Does Vertical Integration of Distributors and Theaters Ensure Movie Success?: Evidence from the Korean Film Industry

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This study examines the relationship between vertical integration within the film industry and individual film success. Within the movie industry, the integration of distribution companies with their own theaters is deemed to be effective due to the reduction in transaction costs. However, an analysis of data on Korea's film industry from 2001 to 2010 reveals that the market share growth of non-integrated distributors is positively associated with film success but the growth of integrated distributors is not significantly associated with film performance. To add to this, an increased screen number of market share of integrated firms was revealed to be negatively associated with film outcomes. In Korea, the integration of distributors and multiplexes by major companies has been criticized for being unfair as it gives companies' own films more advantages regarding the number of screens they are played on, duration of release, and marketing. However, findings from this study reveals that a market share increase of integrated movie companies can lead to investment decisions based on unvarying selections, limiting rational decisions of theaters and cast a negative impact to their own film's success. Thus, vertical integration in the movie industry should be reassessed not only from the perspective of fairness but from the perspective of efficiency and policy making as well.

Keywords: film industry, vertical integration, transaction cost, distributor, multiplex

Introduction

Film industries are characterized by economies of scale and high uncertainties in demands (Goldman 1983; De Vany and Eckert 1991; De Vany and Walls 1997, 1999). To balance out these high risks, film industries outsource film production from companies to project teams that include producers, writers, directors, and actors who come together temporarily. The film production market is a competitive arena wherein all players are intricately connected to networks of investment, distribution, screening, and so on. Within industries like that of film, commonly characterized by uncertainty in demands, customized exchanges of professional resources, task complexity, and frequency of human asset specificity, an embedded structure of network inevitably develops (Faulkner and Anderson 1987; Jones, Hesterly, and Bogatti 1997).

In this context, film distribution companies are not simply middlemen in the film making and screening processes. Rather, they are nodes that connect dispersed units and film markets in addition to their roles of securing content. Film distribution companies become the main players that invest resources and manage the business in its entirety; distributors recruit equity investors through project financing, oversee the film's production and marketing process, and share profits and losses with different parties and principals based on the agreed upon contracts.

Vertical integration in the film industry is defined by the entirety or parts of investment, production, distribution, and screening in theaters being managed by a single company or business group. In the early era of the movie industry, major studios in countries including the United States, France, and Japan adopted vertical integration (Jones 2001; Bakker 2005; Hanssen 2010). However, the production sector is now externalized in the modern film industry; the situation of vertical integration of distributors and multiplexes differs from country to country. For the United States, the 1948 Paramount Case became the catalyst that separated movie studios from theaters, disintegrating the previous structure. Some major studios in France and Japan remained integrated while countries like Germany and England, influenced by the companies in the United States, have done away with the structure. Excluding the United States, where distributors and theaters are managed as separate institutions, vertical integration has been recently observed in countries with competitive domestic movie industries, including South Korea.

The vertical integration of film companies is initiated by an organizational incentive to reduce transaction costs. Through integration, firms strengthen their control over theaters, allocate resources strategically, and create a hierarchical structure that can improve film performance. Previous literature analyzed vertical integration as an efficient structure that can increase a firm's success by reducing transaction costs and improving price competitiveness (Blackstone and Bauman 1999; Gil 2007, 2009; Mitsuru 2010; Choi and Lee 2013). The film industry in Korea, however, has received negative assessments of its vertical integration based on the belief that vertically integrated multiplexes and distributors create unfair structures that cause discrimination against movies distributed by other distributors (Lee, Choi, and Choe 2009; Yoon and Kim 2012; Lee and Choi 2014; Choi and Kim 2013; Choi 2017).

On that note, previous literature that focuses on the efficacy of integration for competitive pricing and influence on promotion of movies fails to analyze the direct relationship between firm structure and film performance. Integrated firms are commonly large companies that maintain multiplexes and provide buffers for risks that non-integrated distributors lack. The high survival rate of large distributors tends to be misunderstood as an outcome of the success of their films. In reality, those large companies

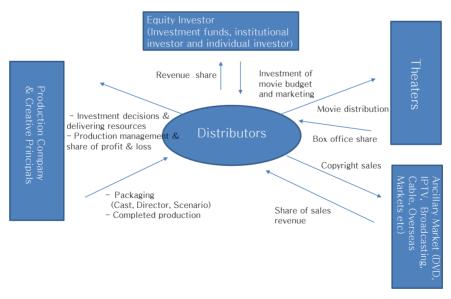


Fig. 1.—Network Centricity of Korean Distributors

could survive based on their ample resources regardless of failure of individual films. Therefore, this study examines whether or not a distributor's performance differs depending on integration or non-integration of multiplexes by analyzing Korean movie data from 2001 to 2010.

Vertical integration of movie companies and film performance

efficiency and inefficiency of vertical integration

Firms integrate for economic reasons—more specifically, to save on transaction costs. Transaction costs increase when there exists uncertainty in demands, small-numbers exchange, bounded rationality, and increased opportunism (Williamson 1979, 1991), where the costs can no longer be fully predicted or reflected in agreements (Brown and Potoski 2003). Transaction costs between distributors and theaters are sizable and incentivize both parties to integrate.

Due to the uncertainty in predicting demand for each released film, it is common practice not to settle on a defined screening period when distributors and theaters come to a contractual agreement on a release. Distributors have to undertake the risk of theaters replacing their movies with other movies from different distributors. Since both parties repeatedly come to agreements and exchanges, theaters seek to develop relationships with stable distributors with former film success. Therefore, film industries have incentives to move toward vertical integration; integrating brings increased control of markets, strategically distributes resources, and enhances film success. Since theaters that are integrated with distributors screen more movies distributed by their own company (Gil 2007, 2009; Choi and Kim 2013), firm performance of integrated distributors may exceed that of non-integrated companies.

However, film industries can also be more effective when distributors are flexible when facing quickly changing elements and demands. Movie industries are not simply based on the hierarchical structure of firms but involve interaction between players and temporary teams of principals. These actors within film industries continuously produce in flux; they come together with various resources for each project only to disperse and reunite once again (Cattani and Ferriani 2008; Ferriani, Cattani, and Fuller 2009). Within this context, integrated distributors take a longer time to make decisions due to their internal hierarchy and are less flexible to external

changes. Therefore, the vertical integration of distributors and theaters could have either a positive or negative effect on film success.

Size of firms and bounded rationality

Whether or not the size of a distributor has an influence the economic resources that they can provide is an important question related to a film's success. Ticket price is set by the theater and fixed regardless of a film's production costs. Theaters set the same ticket price for blockbuster movies that may have 100 billion won invested in their production and low budget movies produced with less than 1 million won. This is due to the nature of goods where marginal cost is starkly lower than the initial production cost. Films that are high in production cost can only be produced when they can secure a high number of screens to minimize marginal cost. Therefore, distributors need to increase the number of screens to secure revenue. Film industries affected by economies of scale might benefit more from the size of distributors than incentives from vertical integration, contrary to the conventional understanding that vertical integration is closely associated with a film's high performance. The ability of distributors to guarantee the number of screens and control theatrical release duration is a necessary component related to positive outcomes.

As the size of a distributor grows, however, the cost of making management decisions also increases. With the growth of distributors, first-look options (a priority to determine investment and distribution for film) are expanded and information processing costs increase as well. Sometimes systems are created to standardize scenario rating to reduce investment decision costs. However, these systems may also cause a negative cycle of continually selecting unvarying scenarios, which can be called selection bias.

Whether or not distributors are integrated with theaters may have an effect on investment decisions. Film distributors are also investors in the film business and investment decisions are a key step in securing the competitiveness of a film. As a network-centered actor, distributors mediate the upstream investment market and downstream screening market. Korean distributors have higher levels of authority and far more instrumental roles in film projects compared to those in other countries. Before a film is produced, the production and distribution companies sign a contract related to its investment, production, distribution, and revenue share agreement. Unlike in the United States where only 30 percent of films are financed by distributors (Sorenson and Waguespack, 2006), most Korean distributors invest around

30 percent of the total costs for almost all commercial films. Integrated distributors have secured a margin of safety with the high number of screens for their films, while increasing the risk of their own selection bias. In contrast to integrated distributors, non-integrated distributors only depend on film outcomes for their survival; their growth in size equates to strengthened decision-making and efficient investment that can enhance the quality of their content.

Integrated distributors that have secured a margin of safety will adjust goals and standards through bounded rationality, no longer looking for exponential film success but settling for an aspiration level. Therefore, an increase in the market share of integrated and non-integrated distributors may yield different outcomes regarding achievement of films. For instance, growth in size of integrated distributors may not have a positive correlation with film success.

Integration efficacy and asset specificity

Vertical integration is advantageous in an environment where prediction of demands is easier and resources are distributed in a fixed system through group hierarchy (Helfat and Teece 1987). When demands are uncertain, however, it is more efficient to engage in temporary transactions so as to reallocate resources faster in comparison with the routine of organizations where the flow of resources can be tied up (Jones et al. 1997).

Within integrated distributors, there still exist the possibility of opportunism and the possibility of mutual incompatibility between the distribution and screening sectors. If the integrated theaters screened their films in a favorable manner, this act sacrifices the potentially greater revenue that could be accrued by showing other distributors' films. This suggests that the preponderance of affiliated films may be disadvantageous to the revenue maximization of the vertically integrated theater. Movie theaters have to deal with all distributors in order to have their movies supplied, and theaters are a limited resource, so it is difficult to exclude or monopolize for bilateral deals according to their affiliation. Transactions between distributors and theaters occur consistently and repeatedly between them regardless of whether they are affiliated or not. In other words, it is hard to generate asset specificity even if distributors and multiplexes are integrated.

It is well known that theaters can generate stable profits, despite only about 25 percent of the films that are released generating a profit. The dataset used for this study confirms that only 180 out of 638 movies, or 28.2 percent,

passed the break-even point. Therefore, if theaters go against the market rule to organize screenings to promote the revenue interest of their company's films, this only becomes a cover-up for poor performance, a showcase of a negative result including market failure and reduced total profit of the firms.¹ Strained distribution of resources within groups that are strongly connected can result in inefficiency equivalent to reduced productivity and social well-being that results in an unfit distribution of resources.

Movie companies and vertical integration in Korea between 2000 and 2010

Korea's film industry began its drastic growth as it entered the 21st century; in its first decade, various types of firms appeared and disappeared. Firms characterized by their differences in resources and background were seeking out a sustainable structure fit for this industry. Large corporations like CJ,

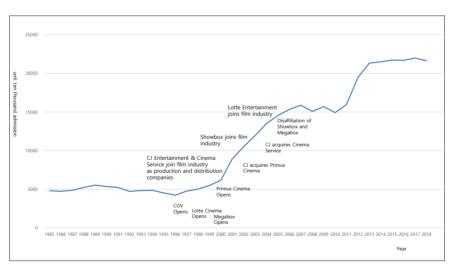


Fig. 2.—Nationwide Admission and Emergence of Integrated Firms
Between 2000 and 2010

¹ According to people who work for multiplexes within the integrated system in Korea, "when their distributors request more screen numbers and longer release duration for their movies, it is usually intended to reduce the financial loss of the film rather than to increase its profit."

	Integrated Firms				Non-integrated Firms
	CJ	Cinema Service	Lotte	Orion	Other Majors
1998	Opening of CGV	Established as Kang Woo-suk Production in 1996 to change name to Cinema Service in 1999 and started distribution			
1999	Establishment of CJ Entertainment		Opening of Lotte Cinema		
2000				Opening of Megabox	Formation of non- integrated distributors
2001 2002 2003		Opening of Primus Cinema		Establishment of Showbox	including Show East, Tube Entertainment, Korea Pictures
2003	Acquires 40% share of Primus Cinema and Cinema Service	Dissolution of integration after selling of Primus Cinema	Establishment of Lotte Entertainment		
2005		Settled ongoing projects through co-distributing with CJ Entertainment			-Tube Entertainment and Korea Pictures leaves distribution industry -SKT, KT enters film industry
2006		Sells Cinema Service and becomes mid-sized company that produces and distributes			-Show East dissolves -Kangjegyu Film and Myung Film merges and exchanges stocks with Seshin Buffalo, going public through back door listing
2007	Takes over Cinema Service			Dissolution of integration after selling of Megabox	
2008					-Prime Entertainment leaves distribution industry -MK Pictures and Myung Film separates

Lotte, and Orion Group each opened their own multiplexes—CJ CGV in 1998, Lotte Cinema in 1999, and Megabox in 2000, respectively. Subsequently, they became involved in investment and distribution by integrating their affiliations: CJ Entertainment in 1999, Lotte entertainment in 2004, and Showbox in 2002. Cinema Service, which started as an independent production company in 1996, also joined the vertical integration trend in 2004 when it opened Primus Cinema.

Other major distributors that were not integrated include Korea Pictures, Tube Entertainment, Show East, and Sidus. Even major telecommunications companies like SKT and KT joined the bustling movie industry. Some production companies listed their stocks through mergers and acquisitions. Major events to take note of were Orion's disbanding of integration after selling its multiplex, Megabox,² and CJ group merging with Cinema Service and Primus Cinema after buying them out.³ This period marked a growth curve and the formation of structure within the Korean film industry and lends itself as an ideal setting to examine whether the structure of distributors is correlated with movie success.

Data and method

Variables

This study examines a decade's worth of Korean films released in theaters between 2001 and 2010. Out of 938 Korean films, commercial films that satisfy all variable data needed for the study were selected for logistic regression analysis.⁴ Out of the remaining 638 commercial films with available budget data, 40 films lacking critics' ratings were excluded, leaving a total of 598 films as the final analytical sample.

Dependent Variable

First, this study measured the quantitative performances of Korean films by a log value of the national number of admissions. This study examined Korean

 $^{^2}$ Megabox was taken over by an Australian Macquarie group in 2007 and was then bought by ISplus, JoongAng Ilbo in 2008.

³ CJ group bought 80 percent of Primus Cinema's shares in 2005 and merged with CGV in 2013.

⁴ KOFIC categorizes films with over one billion won in production cost or released on over 100 screens as commercial. This study utilizes KOFIC's definition for commercial films.

films that existed before the Korean Film Council (KOFIC) introduced its official film industry statistics system called Korea Box-office Information System (KOBIS). KOBIS has been providing reliable nationwide audience measurements of individual films since 2004 and box office measurements since 2010. Therefore, instead of box office numbers, admission numbers were used in this study. Measurements were secured through published reports including KOFIC's annual reports. Some of the audience measurements of films from 2001 to 2003 were obtained from authentic interview sources, totaling audience measurements for 912 films.

Second, qualitative film performance was measured by transforming the profit rate of films into a log value. The profit rate of each film is difficult to assess as films continue to make profit through ancillary markets (such as DVD, Cable TV, Broadcastings, IPTV etc) after screening in theaters, with rates differing by measurement period and being kept confidential by companies. In order to find revenue value, movie budgets for a total of 638 films were calculated based on KOFIC research data and supplemented with interviews of movie-related personnel. In Korea, box offices deduct levies and the 10 percent value added tax (VAT) before theaters and distributors share the revenue.⁵ During this period, distributors and theaters equally split revenue 50/50 in a fixed ratio revenue share system.⁶ Since most profit is made through theaters and ancillary market profit deviations are known to be small, the profit rate for each film was calculated as following:

- Profit Rate = (Total Revenue Total Cost / Total Cost)
- Total Revenue = [Revenue from theaters (Nationwide Admissions * Average Ticket Price of the Year) Levies Value Added Tax] / 2 + Ancillary Market Revenue (Box Office * Ratio of Ancillary Market Revenue to Total Revenue of the year)

Independent Variables

As for independent variables, in order to observe the relationship between vertical integration of distributors and movies success, films that were

⁵ Korean movie ticket price included an added 6.5 percent culture and arts promotion fund levy from 1973 to December 31, 2003. From July of 2007, a three percent levy was added, which pays into the movie promotion fund.

⁶ This is different from most box office revenue share in other countries that apply the sliding system, which sets a specific ratio for screening of distributors depending on agreements between each distributor and theater.

CHART. 2
DEFINITION AND MEASUREMENT OF VARIABLES

Variable Name			Details on Measurement		
Dependent	Admission		Log Value of admission Measurement		
Variable	Profit Rate		Log Value of Profit Rate		
	Distributor Type	Vertical Integration	Non-integration: 0 Integration: 1		
Independent Variable	Distributor Size	Distributor Market Share	Distributors' Market Share of Korean Film Market in the Year Measured (minimum score=0, maximum score=1)		
	Effect of Vertical Integration	Affiliated Multiplex Market Share	Affiliated Multiplex's Market Share in Number of Screens in the Year Measured (minimum score=0, maximum score=1)		
	Bu	dget	Log Value of Total Cost		
	Sci	een	Number of Screens Showing Film in Seoul		
	Word of Mouth		Audience Rating on Naver		
	Critic		Cine21 Magazine Movie Critic's Rating		
	Seasonality		Off-season: 0 Peak season: 1		
	Foreign Market Share		Monthly Foreign Film Market Share (minimum score=0, maximum score=1)		
	Dire	ector	Number of Directing Feature Films Prior		
Control Variable	Star		Non-Star: 0, Star: 1 * 'star' actor is measured by previous box office hits, film awards and influences in drama, advertisements and more		
	Ge	nre	Comedy (Romantic Comedy, Gang Comedy: 1 Action (Natural Disaster, Violence, Martial Arts): 2 Thriller (Crime, Mystery, Noir): 3 Romantic Drama (Romance, Eroticism): 4 Drama (Human Drama, Narrative): 5 Horror (Horror): 6, Others (SF, Fantasy, etc.): 7 *first genre category listed on Naver movie genre category		
	Movie Rating		G-rated: 1, Ages 12 and above: 2, Ages 15 an above: 3, Ages 18 and above: 4		
		ear	Year of Release, 2001~ 2010: 1~10		

released by integrated distributors and non-integrated distributors were coded as a dummy variable. Second, to assess the effect of distributors' size on film performance, the distributor's market share for each year was utilized. In addition, the moderating effect caused by the integration structure and non-integration structure of distributors on the relationship between the

growth of distributor's market share and film success was examined. Third, to assess the effect of integration, market share in number of screens of affiliated multiplexes was noted. For films of non-integrated distributors, their market share in number of affiliated screens was recorded as zero.

Control Variables

Quantitative and qualitative variables found to influence film performance were controlled for in this study. Control variables included film budget, number of screens on film release, word-of-mouth effect, rating by critics, seasonality, monthly foreign film market share, director, star, genre, movie rating, and year of release for the film. Variable measurements are based on public statistics including reports published by KOFIC and some variables were additionally researched through article searches and interviews.

Descriptive statistics

Out of 638 films with data for budget, 45.68 percent, or 296 films, were distributed by integrated distributors leaving 54.32 percent, or 352 films, to be distributed by non-integrated distributors. Quantitative variable averages including number of admissions, profit rate, budget and market share of distributors, were higher for integrated distributors and had less variance. Integrated distributors are large in scale and focus on commercial films, regulating their quality in movies. On the other hand, non-integrated distributors can be both large or small in scale and have more variance and lower variable averages.

Table 4 displays the correlation value of quantitative admission measurements and qualitative profit rate measurements as 0.9610. This means that the two variables are regarded to be almost indistinguishable. The fact that the two dependent variables share such a high correlation may indicate that films pursue economies of scale.

Results and findings

In table 5, models 1, 2, and 3 show regression results using admissions as the dependent variable while models 4, 5, and 6 use profit rate as the dependent variable. Models 1 and 4 include only control variables while models 2 and 5 include the independent variables of distributor type, market share of distributors, and market share of affiliated screen numbers. Models 3 and 6

TABLE 1
DESCRIPTIVE STATISTICS (TOTAL)

Variable	Obs	Mean	SD	Min	Max
Admission (person)	638	1105894	1629756	25	13019740
Profit Rate (%)	638	-21.72	91.77	-99.99	785.38
Distributor Market Share (%)	638	18.33	14.17	0	44.90
Budget (hundred million won)	638	45.3	29.5	10.0	359.0
Screen(Seoul) (number)	638	51.9	32.46	1	200
Movie	638	100.00(%)			
Non-Integrated distributor's	323	50.63(%)	-	-	-
Integrated distributor's	315	49.37(%)	-	-	

TABLE 2 DESCRIPTIVE STATISTICS (Non-Integrated Distributor's)

Variable	Obs	Mean	SD	Min	Max
Admission (person)	323	822826.3	1341434	25	12302831
Profit Rate (%)	323	-34.17	87.17	-99.99	526.08
Distributor Market Share (%)	323	9.11	11.37	0	44.9
Budget (hundred million won)	323	40.2	28.5	10.0	359.0
Screen(Seoul) (number)	323	45.63	29.73	1	149

 $\begin{tabular}{ll} Table 3 \\ DESCRIPTIVE STATISTICS (Integrated Distributor's) \\ \end{tabular}$

Variable	Obs	Mean	SD	Min	Max
Admission (person)	315	1396151	1837419	515	13019740
Profit Rate (%)	315	-8.95	94.7	-99.80	785.38
Distributor Market Share (%)	315	27.79	9.89	0.4	41.16
Budget (hundred million won)	315	50.5	29.6	10.0	207.0
Screen(Seoul) (number)	315	58.34	33.89	1	200

2 8 10 1. Ln(admission) 1.0000 0.9610*** 1.0000 2. Ln(profit rate) 3. Distributor ms 0.3377*** 0.3026*** 1.0000 4. Affiliated_multiplex_ms 0.1369*** 0.1069** 0.6193*** 1.0000 5. Forean ms 1.0000 6 Screen 0.7168*** 0.6275*** 0.2954*** 0.2913*** -0.0743 1.0000 -0.0088 -0.0201 0.0187 -0.0075 -0.0077 0.0500 1.0000 7. Director 0.1967*** 0.2132*** 0.0997 0.0644 -0.0219 0.1649 0.0180*** 1.0000 8. W_o_M 9. Critic 0.1108** 0.0444 -0.0107 -0.0869 0.1853 0.1322 0.4959*** 1.0000 10. Ln(budget) 0.6702*** 0.4410*** 0.2805*** 0.1855*** -0.0746 0.6814 0.0269 0.0721 0.0309*** 1.0000

TABLE 4
CORRELATIONS

are combined models that looks at the moderating effect of the relationship between company size, measured by distributor market share and film success, is moderated by vertical integration. The results of the dependent variables admission measurement and profit rate are almost overlapping.⁷

Whether or not distributors are integrated with multiplexes and distributor's market share show a positive correlation to film success, where the success of a film is shown in admission measurement and profit rate increases (p < 0.001). However, the interaction variable (Integration x distributor's market share) shows a significant negative correlation (p < 0.001) with film performance which means that the relationship between a distributor's market share and film success is distinctively affected by integration.

Testing for linear combination, as shown in Tables 6 and 7, revealed a negative directional effect of distributor's market share on the relationship between integrated distributors and film achievement, but was not statistically significant. However, for non-integrated distributors, the distributor's market share had a significant positive correlation to admissions measurements and profit rates (p < 0.001). In other words, growth of integrated distributors as measured by market share increase was not correlated to film outcome, while growth of non-integrated distributors has a significant positive correlation to film success.

⁷ Among control variables, it has a significant positive relationship with number of screens, seasonality, and word of mouth effect, and the critic evaluation has a significant negative relationship. What is interesting is that the increase in budget has a positive relationship with an increase in admissions but has no significant relation to an improved profit rate. It is an additional important finding in this study that the analysis results of two dependent variables.

TABLE 5 RESULTS

	model1	model2	model3	model4	model5	model6
VARIABLES	I	n(admission	1)]	Ln(profit rate	e)
Vertical Integration		0.396**	0.874***		0.398**	0.875***
		(0.136)	(0.180)		(0.136)	(0.180)
Distributor market share		0.873*	2.330***		0.871*	2.325***
		(0.411)	(0.545)		(0.411)	(0.545)
Vertical Integration x			-3.228***			-3.221***
Distributor market share						
			(0.808)			(0.808)
Affiliated multiplex market share		-2.205***	-1.550**		-2.211***	-1.557**
		(0.504)	(0.523)		(0.504)	(0.524)
Director	-0.00680	-0.00666	-0.00716	-0.00675	-0.00660	-0.00711
	(0.00478)	(0.00471)	(0.00465)	(0.00478)	(0.00471)	(0.00465)
Star	0.0999	0.0850	0.0635	0.101	0.0861	0.0646
	(0.0923)	(0.0910)	(0.0900)	(0.0924)	(0.0911)	(0.0901)
Ln(budget)	0.807***	0.782***	0.773***	-0.194	-0.218	-0.228*
	(0.113)	(0.111)	(0.110)	(0.113)	(0.111)	(0.110)
Screen	0.0345***	0.0340***	0.0340***	0.0345***	0.0340***	0.0340***
	(0.00212)	(0.00213)	(0.00210)	(0.00212)	(0.00213)	(0.00210)
Seasonality	0.215*	0.224**	0.199*	0.215*	0.223**	0.198*
	(0.0842)	(0.0829)	(0.0821)	(0.0842)	(0.0829)	(0.0821)
Critic	-0.0914*	-0.0902*	-0.0893*	-0.0912*	-0.0899*	-0.0890*
	(0.0384)	(0.0378)	(0.0374)	(0.0384)	(0.0379)	(0.0374)
Word of mouth	0.193***	0.188***	0.183***	0.193***	0.188***	0.183***
	(0.0320)	(0.0315)	(0.0312)	(0.0320)	(0.0315)	(0.0312)
Foreign film market share	-0.00267	-0.0587	-0.0615	0.00297	-0.0532	-0.0560
	(0.252)	(0.249)	(0.246)	(0.252)	(0.249)	(0.246)
Genre						
action	-0.566***	-0.563***	-0.514**	-0.567***	-0.564***	-0.515**
	(0.163)	(0.161)	(0.159)	(0.163)	(0.161)	(0.159)
thiller	-0.281	-0.235	-0.253	-0.282	-0.236	-0.255
	(0.146)	(0.144)	(0.142)	(0.146)	(0.144)	(0.142)
melodrama	-0.429**	-0.395**	-0.419**	-0.431**	-0.396**	-0.420**
	(0.132)	(0.131)	(0.129)	(0.132)	(0.131)	(0.129)
drama	-0.603***	-0.566***	-0.568***	-0.604***	-0.566***	-0.569***
	(0.114)	(0.113)	(0.112)	(0.114)	(0.113)	(0.112)
horror	0.305	0.276	0.283	0.303	0.274	0.281
	(0.168)	(0.165)	(0.163)	(0.168)	(0.165)	(0.163)

TABLE 5
RESULTS

RESULTS						
	model1	model2	model3	model4	model5	model6
VARIABLES	I	n(admission	.)	I	n(profit rate)
SF, fantasy, animation etc	-1.267***	-1.237***	-1.203***	-1.269***	-1.238***	-1.204***
	(0.217)	(0.214)	(0.211)	(0.217)	(0.214)	(0.211)
Movie Rating						
age12	0.107	0.115	0.0640	0.106	0.114	0.0633
	(0.168)	(0.165)	(0.164)	(0.168)	(0.165)	(0.164)
age15	0.200	0.198	0.135	0.198	0.197	0.134
	(0.160)	(0.157)	(0.156)	(0.160)	(0.157)	(0.156)
age18	0.193	0.217	0.184	0.192	0.215	0.183
	(0.173)	(0.170)	(0.168)	(0.173)	(0.170)	(0.168)
Year						
2002	-0.0582	-0.0803	0.102	-0.0204	-0.0430	0.138
	(0.220)	(0.220)	(0.222)	(0.220)	(0.220)	(0.222)
2003	-0.450*	-0.506*	-0.245	-0.430*	-0.487*	-0.227
	(0.217)	(0.224)	(0.231)	(0.217)	(0.224)	(0.231)
2004	-0.467*	-0.526*	-0.265	-0.331	-0.391	-0.130
	(0.218)	(0.227)	(0.234)	(0.218)	(0.227)	(0.234)
2005	-0.628**	-0.599**	-0.361	-0.515*	-0.487*	-0.250
	(0.218)	(0.224)	(0.229)	(0.218)	(0.224)	(0.229)
2006	-0.999***	-0.945***	-0.712**	-0.897***	-0.844***	-0.611**
	(0.210)	(0.218)	(0.223)	(0.210)	(0.218)	(0.223)
2007	-1.174***	-1.010***	-0.838***	-1.083***	-0.919***	-0.747***
	(0.219)	(0.224)	(0.225)	(0.219)	(0.224)	(0.225)
2008	-1.660***	-1.450***	-1.222***	-1.542***	-1.331***	-1.105***
	(0.220)	(0.227)	(0.232)	(0.220)	(0.227)	(0.232)
2009	-1.426***	-1.214***	-1.018***	-1.255***	-1.043***	-0.848***
	(0.231)	(0.238)	(0.240)	(0.232)	(0.238)	(0.240)
2010	-1.494***	-1.267***	-1.078***	-1.257***	-1.030***	-0.842***
	(0.229)	(0.238)	(0.240)	(0.229)	(0.238)	(0.240)
Constant	-6.568**	-6.204*	-6.230**	1.540	1.906	1.880
	(2.441)	(2.403)	(2.372)	(2.442)	(2.404)	(2.373)
Observations	598	598	598	598	598	598
R-squared	0.729	0.739	0.746	0.590	0.606	0.616
Adj. R-squared	0.716	0.726	0.733	0.572	0.585	0.596

Standard errors in parentheses.

^{***} p < 0.001, ** p < 0.01, * p < 0.05

EINEAR CO	DMBINATION TEST	EN(ADMISSION)
Ln(admission)	Coef	s.e.
Integration	8978745	.6006862
Non-Integration	2.330311***	.5452757

Table 6 Linear Combination Test – Ln(admission)

Table 7
Linear Combination Test – Ln(profit rate)

Ln(profit_rate)	Coef	s.e.
Integration	008956	.0060088
Non-Integration	.0232497***	.0054545

^{***} p < 0.001

Figure 3 is a graph displaying film outcomes of integrated and nonintegrated distributors. Integrated distributors are major players and are characterized by large initial market shares. However, when their market share reaches a certain point it ceases to have an influence on film performance. On the other hand, non-integrated distributors hold a smaller share of the market initially but their growth shows a positive influence on film success. In other words, growth of non-integrated distributors is accompanied by film success but interpreting growth in size for vertically integrated distributors becomes more complicated because it can mean a quantitative expansion of market share backed by company resources which complicates actual measure of film success. Interestingly, at the 27 percent mark of the distributor's market share—which is exactly within the range where the market share of Korea's top distributor lies-film success due to company size growth for integrated and non-integrated distributors cross over. The fact that there is a cross over effect based on distributors' structure at the juncture where the top Korean distributor's average market share lies entails that most efficient accomplishments can be made by non-integration.

The inefficiency of vertically integrated distributors can also be examined in the negative relationship found between market share of affiliated screens and film success as shown in figure 4. Here we see that vertical integration of the film industry not only hindered optimal programming of theaters, but also increased the selection bias in investment

^{***} p < 0.001

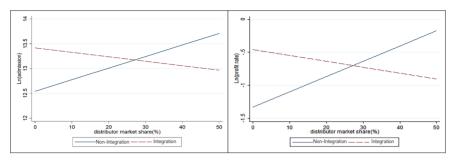


FIG. 3.—FILM PERFORMANCE AND INCREASE OF DISTRIBUTORS MARKET SHARE

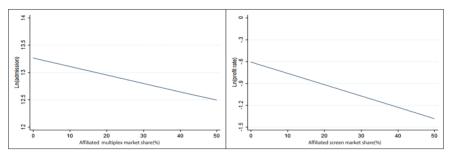


Fig. 4.—Film Performance And Increase Of Affiliated Multiplex
Market Share

markets and had a negative influence on box-office results. This finding does not support the previous literature that claims vertical integration of distributors and theaters to be efficient based on transaction cost theory.

Conclusions

Findings from this study reveal that vertical integration between distributors and multiplexes in the film industry has an effect on film success where an increase in an integrated distributor's share of the market and affiliated screen numbers exhibit a non-significant or negative correlation with film performance. This study's findings reveal that within competitive structures like film industries, characterized by limitations in asset specificity, hierarchical allocation of resources through vertical integration becomes inefficient, whereas a more flexible structure that can quickly accommodate

external changes may be more competitive. A market share increase of integrated distributors can lead to investment decisions based on unvarying selections, ultimately limiting rational decisions of theaters and negatively impacting film success. Expansion of the market share for integrated companies can therefore lead to reduced efficiency in economic practices.

Findings from this study expand on previous literature from two different perspectives. First, it has been previously understood that vertical integration in the film industry is efficient due to its incentive structure. However, within multiplex theaters, competitive pricing cannot be regarded as the main channel for film success; rather, increasing screening resources for movies by integrated distributors can prove unproductive. Therefore, vertical integration in the film industry needs to be reassessed from the perspective of economic efficiency.

Second, since vertical integration can only be achieved by sizable firms, integrated distributors meet the condition for economies of scale. Companies characterized by economies of scale develop dominance in the market as well as displaying some form of vertical restriction. By utilizing such influence and resources, firms can increase their market share, which can result in unfair practices and even cast a negative impact to their own film's success. The vertical integration of Korea's film industry should be reassessed not only from a perspective of fairness but also from the perspective that it can reduce competence.

This study examined whether the structure of vertical integration has an effect on film success but did not include an all-encompassing angle examining a company's underlying motives for incentives, and their business strategies or diversification. In addition, long-term sustainability of the integrated distributors was not discussed. Firms may choose integration for survival but it may not always lead to the best business practices and since there can be other factors that affect film success, this study has limitations in offering generalizable theoretical claims.

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