

Ownership and Control of Mutual Savings Banks in Korea

MinHwan Lee^{1*}

1. College of Business Administration, Inha University, 402-751, Incheon, Korea

*E-mail of the corresponding author: skymh@inha.ac.kr

Abstract

This paper investigates examine the effects of ownership and control on mutual savings banks with respect to management performance and soundness in Korea. This study further verifies what factors determine the sustainability of mutual savings banks and also examines how management structure affects their performance. First, for performance, corporate-owned mutual savings banks managed by professional CEOs seem to have a negative relationship with performance. Second, for firm sustainability as an independent variable, the difference in ownership structure does not affect the sustainability of savings banks when ownership is divided into corporate and private. Finally, according to the results of the logit model on whether the independent variables affect the management form and ownership structure, the largest shareholder's participation in management was not affected by almost all variables, except for bank size. Moreover, ownership type had a positive effect on the management participation of the largest shareholder because most of the insolvent mutual savings banks were taken over by banks and other corporations when they became bankrupt.

Keywords: Ownership Structure, Management Performance, Sustainability, Management Form, Mutual Savings Banks

1. Introduction

Since Berle and Means (1932) identified the separation between ownership and management in modern corporate finance, numerous studies have been conducted on the relationship between corporate performance and governance. Subsequently, Jensen and Meckling (1976) argued the manager who runs a company on behalf of shareholders should act faithfully to their interests, but may seek his/her own interest due to the agency problem. However, this can be minimized by designing an incentive-compatible structure or monitoring the manager. Mutual savings banks, classified as leading consumer-based financial institutions in Korea, have a relatively high proportion of shares held by large shareholders amongst financial institutions.

From a management viewpoint, they are financial institutions for which direct management is generalized. That is, the owner, rather than a professional CEO, is directly involved in management or engages someone related to the owner as manager. Several scholars pointed out the concentration of ownership and management as a direct cause for the insolvency of mutual savings banks from 2011 to 2014. They experienced a management crisis starting from 2011 due to the 2008 global financial crisis and the insolvency of project financing caused by the real estate market recession. Moreover, around 30 mutual savings banks had been forced out of the market by 2014 due to the restructuring process. The primary reason for their insolvency was due to loan insolvency. However, the more fundamental reason is the relatively large share ownership by individuals and their active participation in management, which has led to poor monitoring by shareholders. Additionally, as most mutual savings banks are unlisted, market monitoring has not operated properly. In other words, mutual savings banks do not have decentralized share ownership, unlike banks.

Numerous cases of owner management have been observed, where mutual savings banks are managed under the absolute control of the owner and fail to be properly monitored, ultimately leading to insolvency. While this process has advantages, such as quick decision-making and solving the agency problem, if the owner's pursuit of private interests is not properly monitored and controlled, the financial institution may become insolvent, resulting in significant social losses.

Therefore, the purpose of this study is to examine the effects of ownership and control on mutual savings banks with respect to management performance and soundness. Additionally, since mutual savings banks have undergone restructuring several times, this study further verifies what factors determine the viability or sustainability of mutual savings banks and also examines how management structure affects their performance and how their management performance differs from those of financial institutions managed by professional CEOs. First, section 2 examines the characteristics of mutual savings banks' ownership and governance structure. It then identifies prior studies on the issues that may arise when corporate ownership is concentrated or when ownership and management are not separated based on the agency problem. Second, section 3 describes the model and variables used to examine the ownership and management structure and the management

performance of mutual savings banks and we explain the results of the analysis using an econometric model. Finally, section 4 summarizes the paper and discusses future research projects.

2. Ownership Governance Structure and Characteristics of Mutual Savings Banks

2.1 Ownership Governance Structure of Mutual Savings Banks

Unlike other financial institutions in Korea, such as banks, the individuals hold a large share of the stock ownership of mutual savings banks because mutual savings banks started with the intention of absorbing private loan system. Therefore, there were no restrictions on stock ownership for private moneylenders. As of December 2007, among the total 108 mutual savings banks, 43 had corporations as a major shareholder, accounting for only 39.9% of the total. The number of mutual savings banks with corporations as largest shareholder has increased sharply, accounting for 40 (57.0%) out of the 93 mutual savings banks as of December 2012, which corresponds to the restructuring period, and 46 (58.2%) out of 79 banks as of December 2016 when restructuring had been completed. The sharp increase of corporate shareholders as largest shareholders in mutual savings banks is attributed to the government, which had orchestrated most insolvent mutual savings banks to be taken over by banks, other financial institutions, and corporations through restructuring, as private mutual savings banks were creating moral hazard due to owner management.

On the other hand, the number of mutual savings banks with above 50% of shares held by the largest shareholder increased from 47.2% in 2007 to 65.9% in 2016. As a result of restructuring, the ratio of corporate ownership increased for mutual savings banks. At the same time, the concentration of ownership by the largest shareholder also increased significantly.

Table 1. Change of the large shareholders' proportion of mutual savings banks

Type Holding ratio	2007.12			2012.12			2016.12		
	Individual	Firm	Sum	Individual	Firm	Sum	Individual	Firm	Sum
above 80%	8	18	26 (24.1)	6	33	39 (42.0)	4	27	31 (39.2)
50~80%	15	10	25 (23.1)	11	11	22 (23.6)	11	10	21 (26.7)
below 50%	42	15	57 (52.8)	23	9	32 (34.4)	18	9	27 (34.1)
sum	65 (60.1)	43 (39.9)	108 (100)	40 (43.0)	53 (57.0)	93 (100)	33 (41.8)	46 (58.2)	79 (100)

Note: According to the largest shareholder notation in the auditor's report, () is the proportion of the total

Source: Korea Deposit Insurance Corporation

Subsequently, the management control of the largest shareholder of mutual savings banks is examined by classifying as "direct management" when the largest shareholder directly participates in management as the CEO, "indirect management" when the largest shareholder indirectly participates in management by also acting as an executive, and "professional management" when a third person, independent of the largest shareholder, participates in management as CEO. At the end of 2013, direct management, accounted for 47.2% of the total 89 mutual savings banks, which shows the number of mutual savings banks directly managed by the largest shareholder decreased significantly compared to the 61 (58.1%) at the end of 2010. The number of indirect management mutual savings banks in which the largest shareholder also acts as an executive, although few, decreased to six at the end of 2013 from the 13 at the end of 2010. On the other hand, mutual savings banks managed by professional CEOs, increased sharply from 37.2% in 2010, before restructuring, to 58.4% in 2013. As a result of the restructuring, the mutual savings banks where the largest shareholders were directly or indirectly involved in management were driven out of the market more than those run by professional management. In effect, most of the insolvent mutual savings banks were taken over by corporations and managed by professional CEOs. As a result, while savings bank management experienced restructuring and a deteriorating management environment, direct management by the owner was generalized for privately owned mutual savings banks and professional management by professional CEOs for corporate-owned large mutual savings banks.

Table 2. Types of management of the Large Shareholder's Form (unit: number, %)

classification	'06. 12			'13. 12			
	sum	individual	Corporation	sum	individual	Corporation	sum
Direct Management	36	47	14	61 (58.1)	31	11	42 (47.2)
Indirect Management	38	8	5	13 (12.4)	2	4	6 (6.7)
Professional Management	32	11	20	31 (29.5)	4	37	41 (46.7)
sum	105	66 (62.8)	39 (37.2)	105 (100)	37 (41.6)	52 (58.4)	89 (100)

Source: Korea Deposit Insurance Corporation

2.2 Prior Studies

Unlike banks, mutual savings banks do not have strict restrictions on industrial capital and individual stock ownership (Note1). Therefore, most of them have controlling shareholders whose dominance is strong. The financial supervisory authority is aware of the harmful effects of controlling shareholders and attempts to prevent moral hazard through various legal provisions. However, as majority shareholders continue to perform illegal acts despite legal provisions, the financial supervisory authority minimized the mismanagement possibility by majority shareholders by strengthening the control function against them and removing unqualified majority shareholders. Demsetz and Lehn (1985) argued the concentration of stock ownership reduces agency cost and creates an incentive to maximize corporate value.

Additionally, Leland and Pyle (1977) found stock ownership by the management in the presence of information asymmetry between managers and shareholders can be perceived as a positive signal that management is confident about company future performance. They also explained that such managerial behavior operates in the direction of lowering agency cost. On the other hand, Fama and Jensen (1983) proved that the combination of ownership and management can damage the interests of outside stakeholders in that the founder can pursue private profit maximization by managing the company at the expense of interests others than those of the stakeholders. Subsequently, Anderson et al. (2003) found the combination of ownership and management in family firms is closely related to family reputation. Therefore, the incentive to improve corporate performance is stronger than that of firms where ownership and management are separate. Regarding the management performance of family firms where ownership and management are combined, Anderson and Reeb (2003) compared their management performance to that of non-family firms from the US S&P 500 firms in the 1990s and found family firms exceeded the management performance of non-family ones.

3. Empirical Analysis

3.1 Analysis Model and Variable Composition

The ownership and governance structure of mutual savings banks not only affect the management performance of mutual savings banks but also overall management, including risk-seeking behaviors. That is, if a largest shareholder exists and participates directly or indirectly in management, there is a possibility the soundness of the savings bank may be greatly damaged due to its pursuit of private interest when the checks and balances system is insufficient. Therefore, management by a professional CEO can generally be positive in terms of securing expertise compared with the case where the majority shareholder participates in management directly or indirectly. The management condition of the savings bank can thus be improved. Consequently, this study first analyzes the effects of the ownership and governance structure of mutual savings banks on their management performance. For this purpose, panel data is analyzed using a linear probability model.

The empirical model we use to estimate the relationship between ownership and performance is shown in equation (1). We also investigate whether firm sustainability enhances performance, as modeled by equation (2). We employ panel regression to estimate these equations.

$$Performance_{it} = \beta_1 \times Ownership_{it} + \beta_2 \times Manager_{it} + \beta_3 \times Firm_{it} + \beta_4 \times Macro_t + \varepsilon_{it}, \quad (1)$$

$$History_{it} = \beta_1 \times Ownership_{it} + \beta_2 \times Manager_{it} + \beta_3 \times Firm_{it} + \beta_4 \times Macro_t + \varepsilon_{it}, \quad (2)$$

where i and t represent particular mutual savings banks and time.

Here, the $Performance_{it}$ of the savings bank is the ROA of an individual savings bank and $History_{it}$ is the period from the year of establishment to present. $Firm_{it}$ is a company unique variable and $Macro_t$ a macro variable that affects the overall management of mutual savings banks.

The data are from the financial information system provided by the Financial Supervisory Service and individual business reports. The analysis periods are half-years from 2007 to 2016, which includes the restructuring period for mutual savings banks (Note 2). The number of mutual savings banks included in the analysis decreased from 107 in 2007 to 79 by 2016. An unbalanced panel model was used, with consideration for the annual change in the number of mutual savings banks due to restructuring.

Next, an empirical analysis was conducted utilizing a binary logit model to examine which corporate characteristics influence ownership and governance structure, with a value of 1 when the bank is corporate-owned, and 0 otherwise. Management type were originally classified into direct, indirect, and professional. However, indirect management was included under the direct management category and designated as a binary variable (Note 3).

$$P(ownership_{it}) = F(Firm_{it}, Macro_{it}) \text{ and } P(manager_{it}) = F(Firm_{it}, Macro_{it}).$$

Here, $F(\cdot)$ for equation () is a logistic cumulative distribution function. In general, for the logit model

$$Y = \begin{cases} 1, & Y_{it}^* > 0 \\ 0, & Y_{it}^* < 0 \end{cases} \quad (3)$$

$$Y = \alpha + \beta X + \varepsilon. \quad (4)$$

In the above equation, when the cumulative distribution function of the probability distribution is standard normal, it becomes a probit model. However, as we assume a logistic distribution, it becomes a logit model. Additionally, $P(ownership_{it})$ indicates the probability the largest shareholder is a corporation. The variables used in this linear probability model and logistic analysis are as follows:

Independent variables

Firm performance

The average annual rate of profit after tax on total assets (ROA) was used to measure management performance.

Firm sustainability

The duration from establishment to 2018 was considered as firm sustainability and used to determine which variables influenced the survival of the firm.

Ownership

A binary variable that takes the value of 1 if the largest shareholder is a corporation and 0 if an individual was used.

Manager

A binary variable that takes the value of 1 if the largest shareholder directly manages the savings bank or participates as an executive and of 0 if the management is entrusted to a professional CEO was used.

Dependent variables

Stock ownership ratio of largest shareholder

In addition to adopting the stock ownership ratio of the blockholder as a variable, a variable for each section is used, where the blockholder's shares are divided into 50% or less, 50%–80%, and 80% or more.

History

As a general indicator of how long the savings bank existed, that is, the period from the foundation to the final year (2018) was adopted.

ROA

The average annual rate of profit after tax on total assets (ROA) was used as profitability index.

BIS

The BIS ratio is used as an index of the soundness of mutual savings banks.

Non-performing loans

The ratio of substandard loans to total loans was used as an index of the soundness of the mutual savings banks' assets.

Expense ratio

The expense ratio (selling and administrative expenses) was used to represents the expenses of the savings bank.

Asset

To examine how the ownership and governance structure differ depending on size, a variable that takes the natural log of the asset was used.

Land index

To examine how the possibility of insolvency affects the ownership and governance structure, the commercial real estate rate of change compared the same quarter of the previous year, which is the main collateral of mutual savings banks, was used. Since the decrease in land prices affects the quality of mortgage loans over time, a time lag variable with half-year lag was considered.

GDP

Economic growth was used as a variable, as it positively affects the management of mutual savings banks and impacts the stability of the governance and ownership structure of mutual savings banks.

Table 3. Definitions and descriptive statistics for variable

Independent variable	Definitions
ROA	average annual rate of profit after tax on total assets
sustainability	firm sustainability
ownership	ownership 1 or 0
manager	managed 1 or 0
dependent variable	
BIS	BIS ratio
Asset	Ln (total asset)
NPL	nonperforming ratio (nonperforming loans/total loans)
COA	expense ratio (selling and administrative expenses/total asset)
Portion	portion of large shareholder
por 80	large shareholder holds above 80% share
por 50	large shareholder holds above 80% share
commercial(-1)	previous period land index for commercial area
GDP	GDP growth rate

Based on these variables, the Breusch-Pagan test was conducted to verify whether it is necessary to consider the fixed object properties of the error term in the linear panel model. As a result, the value of Kai 2 is 553.22 and the P-value is 0. Therefore, the null hypothesis that the error term is 0 was rejected and the random effects model used instead of OLS. Next, the Hausman test was conducted to determine whether the fixed or random effects model was more suitable. As the value of Chi square was 0.1614, the null hypothesis that P = 0 was rejected and the random effects model used.

Table 4. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
own	1907	.5160	.4999	0.0000	1.0000
por	1907	61.9733	29.2689	9.2000	100.0000
sur	1907	36.3991	12.9763	5.0000	50.0000
roa	1906	-.40053	4.7702	-65.1900	25.5300
bis	1907	13.0036	21.0187	-187.2000	490.1500
lasset	1907	12.7900	1.0460	8.2920	15.5594
npl	1692	11.4289	13.0086	0.0000	275.8994
exp	1907	1.2575	.8130	0.0058	11.8508
commercial	1907	1.6121	2.3258	-4.5092	5.9589
manager	1596	.4016	.4904	0.0000	1.0000
por80	1907	.3361	.4725	0.0000	1.0000
por50	1907	.2585	.4380	0.0000	1.0000
gdp	1907	3.4213	2.2091	-1.6000	7.4000

Table 5. Correlations between variables

	own	por	sur	bis	lasset	npl	exp	commerl	manage r	por80	por50	gdp
own	1											
por	0.48	1										
sur	-0.29	-0.3652	1									
bis	0.03	0.0593	0.0122	1								
lasset	0.36	0.1755	-0.192	-0.2169	1							
npl	0.1	0.0757	-0.0887	-0.2332	0.0013	1						
exp	0.06	0.1676	-0.1834	0.1213	-0.1549	0.0124	1					
commerciall	-0.01	-0.0115	0.0092	0.0093	-0.0273	-0.0453	0.0571	1				
managerl	0.54	0.4899	-0.303	0.0755	0.422	0.062	0.0959	-0.0099	1			
por80	0.42	0.8444	-0.3813	0.0703	0.1321	0.0674	0.2035	0.0024	0.4720	1		
por50	-0.07	-0.0089	0.1056	0.0333	-0.0167	-0.029	-0.0623	-0.0165	-0.0889	-0.4317	1	
gdp	0.01	0.002	0.0068	-0.0237	0.019	0.0003	0.0052	-0.6530	-0.0044	-0.0015	-0.0019	1

3.2 Empirical Results

First, the analysis was performed by setting performance as dependent variable. The stock ownership ratio of the largest shareholder was used as variable. Dummy variables, ranging from 0%–50%, 50%–80%, and 80% or more, were also used. First, the performance of a corporate-owned savings bank managed by a professional CEO was evaluated as effective at the 1% level. However, since the coefficient's sign is negative, the management performance of a corporate-owned savings bank managed by a professional CEO is lower than that of a privately-owned savings bank. These results are consistent with the analysis of Anderson et al. (2003), which suggests mutual savings banks where individuals participate directly in management play a role in lowering agency cost, thus demonstrating higher management

efficiency. Additionally, as in the general financial theory, the increase of the BIS ratio and decrease of nonperforming loans were observed to increase ROA at the 1% significance level. Next, the rise in commercial real estate prices increases the performance of mutual savings banks at the 1% significance level. Further, the increase of the stock ownership ratio of the largest shareholder increases the profitability of mutual savings banks at the 10% significance level. As direct management of the largest shareholder shows better management performance than that of professional management, the increase in stock ownership of the largest shareholder is interpreted as a result of avoiding decision-making delays due to a more responsible management. This is also attributed to the existence of multiple stakeholders. Making prompt decisions and responsible management is due to the reduction of costs associated with conflicts. According to model 2, which used dummy variables according to ownership ratio, the highest performance is for 50%–80%, where ownership can be maintained while being held in check by other shareholders, rather than the case where shares were overly concentrated to the largest shareholder.

According to the analysis results on firm sustainability as an independent variable, the difference in ownership structure does not affect the sustainability of savings banks when the ownership is divided into corporate and private. However, when management participation is divided into the professional and direct management, the estimated coefficient for management participation was -1.34 in model 3. This means that professional management, compared to direct management, shortens the life span of mutual savings banks. Additionally, the increase in corporate profits, rise in BIS ratio, decrease in nonperforming loans, and size of the savings bank appears to increase the sustainability of mutual savings banks, which is consistent with the general interpretation.

Table 6. Effect of ownership structure and history on performance

	ROA		HIS	
	(1)	(2)	(3)	(4)
intercept	-12.4630 (1.9354)***	-12.1306*** (1.9247)	22.2362*** (2.1507)	21.6807*** (2.1463)
own	-0.7611 (0.2425)***	-0.7090*** (0.2391)	-0.1580 (0.1675)	-0.1453 (0.1645)
sur	0.0219 (0.0101)*	0.01911* (0.01028)	0.0385** (0.0156)	0.0369** (0.0156)
bis	0.0236 (0.0041)***	0.02323*** (0.0041)	0.0155*** (0.0027)	0.0159*** (0.0027)
npl	-0.2154 (0.0099)***	-0.2156*** (0.0099)	0.0291*** (0.0070)	0.0283*** (0.0070)
exp	-0.0410 (0.0935)	-0.0313 (0.0934)	0.0542 (0.0561)	0.0593 (0.0560)
commercial	0.138 (0.0469)***	0.1426*** (0.0467)	0.0053 (0.0266)	0.0079 (0.0265)
manager	-1.4747 (0.3330)***	-1.4047*** (0.3357)	-1.3469*** (0.5180)	-1.2924* (0.5173)
lasset	1.0894 (0.1427)***	1.0770*** (0.1439)	0.9455*** (0.1386)	0.9631*** (0.1387)
por	0.0079 (0.0046)*		-0.0097*** (0.0037)	
por80		0.4049 (0.2859)		-0.7589*** (0.2044)
por50		0.8311** (0.2620)		-0.1813 (0.1914)
gdp	0.0397 (0.0435)	0.0425 (0.0433)	-0.0013 (0.0245)	-0.0005 (0.0245)
sample	1448	1448	1448	1448
R2	0.3492	0.3457	0.0217	0.0241

Finally, the logit model was used to examine whether the independent variables in the above model affect management form and ownership structure. The largest shareholder's participation in management was not affected by almost all variables, other than savings bank size. This suggests the decision of the largest shareholder to participate in management is determined regardless of the performance of the savings bank. Therefore, even if the savings bank becomes difficult to manage, the largest shareholder does not participate in direct management. Ownership type has a positive effect on the management participation of the largest shareholder, because a professional CEO is assumed to be hired in the case of corporation ownership, rather than assigning a CEO related to the parent company. Moreover, if profitability is low and period of existence brief, the savings bank is more likely to be owned by a corporation. This is because most insolvent mutual savings banks were taken over by banks and other corporations when they became subject to bankruptcy. If the ownership structure is concentrated, many banks are owned by corporations, since most corporations that newly acquired mutual savings banks own 100% of shares, which is in line with the above explanations.

Table 7. Effect of ownership structure and history on performance

	Manager		Ownership	
intercept	-51.2581 (9.3740)	-66.7156 (9.2852)	-6.7563 (4.7365)	-4.6516 (4.6295)
ownership (manager)	1.0997 (1.0490)	0.8165 (1.0933)	3.1348*** (0.8502)	3.6779*** (0.8844)
sur	-0.0184 (0.4428)	-0.0781 (0.0518)	-0.0974** (0.0380)	-0.0962*** (0.0364)
roa	-0.0987 (0.0818)	-0.1818 (0.0923)	-0.0847* (0.0433)	-0.0639 (0.0421)
bis	0.0406 (0.0315)	0.0207 (0.0260)	0.0264* (0.0139)	0.0208 (0.0138)
npl	0.0312 (0.0407)	0.01234 (0.0432)	-0.0106 (0.0198)	-0.0060 (0.0196)
exp	0.3166 (0.5761)	0.9066 (0.4668)	0.2901* (0.1666)	0.2610* (0.1579)
commercial1	0.0243 (0.2408)	-0.2882 (0.3042)	0.0372 (0.0791)	0.0086 (0.0782)
lasset	3.2133*** (0.6614)	5.1599*** (0.6583)	0.3829 (0.3510)	0.4189 (0.3462)
por	0.0801*** (0.0194)		0.0634*** (0.0090)	
por80		8.5204*** (1.7276)		3.1869*** (0.5182)
gdp	-0.0242 (0.2159)	-.2159 (0.2666)	0.0358 (0.0725)	0.0123 (0.0720)
Log likelihood	-101.4778	-92.1957	-325.7207	-335.0582

4. Conclusions

Although mutual savings banks in Korea have a short history, a large number of mutual savings banks have been liquidated as a result of the foreign exchange and global financial crises. Therefore, this study examines how the management performance and sustainability of savings banks are influenced by the ownership and governance structures, which were the causes of restructuring of mutual savings banks, and analyzes ownership and governance structure determinants.

First, for performance, corporate-owned mutual savings banks managed by professional CEOs seem to have a negative relationship with performance. That is, corporate-owned mutual savings banks managed by professional CEOs have relatively low performance compared to mutual savings banks in which the largest shareholders are individuals that participate in direct management. Second, for firm sustainability as an independent variable, the difference in ownership structure does not affect the sustainability of savings banks when ownership is divided into corporate and private. Finally,

according to the results of the logit model on whether the independent variables affect the management form and ownership structure, the largest shareholder's participation in management was not affected by almost all variables, except for bank size. Moreover, ownership type had a positive effect on the management participation of the largest shareholder because most of the insolvent mutual savings banks were taken over by banks and other corporations when they became bankrupt. If ownership is concentrated, several of the banks are owned by corporations, and most corporations that newly acquired mutual savings banks own 100% of shares, which is in line with the above explanation.

Meanwhile, for management performance according to the largest shareholder type, private and privately-owned mutual savings banks performed better than corporate-owned ones. Considering the relationship between the degree of management participation of the largest shareholder and management performance, the mutual savings banks where the largest shareholders participate in management directly or indirectly perform relatively better than those managed by professional CEOs. In other words, mutual savings banks have shown the highest level of management performance when the largest shareholder is an individual that participates directly in management. Therefore, to improve the management soundness and profitability of mutual savings banks and establish them as sound consumer-based financial institutions the following considerations should be paid attention to. While owner management should be promoted, stock ownership should be properly decentralized to prevent the loss of checks from the market and outside parties by concentrating over 80% of the shares to the owner. Alternatively, the supervisory authority should strengthen regulation and supervision to provide institutional strategies to prevent moral hazard due to owners.

References

- Anderson, Ronald C. and David M. Reeb. (2003). Founding-Family Ownership and Firm Performance: Evidence from the S&P 500. *The Journal of Finance*, 58(3), 1301-1328
- Anderson, Ronald C., Satter A. Mansi and David M. Reeb. (2003). Founding-Family Ownership and the Agency Costs of Debt. *The Journal of Financial Economics*, 68(2), 263-285
- Berle Adolf A., and Means, Gardiner C. (1932). *The modern corporation and private property*. Transaction Publishers
- Chun, SunEae and Lee MinHwan. (2008). The influence of ownership-governance structure of mutual savings banks on management performance and risk level. *Insurance development research*, 19(3), 229-261
- Demsetz, Harold and Kenneth Lehn. (1985). The Structure of Corporate Ownership: Causes and Consequences. *Journal of Political Economy*, 93(6), 1155-1177
- Fama, Eugene F. (1980). Agency problems and the theory of the firm. *The Journal of Political Economy*, 88 (2), 288-307
- Fama, Eugene F. and Micheal C. Jensen. (1983). Separation of Ownership and Control. *Journal of Law and Economics*, 26(2), 301-325
- Gao, Huasheng, Harford, Jarrad and Li, Kai. (2012). CEO pay cuts and forced turnover: Their causes and consequences. *Journal of Corporate Finance*, 18(2), 291-310
- Huson, Mark R., Malatesta, Paul H. and Parrino Robert. (2004). Managerial succession and firm performance. *Journal of Financial Economics*, 74(2), 237-75
- Jensen, M.C., and Meckling, M.H. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360
- Leland, Hayne E. and David H. Pyle. (1977). Information Asymmetries, Financial Structure, and Financial Intermediation. *The Journal of Finance*, 32(2), 371-387
- McConaughy, Daniel L., Micheal C. Walker, Glenn V. Henderson and Mishra S. Chandra. (1998). Founding Family Controlled Firms: Efficiency and Value. *Review of Financial Economics*, 7(1), 1-19

Note 1. In Korea, there is no restriction on stock ownership by industrial capital for financial institutions other than banks. However, for banks, the stock ownership by industrial capital is limited to 4% of the total number of stocks issued in accordance with Article 16-2 of the Banking Act.

Note 2. Savings banks originally settled their fiscal year in June. As of 2015, the settlement month was adjusted to December.

Note 3. In fact, indirect management can be considered similar to direct management, since the largest shareholder controls the manager with management rights.