작 네트워크에서는 연결 관계가 강할수록 영화의 예술적인 성과에는 부정적인 영향을 미치지만, 영화의 상업적인 성과에는 긍정적인 영향을 미친다는 것을 보이고 있다.

주제어: 강한 연결 관계 (Strong ties), 약한 연결 관계 (Weak ties), 영화 수출 프로젝트, 영화 산업

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