

TRANSPLANTING OUTSIDE DIRECTORS TO THE KOREAN FINANCIAL MARKET, 1999-2000*

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In an effort to recover quickly from the Asian crisis, the Securities and Exchange Law of Korea was revised in 1998 to require all publicly traded companies to appoint at least one outside director on their boards. Outside directorship had been totally unknown to Korean business before the crisis and thus provides an interesting opportunity to observe how business practices are transplanted to a new environment. Using data compiled from annual reports of Korean financial institutions in 1999-2000, this paper attempts to reveal the logic behind the outside director network that was being formed for the first time in Korea. The analysis finds that, although the legal requirement is being met, the real mechanism at work is cooptation by large financial institutions rather than the originally intended monitoring by outside directors. Unlike the American case where bank centrality has traditionally been predominant, it is not banks but universities with high legitimacy that are at the center of the network. Family ownership is poisonous because it lowers performance and shuts down the window to the outside world. The results seem to imply that transplanting an institutional practice to a new environment with different contexts can often lead to modifications that betray the original purpose.

Key Words: *Korean business, outside director, interlocking director, bank centrality, cooptation, Asian crisis*

INTRODUCTION

Crises dismantle the *status quo*. With its powerful disruptive forces, an economic crisis can open a leak through which institutional practices alien to the *status quo* might flow into the heart of the long-standing economic system. On the other hand, the new institutional practices thus introduced are often no longer the same as

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they were in the original environment, because they are frequently modified to suit the new environment by the collective efforts of the affected parties in the latter. The Asian economic crisis of 1997/98 provides an excellent opportunity to observe this process. Although the so-called "developmental state" system in Korea began to dissolve since the early 1980s, it was not until the Asian crisis that the country finally and painfully realized that it had no time left before making a dramatic change. The peculiarities of the Korean system once admired as the engine of fast-growth machine were suddenly criticized as cronyism, corruption, and bubble.

In an effort to go through the crisis as quickly and with little pain as possible, Korea accepted almost all the IMF-mandated prescriptions and added on top of them voluntary ones to attract investors from the international financial markets. Mandatory appointment of outside directors on the corporate boards is one of such efforts. In an economy known for decades for its effective state leadership, family-controlled huge business groups called *chaebol*, and their heavy reliance on bank credit rather than direct financing, the concept of outside directors was hardly known before the crisis. To borrow Fligstein's term (1990), outside directorship does not mix well with the 'conception of control' prevalent in the Korean economy. The Asian crisis, however, suddenly changed the business climate. *Chaebol* business groups were criticized for their 'emperor management,' which means the group chairman makes all the important decisions without consulting anyone. Boards of directors are typically powerless because directors are appointed and dismissed at whim by the group chairman. In this new climate, outside directors began to be seen as an attractive alternative that can monitor the emperor management. Once surfaced from under the water, the idea spread very quickly and mandatory appointment of outside directors was finally included in the letter of intent the Korean government submitted to the IMF.

However, it seems that institutions are not so easily transplanted. If outside directors as a monitoring device has evolved out of the Western experiences — largely American and British — where capital market-based direct financing is predominant, its transplantation to the East Asian context must have generated some modifications. The Korean economy has come to have all the problems — if they are problems — pointed out as the causes of the Asian crisis as a consequence of the growth trajectory it has followed for the past half century. History cannot be undone. Since the new institutional

requirement of outside director appointment is mandatory, it cannot be undone, either. If neither can be undone, there must be some modification that makes them live peacefully together. This paper attempts to delineate the logic of outside director selection in Korea by closely examining data on outside director network of financial institutions in 1999-2000.

FINDINGS, CONSENSUS, AND DEBATES SURROUNDING OUTSIDE- AND INTERLOCKING DIRECTORS IN THE WEST

In the existing literature, the borderline between outside- and interlocking directors is less than perfectly clear. Interlocking directors are a subcategory of outside directors from the point of view of the recipient firm. Conceptually one can apply stricter definition for interlocking directors as 'people who work as directors in both the dispatching and the receiving firms,' while outside directors can be either directors or not in the dispatching organization as long as they sit on the receiving firm's board. However, despite the conceptual distinction, the borderline can often be blurred in both academic research and real life. For example, in his review on interlock research, Mizruchi begins with a definition such as, "an interlocking directorate occurs when a person affiliated with one organization sits on the board of directors of another organization" (1996: 271). In this definition of an interlocking directorate, there is no such strict requirement that the person has to sit on both boards. Rather, all it requires is that the person is 'affiliated' with the dispatching organization. In fact, there is no reason to insist on this strict definition of an interlocking director because the whole idea about the phenomenon started from the observation that it might signal a cooperative strategy between economic organizations for reducing uncertainty in their environments (Allen, 1974). People do not have to be directors to function as a liaison between multiple organizations and thereby reduce uncertainty. Furthermore, it is often practically impossible to distinguish between interlocking- and outside directors in the empirical data. In the annual reports of Korean firms, for example, most firms simply state that a specific person is an 'outside director,' or a 'non-full-time director' together with the person's primary organizational affiliation, without specifying whether s/he sits on the board of the sending organization. For these reasons, I will treat outside directors and interlocking directors as two different

words for basically a same phenomenon in this paper.

Although it is neither a logical necessity nor a practical possibility to distinguish between the two, one finds a substantial gap in the respective research tradition dealing with one or the other. In the outside director research tradition, new institutional economics perspective, especially agency theory, has been dominant. In his classical formulation of the agency problem, Fama states that “[outside directors] might best be regarded as professional referees whose task is to stimulate and oversee the competition among the firm’s top managers. In a state of advanced evolution of the external markets that buttress the corporate firm, the outside directors are in their turn disciplined by the market for their services which prices them according to their performance as referees” (Fama, 1980: 293-4). As obvious from this statement, agency-theoretic formulation of the outside directorate requires a few important assumptions about the corporate environment. First, it requires a substantial degree of separation of ownership and control, the ideal type of which is a Berle and Means-type firm. Second, common to all fields of new institutional economics, it requires a reasonably well-functioning market to ensure outside directors live up to their responsibilities.¹

Empirical research along this tradition has produced numerous findings. Some of the representative results include the following. Outside director appointments generate significantly positive share-price reaction, confirming that the events are in the interest of shareholders rather than the incumbent management, a finding consistent across different occupations of the appointee (Rosenstein and Wyatt, 1990). Outside directors are more likely to join the board after a firm performs poorly (perhaps to strengthen the monitoring device), while inside directors are more likely to leave (Hermalin and Weisbach, 1988). Adding outside directors to the corporate board has some positive, though lagged, effects on profit, with decreasing marginal returns (Baysinger and Butler, 1985). An important commonality in these findings is that they see the firm as a nexus of conflicting interests, especially between the management and the shareholders, thereby anticipating a positive relationship between outside director monitoring and firm performance.

¹ Williamson explicitly admits that: transactions cost economics relies on the assumption of the existence of market competition; this reliance narrows the scope of transaction cost economics; and there is the need for constructing a broader theoretical framework of which his contribution is a part (1985: 22-3; 1988: 174).

Things are a little different following the director interlock research tradition. Rather than the potential conflict of interest between the management and the shareholders, what matters here is the relationship between organizations, between organizations and their environments, or between social classes. Firms are often implicitly assumed as coherent bodies with harmonized interests. According to Mizruchi's review (1996), there are at least five identifiable lines of explanations for the interlocking directorates, four of which are of interest in this paper. First, there is collusion theory. The positive relationship between director interlocks and industry concentration found in existing research (Pennings, 1980; Burt, 1983) suggests that the incentive to collude might be the primary motive for firms to interlock. But these findings should be interpreted with caution because the evidence for the positive association between director interlock and firm profitability is not so well established. Second, there is monitoring/cooptation theory. Drawing on Selznick's formulation of the concept of cooptation (1949), many researchers have attempted to establish the link between resource dependence and director interlocks, with fair deal of success (e.g., Pfeffer, 1972). However, what is not so clear here is whether firms "invite" or "dispatch" directors. If firms invite directors, it means that resource-dependent firms try at cooptation by inviting directors from the firms on which they depend. If the latter is the case, firms dispatch directors to the boards of other firms to which they extend favor in order to monitor the reliant firms' management. Both directions can hold depending on the concrete situation. Both collusion theory and monitoring/cooptation theory operate at the organizational level of analysis.

The third explanation, at the class level of analysis, is social cohesion theory. Because most interlocking directors come from positions high in the corporate ladder, it seems self-evident that the phenomenon can be interpreted as a league of their own where 'everyone washes everyone else's hands' (Mills, 1956). It might be possible that interlocking directorates serve to collectively represent the class interest of people so prominent as to sit on multiple corporate boards, to form an 'inner circle,' and to solidify the gap between them and the rest of the society (Useem, 1984).

Finally, there is legitimacy explanation operating at the individual level of analysis. According to this explanation, interlocking directors affiliated with prestigious organizations are invited to sit on the board for the inviting firm's incentive to send a positive signal to potential

investors in the capital market. Instead of the conflict of interest between the management under scrutiny and the interlocking directors who eventually get evaluated by the market, mutual benefit is much more emphasized in this explanation. Both the inviting firm and the invited directors benefit from their joining.²

Combining the questions and issues raised by the research traditions discussed so far, one can come up with a few interesting questions that will help us explore the transplantation of outside directorship into Korean markets.

Q1. **Correlates:** What is the relationship between outside director appointment and firm performance? Is there a systematic relationship? If so, in terms of what performance measure does the appointment of outside directors affect firm performance? Other than performance, what other variables are associated with outside director appointment?

Q2. **Causal Direction:** What is the causal direction regarding outside director appointment? Do firms invite or dispatch directors? In other words, is it cooptation or monitoring? Is this one-or-the-other type of question, or is there possibility that both dynamics are present simultaneously? In case both work simultaneously, what are the factors that determine which is more important?

Q3. **Unit of Analysis:** Is it organizations, individuals, or social classes that really matters? In other words, is it firms, prominent individuals, or classes that count most in the power structure of Korean business as measured by outside director appointments?

Q4. **Types of Environment:** Is it technical/competitive or institutional/legitimacy environment that firms primarily consider when appointing outside directors? Are these appointments driven by pursuit of profit or legitimacy concerns? Like the other three questions, this question is fundamentally related to the true nature of the post-crisis situation in Korea. Were Korean firms primarily driven by profit motives because they were trapped in liquidity problems and credit-crunch, or was there still room for legitimacy concerns even in the middle of crisis situation?

² One explanation Mizruchi mentioned but is not included in this paper is career advancement model. I decided not to include it in this paper because the data I use does not have longitudinal biographical information on the outside directors. To test this theory, one would need longitudinal data both before and after the appointment to see if there was career advancement.

DATA

The data for the current analysis comes from annual reports of Korean financial institutions available from the DART system (Data Analysis, Retrieval, and Transfer System) provided by Korean Financial Supervisory Service. Firms that are listed, subject to external audit, or registered with the FSS are mandated by law to submit their annual reports electronically, which are made available to the general public through the DART system.

Of the many firms for which data is available through this system, I have decided to restrict the boundary to financial institutions. The decision was made because of the unique theoretical as well as empirical position financial institutions have occupied in the director interlock research tradition. Empirically, most existing research has found banks to be central in the American intercorporate network (Kotz, 1978; Mintz and Schwartz, 1985). However, this empirical finding once seemed established has recently been shaken by a contrary result by Davis and Muzruchi (1999) that banks have been losing centrality because of technological advances and regulatory changes that have opened up attractive alternatives of corporate financing and household savings. How central banks are in the director network that is newly being formed in Korea is an empirically intriguing question. Theoretically, there are reasons why banks and/or other forms of financial institutions to be central or peripheral. Banks are expected to be central because their business is to control money supply to firms, whether they use this positional power overtly (financial hegemony) or covertly (financial power). But the degree of bank centrality is likely to be affected by business cycle and major changes in the capital market like merger waves since the part of money supply that is most easily controlled by banks is quick money usually needed in times of business downturn or huge mergers (Stearns, 1986). In addition, like noted above, technological advances and introduction of new financial products might lower bank centrality because the origin and destination of money flow can be more varied than before. If so, there are theoretical reasons both to believe and not to believe Korean banks should be central. It is needless to point out that Korean business was in downturn right after the huge crisis of 1997/98. There was a merger wave, probably for the first time in Korea, which took off around the end of 1997 and landed in 2000 (Han and Chang, 2003). These observations encourage

one to believe that Korean banks should be highly central. But it is also commonsensical that Korean banks have been under the tight grip of the government, which means banks might not have had a chance to put their leverage into actual use and thus discourages the belief. In any case, it is clear that banks and financial institutions are the place from which research on outside director network should get started.

Another concern is the time period for which the data is to be compiled. Since I wanted to allow some minimum amount of time for the new dynamics of outside director appointment to settle down, I decided to give a one-year term after the revision of the law in 1998. Thus, the exact time point should be some time in 1999. However, listed companies in the Korean market can choose among March, June, September and December to submit their annual report, which means that it is not possible to collect data for multiple firms exactly for the same date. As a result, data were compiled as of September or December 1999 for some firms and March or June 2000 for some other firms. However, the consistent principle is to compile data from the first annual report submitted after allowing a one-year term after the revision of the law.

Figure 1 shows the outside director network of Korean financial institutions in 1999-2000. After examining the preliminary results, two financial institutions and those organizations linked only with these

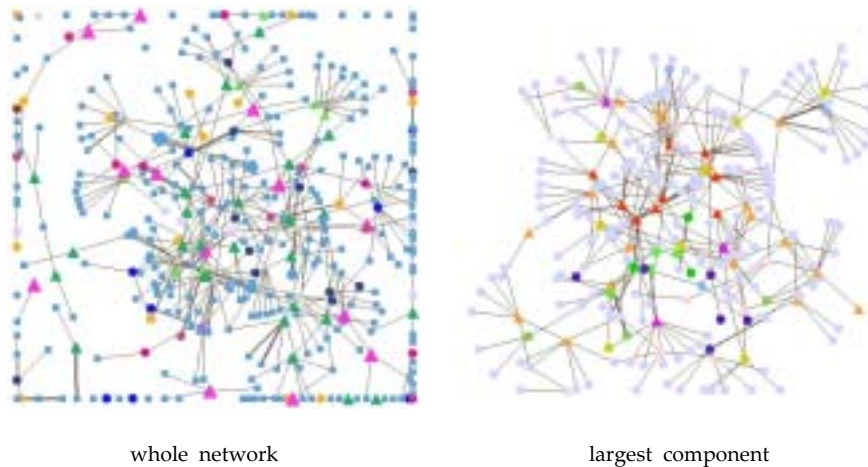


FIGURE 1. OUTSIDE DIRECTOR NETWORK OF KOREAN FINANCIAL INSTITUTIONS
WHOLE NETWORK AND LARGEST COMPONENT

two institutions are deleted before generating Figure 1. The deleted institutions are *Shinhan Bank and Shinhan Securities*. A strong Korean-Japanese presence in the Korean financial market, *Shinhan* maintains an idiosyncratic outside director network in terms of both size and the identity of connected firms. Combined, these two financial institutions bring in 35 mostly Japan-based organizations such as *Korean-Japanese Association for Investment in Korea and Korean-Japanese Chamber of Commerce*. Considering that the 117 financial institutions retrieved from the DART system have on average 3.88 outside directors, the combined network size of 35 is almost five times as many as a typical firm in the data set. Given this, I have decided to delete *Shinhan* and related organizations for three reasons. First, statistically, it brings in extreme skew in the distribution of many variables. Second, network-analytically, its idiosyncrasy conceals important differences among the other 115 organizations. Third, theoretically, there is reason to believe that *Shinhan* comes from a very different population from the one the other firms are drawn from.

After deleting *Shinhan* and related nodes, the whole network in Figure 1 contains 380 nodes, 115 of which are focal firms (i.e., financial institutions). In contrast, the largest component in the same figure has 250 nodes 68 of which are focal firms. Table 1 provides a comparison of some basic characteristics of these two networks.

The two networks summarized in Table 1 do not show much difference but in one characteristic. They have similar density, similar percentage of isolates (72.6% indegree for whole network and 72.4%

TABLE 1. BASIC CHARACTERISTICS OF THE WHOLE NETWORK AND THE LARGEST COMPONENT

	Whole network	Largest component
Number of nodes	380	250
Number of focal nodes	115	68
Number of links	357	267
Network density	.003	.004
Number of isolates	276 indegree; 88 outdegree	182 indegree; 44 outdegree
Number of bridges	290	200
Mean geodesic distance	378.4 (S.D.=24.43)	247.98 (S.D.=22.08)
Number of strong components	0	0
Number of weak components	30	1
Number of cliques	3	3

indegree for largest component; 23.2% outdegree for whole network and 17.6% outdegree for largest component) and similar number of bridges compared to the number of existing links (81.2% for whole network and 74.9% for largest component). Both have none strong component and three cliques. The big difference comes from the number of weak components. In network-analytic terms, a component captures connectedness in a graph. More specifically, a component is a maximal connected subgraph, which means it cannot be made larger without losing its property of having a path between each of the members of it. Nodes that are not members of the component are disconnected from those in the component. A strong component requires reciprocal ties while a tie in either direction satisfies the definition of a weak component. Since outside director network is expected to be asymmetrical by nature, I focus on weak components. What is interesting about the 30 weak components in the whole network is, setting aside the huge component with 250 members, all the other components are very small with an average size of only 4.48.

This result strongly suggests that at least two qualitatively different classes of financial institutions are co-existent in the whole network. One class is those connected with the center, no matter how far the path distance is. The other class is those detached from the center. Since what we are considering here is weak components, 'connectedness' means either, in some sense, influencing, or being influenced by, the center. That a financial institution is 'disconnected' means that it has no path to or from the center. In other words, it cannot, no matter how remotely, influence the center, and the center does not want to influence it. Furthermore, there is no guarantee that the 29 small components are homogenous among themselves. This suggests that the members of the whole network are very likely to be highly heterogeneous. In fact, this heterogeneity could be expected from the nature of the data because financial institutions incorporate very different firms ranging from small mutual credit companies operating on a regional basis to huge nationwide commercial banks. For these reasons, I once again narrow down the scope of data to be analyzed to the members of the largest weak component. In fact, further preliminary analyses revealed that, of the 68 focal firms in the largest weak component, three firms have unexplainable extreme values for some variables, further reducing the number of cases to 65.

ANALYSIS

Who's at the Center? The Center-Periphery Structure

The usual interest in the interlocking directorate research tradition has lied in identifying who is at the center of the power structure represented by the network data. However, the center-periphery structure can be identified differently depending upon the direction of ties the researcher is primarily interested in. If cooptation is the major theoretical motive, then firms with many incoming ties are the significant players, while those with many outgoing ties represent the locus of power if monitoring seems the prevalent mechanism. Figure 2 shows the distribution of indegree- and outdegree centrality values. As obvious from the skewness of the distribution (2.390 skewness and .154 standard error for indegree centrality; 2.195 skewness and .154 standard error for outdegree centrality), both curves are L-shaped, indicating the presence of a center-periphery structure. Table 2 gives the roster of firms with centrality scores above and beyond 90th percentile, together with their organization types and degree centrality scores.

Banks and securities companies are at the center of the outside director network made up of incoming ties. Although at first glance the centrality of these types of financial institutions may seem somewhat consistent with existing research on the American business, it is in fact exactly the opposite when considering the direction of ties. While American banks dispatch the most number of directors to other businesses, Korean banks are at the receiving end most frequently.

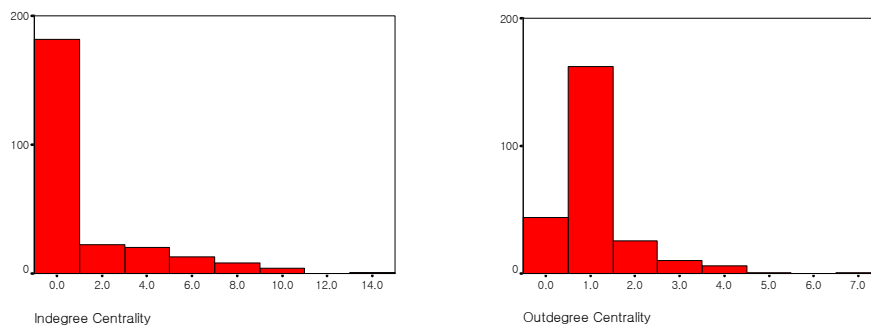


FIGURE 2. HISTOGRAM OF INDEGREE AND OUTDEGREE CENTRALITY SCORES

Because it seems unlikely that the center-location in the incoming tie structure bestows power, there should be an explanation other than power or hegemony. One that most naturally comes to mind is the heightened need for cooptation or legitimacy these firms might have. In fact, banks have been at the core of the *chaebol* restructuring program named "Bank-Centered Corporate Restructuring" while at the same time they have been the target of another reform program called "Financial Restructuring Program."³ It is possible that this situation has rendered banks to feel more need for cooptation and legitimacy that they might have thought can meet by inviting more outside directors.

TABLE 2. ROSTER OF ORGANIZATIONS ABOVE 90TH PERCENTILE IN CENTRALITY SCORES

Indegree Centrality			Outdegree Centrality		
Name	Type	Score	Name	Type of Org.	Score
Korea Housing & Commercial Bank	Bank	13	Korea University	University	7
Good Morning Securities	Securities	10	Seoul National University	University	5
KTB Network	Venture Capital	10	Sinyoung Securities	Securities	4
Hana Bank	Bank	10	Korea Exchange Bank	Bank	4
Korea Exchange Bank	Bank	9	Inha University	University	4
Kwangju Bank	Bank (Regional)	8	Chohung Bank	Bank	4
Peace Bank of Korea	Bank	8	Chungang University	University	4
Kookmin Bank	Bank	7		Government	4
Kumho Merchant Bank	Merchant Bank	7			
Chonbuk Bank	Bank (Regional)	7			
Hana Securities	Securities	7			
Hanbit Bank	Bank	7			
Hyundai Investment Trust & Securities	Securities	7	Securities Board	Supervisory	
Taegu Bank	Bank(Regional)	6			
Samsung Securities	Securities	6			
Seoul Securities	Securities	6			
Korea First Bank	Bank	6			
Chohung Bank	Bank	6			

³ See Chang Sea-Jin (2003) for details of Bank-centered Corporate Restructuring and Financial Restructuring.

Another interesting finding from Table 2 is the importance of universities. Of the eight organizations that dispatched four or more of their employees to the board of directors of the 65 financial institutions in the dataset, four are universities. As discussed earlier, this position has traditionally been occupied by money-center banks in the United States, though with some recent decline. However, it is the universities — especially, those most prestigious ones — that are most central in the network of outgoing directors in the Korean financial market. What does this finding signify? One plausible explanation is cooptation, rather than monitoring, is the key to understanding the dynamics of outside director network newly forming in Korea. Outside directors in my dataset are from just a few walks-of-life. They are executives of business organizations (regardless of distinctions such as domestic vs. foreign, business group vs. independent, nationwide vs. local, and real vs. financial sector), high-rank officers of government ministries or bureaus, professionals such as lawyers, or university professors. Of these select groups of people, university professors are the only group of outside directors who seldom attempt to represent the interests of the dispatching organization. Although employed full-time at universities, their job is basically individualistic. This characteristic can give the inviting firm much relief in the sense that they will not be closely monitored by another organization. In addition, professors, especially those from prestigious universities, bring with them a great deal of legitimacy to the inviting firm. These observations provide the basis for concluding that cooptation is a much more important engine than monitoring in the Korean outside director network. Combining the two findings — banks at the center of the incoming network and universities at the center of the outgoing network-, one might reach a partial answer to some of the research questions raised in the previous section. In terms of causal direction, invitation rather than dispatch — thus, cooptation rather than monitoring seems to be at work. Also, it is likely that legitimacy concern seems also in effect.

CORRELATES OF OUTSIDE DIRECTOR CENTRALITY

One of the important concerns in both outside director research in new institutional economics and director interlock research in sociology is to identify the correlates of centrality. The bivariate correlation matrix containing all the nine variables used in the analysis

is shown in Table 3. Each of the nine variables represents a different aspect of the financial institutions in the dataset. How many outside directors a financial institution appoints is of course the variable of primary concern. Since it is well-documented that business group form is a significant way businesses are organized in Korea, I wanted to include a variable that measures how deeply a financial institution is embedded in this form. Number of affiliated companies is the variable. The more deeply a financial institution is embedded in the business group form, the more affiliated companies it is likely to have. Concentration of ownership in the hands of the owner's family is known as another significant characteristic of Korean business, which is measured by the percent of family ownership. ROA is a standard measure of performance. Securities-to-deposit ratio shows how much risk a financial institution is taking in its day to day business. Unlike loans for which the expected yield is known, securities investment is much riskier because of the possible fluctuation of the securities price in the future. Percent of NPL (non-performing loans) gives the degree of urgency a financial institution is facing because of its bad decisions

TABLE 3. CORRELATION MATRIX OF VARIABLES USED IN ANALYSIS

	1	2	3	4	5	6	7	8
1. # outside directors								
2. # affiliated companies	.346** (.005)							
3. % family ownership	-.365** (.003)	-.063 (.617)						
4. ROA	-.011 (.929)	-.321** (.009)	-.081 (.522)					
5. Securities/deposit ratio	.651** (.001)	.192 (.391)	-.297 (.179)	-.147 (.513)				
6. % NPL	-.299 (.109)	.075 (.692)	.493** (.005)	.023 (.902)	-.404 (.069)			
7. Asset size	.651** (.000)	.419** (.000)	-.238 (.056)	-.270* (.030)	.623** (.002)	-.433* (.017)		
8. PBR	.225 (.084)	.249 (.055)	-.353** (.006)	.277* (.032)	.297 (.191)	-.294 (.129)	.108 (.413)	
9. Stock price fluctuation	-.336** (.001)	-.113 (.390)	.257* (.048)	.118 (.369)	-.343 (.128)	.495** (.007)	-.350** (.006)	-.134 (.307)

* p<.05 ** p<.01

All variables but securities-to-deposit ratio, % NPL, and ROA are logged.

ROA is squared after adding a constant to correct for negative skew.

in the past. Asset size is of course a standard size variable. PBR (price-to-book ratio) measures how favorably the market is evaluating the company. A PBR value higher than 1 means the market sees the business as more valuable than its book value. Stock price fluctuation is calculated by dividing the highest stock price in the past one month with the lowest price in the same period. It gives the degree of market uncertainty a financial institution operates in. Thus, we have variables representing business group embeddedness, family ownership, performance, risk-taking, urgency, size, market evaluation, and uncertainty in addition to the number of outside directors. The number of cases is 65 for all variables but securities-to-deposit ratio (22), percent of NPL (30), PBR (60), and stock price fluctuation (60).

How many outside directors a financial institution appoints is positively correlated with number of affiliated companies, securities-to-deposit ratio, and asset size. It is negatively correlated with percent of family shares and stock price fluctuation. Financial institutions heavily embedded in the business group tend to be bigger and show lower ROA. The negative association between the number of affiliated companies and performance is consistent with the usual criticism that financial institutions belonging to a business group are exploited to function as the money pipeline for the group. Family ownership seems to significantly harm financial institutions. It has strong negative effect on market evaluation. Also, financial institutions with high proportion of family shares tend to have made many bad decisions as demonstrated by higher NPL, encounter higher market uncertainty, and shut down the links to the outside world by having fewer outside directors. ROA is negatively correlated with size but positively with market evaluation. Firms that take more risk tend to be bigger and have more outside directors. Bad decisions measured by the percent of NPL are less frequently made in bigger firms and are positively associated with uncertainty. Again, financial institutions that are favorably evaluated in the market face significantly lower uncertainty.

PREDICTING OUTSIDE DIRECTOR CENTRALITY

So far we have examined the correlates of outside director centrality. However, these are bivariate correlations without controlling for other variables. In the real world factors affecting outside director centrality mix with one another and operate at the same time. To capture this

TABLE 4. OLS REGRESSION OF OUTSIDE DIRECTOR CENTRALITY

	Model 1	Model 2	Model 3	Model 4	Model 5
# affiliated companies	.346** (.005)	.324** (.005)	.348** (.004)	.142 (.171)	.176 (.135)
Family ownership		-.345** (.003)	-.337** (.004)	-.201* (.037)	-.245* (.026)
ROA			.073 (.538)	.178 (.075)	.224* (.046)
Asset size				.591** (.000)	.550** (.000)
PBR					-.027 (.081)
R2	.120	.238	.243	.506	.518
F	8.562**	9.680**	6.517**	15.336**	11.587**

*p<.05 ** p<.01

Table entries are standardized coefficients. P-values are in parentheses.

real world dynamics, regression analysis models are built. Since the number of cases is quite limited to only 65 at the largest, we do not want to have too many independent variables. Table 4 summarizes the OLS results.

Of the nine variables in Table 4, outside director centrality is used as the dependent variable. Of the remaining eight variables, securities-to-deposit ratio and percent of NPL were not used because including these two variables lowers the number of cases as low as 22. Both PBR and stock price fluctuation capture some aspect of the firm's position in the stock market. Although the low and insignificant correlation between these two variables makes it tempting to include both in the regression model, the small number of cases discourages it. Several experiments with these two variables demonstrated that these two variables had almost identical effect on the regression model. Substituting stock price fluctuation for PBR gives slightly higher R2 of .526. Standardized coefficients and p-values remain basically the same. Given this result, I decided to use PBR because this is a better-known standard variable.

Model 1 through 3 show that business group embeddedness increases, and family ownership decreases, outside director centrality. Performance as measured by ROA has no significant effect. It is somewhat hard to understand why business group embeddedness increases the number of outside directors appointed. Because business

group is not a legal entity, firms belonging to a same business group have independent legal status as separate entities. Thus, directors coming from other member firms are technically counted as outside directors, which might be the only reason why business group embeddedness increases outside director centrality. However, there are reasons to believe that business group embeddedness itself should not have this effect. Since business group firms are already tightly controlled by the group chairman via complex web of equity ties, there is no additional need to monitor member firms by means of outside directors. Business groups already have a huge pool of resources and information processing facilities that can easily outperform the benefits individual outside directors can bring, which is another reason why business groups might feel less need to appoint more outside directors. The lack of significant association between ROA and centrality can also be a puzzle, depending on the researcher's theoretical expectation. If the researcher follows agency-theoretic or collusion/cooptation perspectives, there should be a positive relationship. If it is legitimacy theory the analysis is primarily driven by, there should not necessarily be an association.

Model 4 solves the business group puzzle. Once the firm size is controlled for, business group embeddedness suddenly becomes insignificant with much smaller coefficient. Since firms belonging to a business group is generally significantly bigger than independent firms, it seems that much of the business group effect observed in Model 1 through 3 came from the size difference. When size is controlled for, it is noticeable that the effect of ROA comes close to the conventional level of statistical significance. The value was .538 in Model 3 but suddenly flattens to .075 in Model 4. Recall that ROA was negatively correlated with both business group embeddedness and size in Table 3. That is to say, bigger firms, many of which are business group firms, tend to have more outside directors and at the same time perform poorly. This situation conceals the net effect of ROA in Model 3. But once both business group effect and size are controlled for, the net positive effect of ROA begins to reveal itself.

Model 5 has PBR added on top of Model 4. Since this variable market evaluation of the financial institution's value is not statistically significant with the net additional variance explained being only 1.2% (R² from .506 to .518), basically it does little to enhance the model. What it does is to change the close-to-significant effect of ROA clearly significant with p-value of .046. Although the volume of change it

brings is small, the direction of the change can be instantly understood because ROA and PBR are two more-or-less overlapping measures of firm performance. Although ROA reflects the firm's profitability and PBR the market evaluation, they are fundamentally connected with each other.

Yet another finding that is consistently observed in the regression analyses in Table 4 is family ownership lowers outside director centrality. From the correlations in Table 3 we already know that family control is poisonous in many respects. It increases percent of NPL and market uncertainty while at the same time makes the firm unfavorably evaluated by the market. Also, it decreases the number of outside directors. If outside directors do any good for the firm, family ownership deprives the firm of the benefit. All the signals surrounding family ownership point to the same direction. High percent of shares owned by the family, combined with the Korean culture of familism, often encourages heavy involvement of family members in the everyday management of the firm. Since there is no guarantee that the human capital of these family members is as good as those of competition-washed professional managers, it is likely that they more often make bad decisions, increasing the percent of NPL. This trait of a family-controlled firm should of course be unfavorably evaluated by the market, lowering the PBR. The familist culture as well as the lack of available slots due to the many number of family members already sitting on important positions make it difficult to invite talented directors from outside.

CONCLUSION AND DISCUSSIONS

Now it is time to step back a little and think about the answers these findings might suggest to the research questions raised in Section II. We have seen three groups of findings from the analysis of outside director network data of Korean financial institutions in 1999-2000. The first group of findings concerns the center-periphery structure of this outside director network. Unlike the established finding of "bank centrality" from the American data, it is not banks but universities that are at the heart of outside director dispatch network in the Korean data. Banks are at the center of outside director invitation network. To the extent that organizations that dispatch many of their employees to other organizations tend to have power while those receive many from others become vulnerable to

external influence, there is in fact “bank marginality” rather than “bank centrality” in the Korean outside director network that is being formed since 1998.

It is also noteworthy that it is universities that are at the center of director dispatch network. Most of the organizations that appear in the dataset are highly visible and powerful ones such as financial institutions, government bureaus, and law firms. Neither financial institutions with their technicality and instant understanding of what is happening in the recipient institution, nor government bureaus with their regulatory power, nor law firms with their legal expertise are at the center. Universities, compared to these other types of candidates, usually do not have more technical competency or power. There are two major differences universities have from other organizations. One is, they are highly legitimate organizations. The other is, the work of university professors is very individualistic despite their full-time affiliation with the organization. Combined, the “university centrality” observed in the Korean data seems to indicate that the inviting organizations want to have people who will bring high legitimacy but won’t attempt to exercise organized influence. These results suggest that cooptation, rather than monitoring or collusion, is at work in the Korean financial market. If monitoring is the main engine, it should be organizations with technical competency or regulatory power that occupy the center position. If it is collusion, there should be an inner circle composed of prestigious financial institutions.

The second group of findings shows what variables move together without outside director centrality. Business group embeddedness, risk-taking, and size are positively correlated with having many directors from outside. Family ownership and uncertainty are negatively so. Performance, urgency as measured by percent of NPL, and market evaluation do not have significant bivariate correlation with the number of outside directors. Some of these bivariate correlations especially risk-taking and uncertainty are consistent with the cooptation story derived from the first group of findings. Financial institutions well-connected to the outside world face less uncertainty from the environment and thus can take more risks. However, some of the other correlations are ambiguous. The effect of business group embeddedness is already explained. If cooptation is the primary engine at work, why is there no significant association between outside director centrality on the one hand and performance, urgency, and market evaluation on the other?

Some of the answers to these ambiguities are given in the third group of findings. After controlling for the effects of other variables, business group embeddedness loses significance, while performance gets to have a positive relationship with centrality. Bigger firms with more resource and higher visibility tend to appoint more outside directors, while family ownership discourages it. Market evaluation still seems a puzzle. It is not only that the coefficient is statistically insignificant, the sign of the coefficient is contrary to what one would theoretically expect. Since the size of the effect is negligibly small — .027 standard deviation decrease in the number of outside directors when there is one standard deviation increase in PBR — , it would make more sense to say PBR does nothing to affect centrality even if the coefficient is statistically significant. Interpreted this way, the lack of association between PBR and outside director centrality might be seen to support the argument that monitoring is not the primary driver of what has happened in the Korean financial market since 1998. According to the agency theory frequently followed in the new institutional economics research tradition, firms well-monitored should have favorable response from the market, and thus the positive association between these two variables. The lack of such a positive association signifies that monitoring is not a strong force.

Going back to the four research questions identified from the existing literature, we can think of what answers these findings have to those questions. The first question was the correlates outside director centrality. The regression analysis shows that family ownership, performance and size are the important determinants. Although they could not be included in the regression model because of data size considerations, the bivariate correlations show that risk-taking and uncertainty are also systematically associated with outside director centrality. The second question was about the causal direction. The analyses uniformly suggest that it is cooptation, rather than monitoring or collusion, that is primarily at work. This finding has some important implications considering the rationale behind the introduction of outside directors into the Korean market. The stated rationale was, of course, to facilitate management transparency and better corporate governance. However, the results suggest that monitoring purpose is not being well taken care of although the formal requirement is being met.

The third question concerns the proper unit of analysis. It is not possible to clearly delineate the role of social classes with the given

type of data. However, the results seem to suggest some answers regarding the choice between organization versus individual level of analysis. The fact that academics are favored by the inviting firms and the systematic relationship among the groups of variables examined seem to suggest that the proper level of analysis for the Korean outside director network is organizations rather than individuals. If individuals are the proper unit of analysis, we should have been able to observe some powerful individuals who sit on three or more boards at the same time, which was not the case.

Finally, there is the question about the type of environment. The answer is both technical and institutional environments are important. The association that variables representing technical environment risk, uncertainty, and performance have with outside director centrality suggests that this type of environment cannot be ignored. In addition to this, some of the variables can be considered to be closely intertwined with the institutional environment. Number of affiliated companies represents the form of business organizations commonly found in Korea. The consistently negative effect of family ownership on centrality strongly suggests that not only technical but institutional environment is important. Also, the fact that universities organizations that are primarily legitimate rather than technically competitive are at the center once again confirms the argument that both technical and institutional environments are to be taken into consideration for a proper understanding of the formation of outside director network in the Korean financial institutions. Moreover, the findings from the current analysis provide a chance to balance the dialogue regarding the outside director selection mechanism if combined with an existing research. In an existing research, Lee and Oh (2003) used Poisson regression of 323 listed manufacturing firms to find out that proximity to world society and visibility rendered firms more vulnerable to the normative pressure to appoint a larger number of outside directors. Although there are some differences in the research setting in the sense that Lee and Oh's deals with manufacturing firms rather than financial institutions, theirs and the current analysis are at least partially comparable. Lee and Oh's work almost exclusively relied on variables representing institutional environment, although they controlled for the percent of equity held by small shareholders with less than 1% and the changes in revenue, to find out institutional environment is critical in determining the number of outside directors. However, the current analysis recovers

the balance by the findings that many aspects of the technical/competitive environment are systematically related to the centrality of firms in the outside director network.

A few last words are due before closing. There have been many institutional changes and introduction of new institutions in the Korean business since the Asian crisis abruptly dismantled the old system. Mandatory appointment of outside directors for publicly traded firms is one of such new institutions. The dominant discourse right after the crisis was that the crisis-hit countries had been doomed for such a failure because they did not follow the global standard. In this discourse, the high-growth track record of the crisis-hit countries was completely forgotten. New institutions were introduced in a hastened manner to 'cure' the causes of the crisis. And most of the newly introduced institutional requirements are now firmly in place, in the sense that the requirements are being met. However, this does not guarantee that the new rules are doing what they were originally supposed to do. The analysis of outside director network in the Korean financial market strongly suggests that institutions are modified and transformed as they are transplanted in a different context.

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