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Master's Thesis of Business Administration

**CEO mobility and corporate policies
under concentrated ownership:
Evidence from Korea**

**집중된 소유구조 하에서 CEO 이동이 기업정책에
미치는 영향: 한국시장을 중심으로**

February 2021

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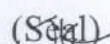
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Abstract

CEO mobility and corporate policies under concentrated ownership: Evidence from Korea

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This study examines the effect of CEO mobility on corporate policies in the setting of a concentrated ownership structure in which CEOs tend to pursue private benefits of control. Based on this characteristic of ownership structure, I hypothesize that CEOs will become entrenched by weakening the incentive mechanism in response to increased mobility opportunities. Consistent with the hypothesis, the firm's incentive mechanisms such as pay-for-performance sensitivity and monitoring intensity decrease, and investment increase due to increased mobility opportunities only when the CEO power is strong. Also, the future firm value decreases when the mobility opportunities increase, which is consistent with the prediction of the entrenchment model that rent extraction will occur due to entrenchment from powerful CEOs. These findings indicate that the channel of the substitute relationship is not career concern incentives from the labor market but CEO power. These results are contrary to the empirical evidence in the U.S. market characterized by a diffused ownership structure, suggesting that the labor market mechanism does not work efficiently in a concentrated ownership structure.

Keyword : CEO mobility, CEO power, Labor market incentive, Agency cost, Incentive mechanism, Managerial entrenchment

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1. Introduction

Under the agency theory, firms intend to align agents' incentives with those of shareholders to reduce agency problems arising from pursuing private benefits of control. Firms can do this either by contracting performance-based compensation with agents or by strengthening monitoring. In addition to these internal corporate policies, there are market-level mechanisms affecting agent costs. Among them, the labor market makes agents work hard on their own in order to move to a firm that offers higher positions and compensations. This career concern incentive results in lower agency costs and less need for internal incentive mechanisms. In other words, if the labor market is efficient, career concern incentive from the labor market could reduce the agency problem, maximizing firm value (e.g., Fama 1980; Holmstrom 1999, Graham et al. 2019).

However, the labor market does not only give CEOs the motive to work harder, but it can also give the CEOs the motive to become more entrenched. Under the entrenchment theory, incumbent CEOs intervene in corporate policies to make it harder for firms to replace the incumbents with competitive CEOs in the labor market. For example, incumbent CEOs who tend to be risk-averse or seek private benefits of control are likely to use their bargaining power from the improved outside options to increase their pay unrelated to performance and to weaken monitoring (e.g., Hermalin and Weisbach 1998; Bebchuk and Fried 2002). Therefore, they have entrenchment incentives.

Both career concern and entrenchment stories give the same prediction that the incentive mechanisms will decrease within a firm-CEO pair as mobility opportunities increase. However, the career concern story indicates that corporate decision-making is optimal, while it is an inefficient outcome under the entrenchment story. Therefore, this paper first examines whether the incentive mechanisms are reduced(weakened) when CEO mobility increases, and if it holds, identifies which story is the channel to explain this substitute relationship.

The baseline result shows no significant association in pay-for-performance sensitivity, board monitoring, and investment as CEO mobility increases. However, the effect of CEO mobility on corporate policies may vary depending on CEO and firm characteristics. Thus, I examine the interactive effects. First, I test the interactive effects of CEO mobility with short tenure on CEO pay-for-performance sensitivity, monitoring intensity, and corporate investment in a firm-CEO pair. According to the career concern model, CEOs with relatively short tenure (i.e., longer careers ahead) are more sensitive to mobility opportunities, so the substitute relationship between CEO mobility and corporate policies should be stronger (Gibbons and Murphy 1992). On the other hand, the entrenchment model predicts that when the CEO tenure is longer, the substitute relationship should be stronger since longer tenure represents the power of CEOs. In other words, considering the length of CEO tenure, the two stories offer opposite predictions. From this identification strategy, I test which of the two stories are more fitted with the empirical evidence. As a result, in a firm-CEO pair with longer CEO tenure than the median value of the total CEO tenure, board monitoring decreases and investment increases when CEO mobility increases, while pay-for-performance sensitivity and board monitoring significantly increase and corporate investment decreases in a firm-CEO pair with shorter CEO tenure. This is contrary to the prediction of the career concern model but is consistent with the prediction of the entrenchment model.

Second, I examine the interactive effects of CEO mobility with CEO age on pay-for-performance sensitivity, monitoring intensity, and investment in a firm-CEO pair. According to the predictions of the career concern model, the younger CEOs are more sensitive to mobility opportunities, so the substitute relationship between mobility and corporate policies should be stronger, while the older CEOs should be less sensitive (Fama 1980). Conversely, the entrenchment model predicts that since older CEOs have relatively stronger CEO power due to their experiences, the substitution should appear in firms held by older CEOs. The empirical evidence shows that, consistent with the prediction of the entrenchment model, board

independence decreases and corporate investment increases for older CEOs.

Third, to support the claim that CEO power is the channel of substitute relationship between mobility and corporate incentive mechanisms, CEO-chair duality, family shareholdings, and family CEOs are used as proxies for CEO power. So, I test if the substitution is stronger in the firm-CEO pair with these characteristics when mobility opportunities increase. As a result, a firm whose CEO serves as the chairman of its board tends to decrease monitoring intensity as mobility opportunities increase. Besides, pay-for-performance sensitivity decreases when family members are one of the major shareholders, while the relationship is opposite and significant when firms do not have such characteristics. Lastly, conditional on the large business group, board independence significantly decreases in response to increased mobility when a family member is in charge of the CEO position, whereas in a firm-CEO pair with a non-family CEO, board independence and pay-for-performance sensitivity tend to significantly increase. In particular, since family CEOs are almost insensitive to labor market mobility opportunities, the substitute relationship that arises from this characteristic is due to CEO power, not due to career concern incentive. This empirical evidence shows that CEO power is the channel of the substitute relationship between CEO mobility and corporate policies.

Finally, the entrenchment story predicts that the rent extraction will occur if incumbent CEOs weaken the incentive mechanisms to pursue private benefits of control. Thus, I hypothesize that the future firm value will decrease as CEO mobility increases. The empirical result shows that the future firm value measured by Tobin's q significantly decreases at $t+1$ after mobility opportunities increase. This result is opposite with the findings of Graham et al. (2019), suggesting that, in the concentrated ownership structure, corporate policies are weakened by CEO power rather than efficiently reduced by career concern incentive.

In summary, previous studies provide empirical evidence consistent with the career concern model, as Fama (1980) predicted. However, Holmstrom (1999) argues that the prediction applies only when the assumption that CEOs are risk-

neutral is satisfied. That is, as Graham et al. (2019) showed, in the United States which has a diffused ownership structure, this assumption is met so that CEOs have strong career concern incentives, resulting in the empirical results consistent with Fama (1980). However, this study examines the impact of CEO mobility on corporate policies in the Korean market where CEOs are unlikely to move due to their risk-averse and seek private benefits of control. That is, in Korea, career concern incentive is relatively weak due to the characteristics of large business groups and family ownership structure. Therefore, CEOs are more likely to be entrenched by weakening corporate governance in response to the enhanced outside option. This is consistent with Hermalin and Weisbach (1998) predictions.

2. Data and Measurement

2.1. Data Sources and Sample Selection

Executive data is collected by TS-2000, and unbalanced panel data is created by assigning an identifier for each executive based on name, date of birth, education, and job experience. From the data, CEO mobility and other CEO characteristics such as tenure and turnover are created.

Firm and board characteristics are collected in FnGuide and TS-2000. Among industry characteristics, industry Tobin's q is calculated by using a value-weighted average of firm-level Tobin's q. Industrial GDP growth is collected by the Bank of Korea Economic Statistics System (ECOS). In the Appendix, the definition of each variable and the database is disclosed. In the full sample, financial, insurance, and utility industries are excluded, and firms with total assets of less than 5 billion won in 2017 are also excluded.

The sample period is from 1998 to 2019. The firms are KOSPI and KOSDAQ listed firms, where CEO data exists. The total sample includes 5051 unique CEOs, 1951 unique firms, and 624 CEO moves (including 241 CEO moves to affiliated firms).

2.2. Measurement of CEO Mobility

The definition of CEO mobility uses industry-level mobility measures used in Graham et al. (2019). These measures represent the average ratio of one firm's CEO being employed by another firm in a given industry and year. Definitions are as follows:

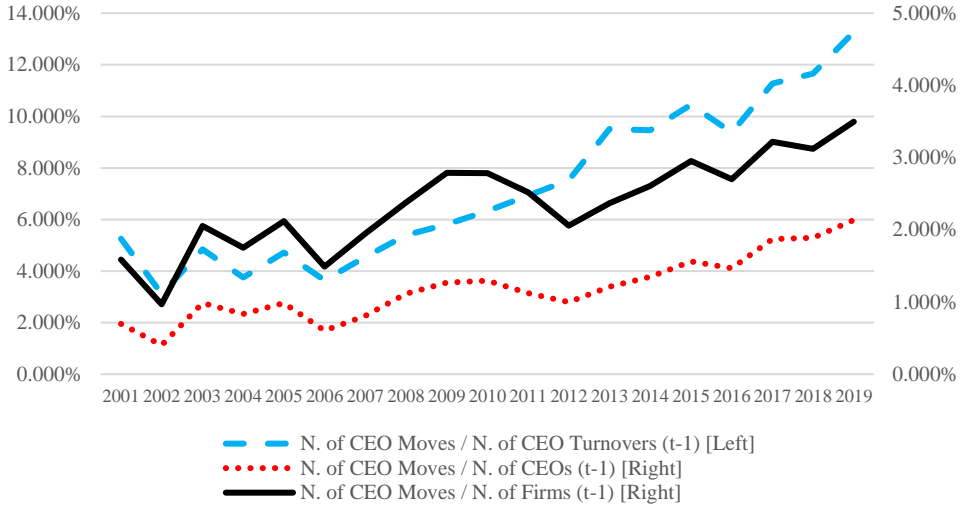
$$\begin{aligned}
 Mobility_{i,j,t} &= \frac{\# CEO\ moves_{-i,j,t}}{\# CEOs_{j,t-1}}, \text{ or} \\
 &= \frac{\# CEO\ moves_{-i,j,t}}{\# CEO\ turnovers_{j,t-1}}, \text{ or} \\
 &= \frac{\# CEO\ moves_{-i,j,t}}{\# Firms_{j,t-1}},
 \end{aligned} \tag{1}$$

where $Mobility_{i,j,t}$ is a measure of CEO mobility in firm i , in industry j , in year t . $\# CEO\ moves_{-i,j,t}$ represents the frequency with which the CEO in industry j moved to the executive position of a firm other than firm i between years $t-1$ and t . $\# CEOs_{j,t-1}$ (or $\# CEO\ turnovers_{j,t-1}$, or $\# Firms_{j,t-1}$) refers to the number of CEOs (or the number of CEO turnover, or the number of firms) in industry j in year $t-1$. Industries are classified into a total of 20 industries using the Korean Standard Industry Classification (KSIC one-digit, alphabet). In addition to the mobility variables of Graham et al. (2019), I add one more mobility measure scaled by the number of firms because there are relatively more firms with multiple CEOs than in the United States.

Figure 1 shows the trends of three measures of CEO mobility (correlation = 0.927, 0.857, and 0.968 respectively). The measurements show an increasing trend, indicating that the mobility increases over the sample period.

Figure 1. Three Measures of CEO Mobility

This figure represents three measures of CEO mobility (three-year moving average) averaged across one-digit (alphabet) KSIC industries from 1998 to 2011. *N. of CEO Moves* represents the number of CEOs who become CEOs or executives of other firms within two years of departure. *N. of CEO Turnovers* represents the number of CEOs leaving the firm in a given year. *N. of CEOs* represents the total number of CEOs in a given year. *N. of Firms* represents the total number of firms in a given year. The correlations of the three scales are 0.927, 0.857, and 0.968, respectively



2.3. Instrumental Variables: CEO Deaths

Measures of CEO mobility can be correlated with economic and labor market conditions (e.g., business cycle, industry- or firm-level performance). In this case, the relationship between CEO mobility and corporate policies does not imply a causal relationship (Graham et al., 2019). Therefore, to solve this problem, the 2SLS method using instrumental variables is used following the methodology of Graham et al. (2019). The instrumental variable is defined as a weighted average of lagged CEO deaths in connected industries in a given industry and year, scaled by the number of CEOs, the number of CEO turnovers, and the number of firms. The weight is the rate of CEO moves in the industry pair for the last 3 years. This is an exogenous shock that increases the mobility opportunities due to the deaths of CEOs in connected industries outside of the given CEO's industry. The definition of Death is as follows:

$$\begin{aligned}
Death_{j,t-1} &= \frac{\sum_{k \neq j} w_{j \rightarrow k,t} \# Deaths_{k,t-1}}{\# CEOs_{j,t-1}}, \text{ or} \\
&= \frac{\sum_{k \neq j} w_{j \rightarrow k,t} \# Deaths_{k,t-1}}{\# CEO \text{ turnovers}_{j,t-1}}, \text{ or} \\
&= \frac{\sum_{k \neq j} w_{j \rightarrow k,t} \# Deaths_{k,t-1}}{\# Firms_{j,t-1}},
\end{aligned} \tag{2}$$

where $Death_{j,t-1}$ is an instrumental variable for the mobility variable in Equation (1) and represents the impact of the mobility due to CEO deaths in $t-1$ in the industries connected to industry j . $\# Deaths_{k,t-1}$ represents the number of deaths of the CEO in year $t-1$ in industry k . $w_{j \rightarrow k,t}$ is the connectedness weight as defined in Graham et al. (2019), which represents the percentage of CEO moves that occurred from industry j to industry k from year $t-2$ to year t . $\# CEOs_{j,t-1}$, $\# CEO \text{ turnovers}_{j,t-1}$, and $\# Firms_{j,t-1}$ are defined as in Equation (1). CEO death data is collected from the disclosure of CEO change in DART. As a result, it includes a total of 72 CEO deaths from 2002 to 2019.

2.4. Descriptive Statistics

Table 1 shows the descriptive statics of the firm-year characteristics of the sample from 2003 to 2019. On average, 187 incumbent CEOs in an industry leave the CEO position each year. $Mobility_{Turnover}$ has a mean and standard deviation of 0.048 and 0.034, which is 2.5 times lower than the samples in Graham et al. (2019), so it is relatively less common to move to an executive position in other firms. The average number of CEO deaths in the connected industries is 0.75 per year. Since the industry's average CEO movement is 8, the value of CEO deaths accounts for about 10% of the movement. Thus, it can cause a meaningful shock to the CEO movement. The average CEO tenure is 5.7 years, and the ratio of outside directors, which shows the independence of the board, is 0.267. Table 1 shows the summary statistics for each variable.

Table 1. Summary statistics

This table reports summary statistics for the samples from 2003 to 2019. *N. CEO Moves* refers to the number of CEOs in a one-digit (alphabet) KSIC industry who become CEOs or executives of another firm within two years of their most recent departure. *N. of CEO Turnovers* represents the total number of CEOs in a one-digit (alphabet) KSIC industry who leave the firm each year. *N. of CEO* represents the number of CEOs in a one-digit (alphabet) KSIC industry included in the sample each year. *Mobility* indicates *N. of CEO Moves* divided by lagged *N. of CEOs*, lagged *N. CEO Turnovers*, or lagged *N. Firms*. These three measures are standardized by their standard deviation to facilitate comparison in subsequent analysis. *Connected Industry Death* is the weighted average number of CEOs who die in other KSIC industries in a year. Both weight and connectedness are determined by the frequency of the CEO move in the last three years between the one-digit (alphabet) KSIC industries. *Death* indicates lagged *Connected Industry Death* divided by lagged *N. of CEOs*, lagged *N. CEO Turnovers*, or lagged *N. Firms* respectively. *Independence* refers to the number of outsider directors scaled by the total number of directors, and all outsiders are directors who are not current officers of the firm. *CEO-Chair* is a dummy variable that has a value of 1 if the CEO is the chairman and 0 otherwise. *CEO Turnover* is 1 if the current CEOs are not the same as the previous year and 0 otherwise. *Total CEO Tenure* is the total number of years an individual holds the CEO position in a given firm. *Pay_perf* represents the changes in CEO salaries and bonuses as t to t+1 over changes in the firm value from t-1 to t.

	N (firm-years)	Mean	Median	STD
<i>Executive Mobility Characteristics</i>				
N. of CEO moves	23,317	8.8	7.0	7.5
N. of CEOs	23,317	1406.4	1877.0	839.7
N. of CEO Turnovers	23,317	187.0	226.0	109.9
N. of Firms	23,317	723.1	830.0	464.3
<i>Mobility</i> _{CEO}	23,317	0.007	0.007	0.006
<i>Mobility</i> _{Turnover}	23,317	0.048	0.048	0.034
<i>Mobility</i> _{Firm}	23,317	0.013	0.013	0.011
Connected Industry Death	23,317	0.75	0.33	1.01
<i>Death</i> _{CEO}	23,317	0.30%	0.02%	0.91%
<i>Death</i> _{Turnover}	23,317	1.73%	0.12%	4.30%
<i>Death</i> _{Firm}	23,317	0.64%	0.04%	2.33%
<i>CEO & BOD Characteristics</i>				
N. of Directors	23,317	6.4	6.0	2.1
Independence	23,317	0.267	0.250	0.162
CEO Turnover = 1	23,317	0.207	0.000	0.405
CEO Tenure	23,317	5.734	4.000	4.566
Total CEO Tenure	23,317	9.563	8.000	5.944
CEO-Chair = 1	16,161	0.967	1.000	0.179
Pay-perf	1,353	0.012	0.000	2.385
<i>Firm Characteristics</i>				
Leverage	23,317	0.191	0.174	0.154
Cash Flow	23,317	0.332	0.199	2.749
Size	23,317	5.456	5.121	1.574
ROA	23,317	0.015	0.029	0.102
PPE/TA	23,317	0.316	0.309	0.184
M/B	23,317	2.178	1.588	2.067
CASH/TA	23,317	0.085	0.061	0.082
Tobin's <i>q</i>	23,317	0.991	0.724	0.873
Investment	23,317	0.046	0.030	0.087
<i>Industry Characteristics</i>				
Industry Tobin's <i>q</i>	23,317	1.088	1.021	0.283
Industry GDP Growth	23,317	0.040	0.033	0.034

3. Descriptive Analysis

Similar to Graham et al. (2019), which shows the executive mobility of the labor market in the United States, I first examine the mobility trends of corporate executives in Korea over the past two decades. This study shows what pattern the CEO movements represent in the Korean executive labor market by comparing CEO movements in terms of times and the types of movement.

3.1. Frequency of CEO moves across Industries

First, I examine the trends of CEO movements over the past 20 years in the Korean labor market. Table 2 shows the proportion of the CEO moving between industries classified as KSIC. CEO movements are when former CEOs become an executive of another firm within three years after leaving the previous CEO position. Panel A (1998-2010) and Panel B (2011-2019) show that more than 50% of CEO movements occur within manufacturing (KSIC = 3). Also, the rate of movements to manufacturing is higher in the last 10 years (2011-2019), and the CEO movements to transportation (KSIC = 7) and finance and insurance (KSIC = 10) increase. As a result of investigating the concentration of CEO movements by using the Herfindahl-Hirschman Index (HHI) based on the ratio of movement between industry pairs, the concentration is 0.109 during the past decade (1998-2010, hereafter referred to as “PRE”) period and the value increases to 0.139 during the last decade (2011-2019, hereafter as “POST”). The results indicate that CEO movements are more concentrated on specific industries in the last decade than in the past decade.

Also, the movements into other industries (i.e., excluding diagonal movements) is 53.08% in POST, which is lower than that of 57.48% in PRE. This indicates that the diversity of CEO movements is relatively less in recent years, which is not consistent with the increasing importance of general managerial skills (Murphy and Zabochnik 2007; Frydman and Saks 2010; Frydman 2017). Rather, it can be interpreted that industry- or firm-specific skills are still important in the

Korean labor market. Therefore, Table 1 shows that although the number of movements in POST is greater, CEO movements deteriorate in terms of diversity and concentration.

These results are stronger when only considering CEO movements into non-affiliates. As the HHI increases from 0.118 to 0.163, the industrial concentration of CEO movements became more intense than when all CEO movements are included. Also, the rate of movements to other industries decreases from 57.50% to 52.85%. On the other hand, when only considering the movements into affiliates, the HHI is relatively low at the level of 0.11 to 0.12, and there is little difference between the periods. Besides, the ratios of movements to other industries are 57.32% in PRE and 53.46% in POST, respectively. These results indicate that the diversity of movements still decreases but the decrement is relatively small compared to non-affiliated CEO movements. Rather, these results suggest that the importance of general management skills is relatively greater in the CEO movements within affiliates, while the importance of industrial-or primary-special skills is significant in non-affiliated CEO movements.

Table 2. Frequency of CEO movements between industries

This table shows the frequency at which CEOs move from firms in the origination industry to other firms in the destination industry by type of movement (or by time in Appendix) from 1998 to 2019. *KSIC-From* refers to the one-digit (alphabet) KSIC industry of the firm where a given CEO leaves. *KSIC-To* refers to the one-digit (alphabet) KSIC industry of the firm for the CEO to move to the CEO or other executive positions. *All Moves* includes all CEO moves that occurred over the sample period. Affiliated represents CEO moves that have moved within the affiliate. The mean of the frequencies and the Herfindahl-Hirschman index are in parentheses. The unit is a percentage. Darkness indicates top 10%, top 20%, top 30%, and top 50% industry pairs in terms of frequency of moves.

Panel A. 1998-2019: 624 Moves (Mean 1.30%, HHI 0.128) - All CEO Moves

KSIC-From \ KSIC-To	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
0. Agriculture, Forestry, Fishing																						0.0
1. Mining												0.16										0.2
2. Manufacturing																						0.0
3. Electricity, Gas, Steam & Air Conditioning Supply			32.69			0.16	0.96	3.21	0.16	0.16	2.56	1.76		3.53	0.32		0.16		0.16			45.8
4. Water, Sewage & Waste Treatment, Raw Material Recycling			0.16	0.16			0.48	0.16				0.16		0.16								1.3
5. Construction			0.16																			0.2
6. Wholesale & Retail Trade			1.76	0.16			1.44	0.16	0.16		0.48	0.16		0.16								4.5
7. Transportation			5.45				0.32	1.92	0.32		0.96	0.64		0.16								9.8
8. Accommodation & Restaurant			0.80					0.16	0.32		0.32	0.16		0.32								2.1
9. Information Service								0.16														0.2
10. Finance & Insurance		0.16	3.37				0.16	1.60	0.16		6.41	1.12	0.16	1.28			0.32		0.16			14.9
11. Real Estate		0.16	3.37				0.48	0.64	0.16		0.96	2.56		0.16			0.16					8.7
12. Professional, Scientific & Technical Service			0.16																			0.2
13. Business Facility Management, Business Support & Rental Service			7.21	0.48			0.64	0.80			0.64	0.16					0.32					10.3
14. Public Administration			0.32						0.16		0.32			0.16								1.0
15. Education Service																						0.0
16. Health Service											0.32											0.3
17. Arts, Sports and Leisure Service											0.00											0.0
18. Associations & Organizations, Repair & Other Personal Service			0.64	0.16																		0.8
19. Activities of households as employers																						0.0
20. Activities of extraterritorial organizations and bodies																						0.0
Total	0.0	0.2	0.2	56.1	1.0	0.2	4.5	9.0	1.3	0.2	13.0	6.9	0.2	5.9	0.3	0.0	1.0	0.0	0.3	0.0	0.0	100

Panel B. 1998-2019: 383 Moves (Mean 1.52%, HHI 0.146) – Excluding CEO Moves to Affiliated Firms

KSIC-From \ KSIC-To	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
0. Agriculture, Forestry, Fishing																						0.0
1. Mining												0.26										0.3
2. Manufacturing																						0.0
3. Electricity, Gas, Steam & Air Conditioning Supply				35.77		0.26	1.31	3.92	0.26	0.26	3.39	2.35		3.13	0.52		0.26		0.26			51.7
4. Water, Sewage & Waste Treatment, Raw Material Recycling				0.26	0.26		0.26	0.26				0.26		0.26								1.6
5. Construction				0.26																		0.3
6. Wholesale & Retail Trade				1.31	0.26		1.31					0.26										3.1
7. Transportation				7.05			0.26	1.04	0.52			0.52	0.52		0.26							10.2
8. Accommodation & Restaurant				1.04				0.26	0.52			0.52	0.26		0.26							2.9
9. Information Service																						0.0
10. Finance & Insurance			0.26	2.61			0.26	2.09	0.26			5.22	1.31		0.52				0.26			12.8
11. Real Estate		0.26		3.92			0.26	0.52				1.04	1.57		0.26		0.26					8.1
12. Professional, Scientific & Technical Service				0.26																		0.3
13. Business Facility Management, Business Support & Rental Service				3.92			0.52	0.78				0.78	0.26									6.3
14. Public Administration				0.26				0.26				0.52										1.0
15. Education Service																						0.0
16. Health Service												0.26										0.3
17. Arts, Sports and Leisure Service																						0.0
18. Associations & Organizations, Repair & Other Personal Service				1.04	0.26																	1.3
19. Activities of households as employers																						0.0
20. Activities of extraterritorial organizations and bodies																						0.0
Total	0.0	0.3	0.3	57.7	0.8	0.3	4.2	9.1	1.6	0.3	12.3	7.0	0.0	4.7	0.5	0.0	0.5	0.0	0.5	0.0	0.0	100.

Panel C. 1998-2019: 241 Moves (Mean 2.33%, HHI 0.112) - Only Including CEO Moves to Affiliated Firms

KSIC-From \ KSIC-To	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
0. Agriculture, Forestry, Fishing																						0.0
1. Mining																						0.0
2. Manufacturing																						0.0
3. Electricity, Gas, Steam & Air Conditioning Supply				27.80			0.41	2.07			1.24	0.83		4.15								36.5
4. Water, Sewage & Waste Treatment, Raw Material Recycling							0.83															0.8
5. Construction																						0.0
6. Wholesale & Retail Trade				2.49			1.66	0.41	0.41		1.24			0.41								6.6
7. Transportation				2.90			0.41	3.32			1.66	0.83										9.1
8. Accommodation & Restaurant				0.41										0.41								0.8
9. Information Service								0.41														0.4
10. Finance & Insurance				4.56				0.83			8.30	0.83	0.41	2.49			0.83					18.3
11. Real Estate				2.49			0.83	0.83	0.41		0.83	4.15										9.5
12. Professional, Scientific & Technical Service																						0.0
13. Business Facility Management, Business Support & Rental Service				12.45	1.24		0.83	0.83			0.41						0.83					16.6
14. Public Administration				0.41										0.41								0.8
15. Education Service																						0.0
16. Health Service											0.41											0.4
17. Arts, Sports and Leisure Service																						0.0
18. Associations & Organizations, Repair & Other Personal Service																						0.0
19. Activities of households as employers																						0.0
20. Activities of extraterritorial organizations and bodies																						0.0
Total	0.0	0.0	0.0	53.5	1.2	0.0	5.0	8.7	0.8	0.0	14.1	6.6	0.4	7.9	0.0	0.0	1.7	0.0	0.0	0.0	0.0	100

3.2. Departing CEOs and New Job Titles

Table 3 shows the percentage of former CEOs employed as executives of other listed firms and the percentage of positions they held in the new firm. When former CEOs leave their position in POST, they are more likely to become executives at other listed firms compared to in PRE. Panel A in Table 3 shows that 4.2% ($=202/4832$) of CEO movements become executives of other firms in PRE. In comparison, 10.0% ($=422/4230$) of CEOs become executives of other firms in POST. In other words, the proportion of former CEOs moving to new firms within 3 years increases by 138.1% from PRE to POST. In detail, the increase in the rate of transfer to another firm is caused by both the shift to the CEO position and the shift to the non-CEO position. However, Panel B indicates that the movements to a non-CEO position contribute more to the rise. In particular, the rate of movements to CEO position is 49.01% ($=99/202$) in PRE, but in POST, this rate decreases to 37.91% ($=160/422$) while the rate of movements to other job titles increases 11%p from 50.99% ($=103/202$) to 62.09% ($=262/422$).

However, these trends look differently when dividing CEO movements into within-affiliates and non-affiliated movements. The percentage of movements to an executive of a non-affiliated firm is 61.38% ($=383/624$), which is greater than that of affiliated firms. Also, the proportion increases from 59.41% ($=120/202$) to 62.32% ($=263/422$) over time. However, the ratio of non-affiliated CEO movements to CEO positions is 31.85% ($=122/383$), in contrast to 56.85% ($=137/241$) of transfers to CEO positions in within-affiliates. Also, the rate at which former CEOs movements to higher executive positions is remarkably high when moving into affiliates, while the rate of movement into outsider director or other executive jobs is high when moving into non-affiliated firms.

Table 3. CEO Departure, Move, and New Job Positions

This table shows the number of leaving CEOs and the number of CEOs moving to new firms by time and type of movement from 1998 to 2019. The new job position represents the first new job title of the former CEO who is hired outside the firm, while the non-CEO represents a move to a non-CEO role. *All Moves* includes all CEO moves that occurred over the sample period. Affiliated represents CEO moves that have moved within the affiliate. The numbers in parentheses are the number of moving former CEOs divided by the number of CEO turnovers for each period. Panel B shows the distribution of positions occupied by moving CEOs.

Panel A. CEO Departures and New Job Positions

Period:	Full			1998-2010			2011-2019		
Move type:	All Moves	No Affiliated	Affiliated	All Moves	No Affiliated	Affiliated	All Moves	No Affiliated	Affiliated
CEO Departures		9062			4832			4230	
- Become Officer of new firm (%)	624 (6.9%)	383 (4.2%)	241 (2.7%)	202 (4.2%)	120 (2.5%)	82 (1.7%)	422 (10.0%)	263 (6.2%)	159 (3.8%)
- Become CEO of new firm (%)	259 (2.9%)	122 (1.3%)	137 (1.5%)	99 (2.0%)	43 (0.9%)	56 (1.2%)	160 (3.8%)	79 (1.9%)	81 (1.9%)
- Become Non-CEO officer of new firms (%)	365 (4.0%)	261 (2.9%)	104 (1.1%)	103 (2.1%)	77 (1.6%)	26 (0.5%)	262 (6.2%)	184 (4.3%)	78 (1.8%)

Panel B. New Job Positions of Moving CEOs

Period:	Full			1998-2010			2011-2019		
Move type:	All Moves	No Affiliated	Affiliated	All Moves	No Affiliated	Affiliated	All Moves	No Affiliated	Affiliated
CEO	41.51%	31.85%	56.85%	49.01%	35.83%	68.29%	37.91%	30.04%	50.94%
Chairman/Vice-Chairman	5.13%	3.13%	8.30%	4.95%	6.67%	2.44%	5.21%	1.52%	11.32%
President	5.77%	4.44%	7.88%	3.47%	1.67%	6.10%	6.87%	5.70%	8.81%
Executive Vice President	7.85%	6.27%	10.37%	6.44%	5.83%	7.32%	8.53%	6.46%	11.95%
Vice President	2.24%	2.61%	1.66%	2.48%	4.17%	0.00%	2.13%	1.90%	2.52%
Outside director	14.26%	22.19%	1.66%	11.88%	19.17%	1.22%	15.40%	23.57%	1.89%
Other Executive Job Titles	23.24%	29.50%	13.28%	21.78%	26.67%	14.63%	23.93%	30.80%	12.58%
Sum	100%	100%	100%	100%	100%	100%	100%	100%	100%

3.3. Characteristics of New Firms

Table 4 shows whether CEO movements through the labor market are an improved opportunity. Panel A represents CEO movements in terms of size, profitability, and average pay. Over the entire period (1998-2019), about 50% of CEO shifts occur larger (measured by total assets) and more profitable (measured by ROA) firms (50.5% and 50.2%, respectively). Also, 55.5% of CEO transfers occur to firms that pay more on average per listed executives. In the case of moving into non-CEO titles, the majority move to a larger size (54.5%), more profitable (53.4%), and higher per-capita executive compensation (54.5%). Besides, as an unreported result, looking at the average pay change which is the first difference between average pay in the first year of employment in the firm before and after the movements, moving to non-CEO titles has 663.7% $(= (507.1-66.4)/66.4)$ higher average pay change compared to the case when moving to CEO-titles. Finally, these results imply that the movements to CEO titles have a different tendency with movements to non-CEO titles. In other words, in terms of reputation and rewards, the movements into non-CEO titles can be interpreted as an external promotion, while the movements into CEO titles cannot.

Comparing PRE and POST, CEOs move to firms that are larger (53.5%), more profitable (57.4%), and offering a higher average pay (59.1%) during PRE. On the other hand, the proportion of CEOs who move to larger and more profitable firms in POST decreases by 4.4%p and 10.7%p, respectively. Also, the proportion of CEOs moving to higher average pay firms decreased by 5%p. In other words, regardless of the titles moved, there is a greater tendency to move to a firm that is not good in terms of reputation and rewards in POST, and this trend also implies that the CEO movements during the POST period on average are not an improved mobility opportunity such as promotion.

This trend appears differently when only considering the movements into affiliates. On average, the size and average pay per executive are larger, but there is

a tendency to move to a firm with relatively poor profitability. On the other hand, when considering only non-affiliated CEO movements, they moved to smaller firms, but with better profitability and higher average pay. In both types of movements, the movements to a non-CEO title can be seen as a movement related to an improved movement opportunity, while the movement to the CEO title represents a poor movement opportunity. From these trends, it is difficult to see movements into affiliates (or to the CEO title) as an improved movement opportunity, so I excluded the movements.

Table 4. Size, Profitability and Average Pay of the Moving CEO's new Firm

This table reports the size and profitability of the new firm and the change in compensation for that firm for CEOs who move to other firms from 1998 to 2019. There are 624 moves for size and profitability, 544 moves for average pay. New Position represents the first new job title of a former CEO who is hired externally. *Larger Firms* represents the proportion of the moving CEOs whose total assets of the new firms are larger than the previous one. *More Profitable Firms* refers to the proportion of moving CEOs hired by new firms with higher ROA. *Higher Average Pay Firms* indicates the proportion of the moving CEOs hired by new firms with higher average pay. All Moves includes all CEO moves that occurred over the sample period. Affiliated represents CEO moves that have moved within the affiliate.

Period:	Full			1998-2010			2011-2019		
Move type:	All Moves	No Affiliated	Affiliated	All Moves	No Affiliated	Affiliated	All Moves	No Affiliated	Affiliated
<i>New Firms</i>									
Larger Firms	50.5%	45.4%	58.5%	53.5%	50.8%	57.3%	49.1%	43.0%	59.1%
New Position: CEO	46.3%	44.3%	48.2%	49.5%	46.5%	51.8%	44.4%	43.0%	45.7%
New Position: Non-CEO	54.5%	47.1%	73.1%	60.2%	55.8%	73.1%	52.3%	43.5%	73.1%
More Profitable Firms	50.2%	52.0%	47.3%	57.4%	59.2%	58.5%	46.7%	48.7%	43.4%
New Position: CEO	46.3%	51.6%	41.6%	54.5%	58.1%	45.2%	41.3%	48.1%	34.6%
New Position Non-CEO	53.4%	52.5%	55.8%	62.1%	61.0%	82.6%	50.0%	48.9%	52.6%
Higher Average Pay Firms	55.5%	55.3%	55.8%	59.1%	59.6%	58.5%	54.1%	53.8%	54.7%
New Position: CEO	46.1%	48.5%	44.1%	43.2%	40.6%	45.2%	47.6%	52.2%	43.4%
New Position: Non-CEO	61.8%	58.3%	70.1%	73.8%	70.2%	82.6%	58.0%	54.4%	66.2%

4. Empirical Results

The increase in mobility opportunities in the labor market gives agents two motives. First, increased mobility opportunities can reduce the need for corporate incentive mechanisms by providing career concern incentives to agents. This is the prediction of Fama (1980) that an efficient labor market can solve the agency problem. On the other hand, improved mobility opportunities can induce agents to be entrenched. For example, risk-averse CEOs or CEOs seeking private benefits of control have incentives to use the enhanced bargaining power to weaken corporate incentive mechanisms rather than to move into other firms. This is the prediction of the entrenchment model that entrenchment may occur due to managerial power (e.g., Hermalin and Weisbach, 1992; Bebchuk and Fried, 2002).

The existing empirical study conducted on the U.S. market shows that career concern incentives make CEOs work harder, reducing the need for corporate incentive mechanisms. However, their incentives may be different depending on the ownership structure, so I examine CEO mobility in the Korean market with a concentrated ownership structure. Since, under the setting, the family's controlling power is strong and CEOs are unlikely to move, I predicted that they are likely to pursue a private benefit of control instead of moving through the labor market in compensation for the enhanced outside option. Based on this prediction, I hypothesize that as CEO mobility opportunities increase, corporate incentive mechanisms such as pay-for-performance sensitivity and board independence will decrease while investment will increase, and this tendency is stronger in a firm-CEO pair with strong CEO power. To test the hypothesis, I follow the empirical methodology of Graham et al. (2019).

First stage regression:

$$\begin{aligned} Mobility_{i,j,t} = & \alpha + \beta_1 Deaths_{j,t-1} + \beta_2 Deaths_{j,t-1} \times CEO\ Power_{i,j,t} \\ & + \beta_3 CEO\ Power_{i,j,t} + \gamma X_{i,j,t} + \delta_t + \theta_{i,c} + \epsilon_{i,j,t}, \end{aligned} \quad (3)$$

Second stage regression:

$$\begin{aligned} Outcomes_{i,j,t} = & \mu + \varphi_1 \widehat{Mobility}_{i,j,t} + \varphi_2 \widehat{Mobility}_{i,j,t} \times \widehat{CEO\ Power}_{i,j,t} \\ & + \varphi_3 \widehat{CEO\ Power}_{i,j,t} + \rho X_{i,j,t} + \pi_t + \tau_{i,c} + \sigma_{i,j,t}, \end{aligned} \quad (4)$$

where i indicates firm, j indicates industry, and t represents year. $Outcomes_{i,j,t}$ are dependent variables, indicating pay-for-performance sensitivity, board independence, and investment. $Death_{j,t-1}$ is an industry level instrumental variable for mobility. $X_{i,j,t}$ are control variables. δ_t and π_t represent year fixed effects and $\theta_{i,c}$ and $\tau_{i,c}$ represent firm-by-CEO fixed effects. The standard error is clustered by both at the industry and year levels.

4.1. Identification Strategies: Total CEO tenure & CEO age

I use several measures representing CEO power to examine the relationship between mobility and corporate policies. First, by using CEO tenure as the proxy for CEO power, I test the hypothesis that the corporate internal incentive mechanisms are weakened as CEO mobility increases within a firm-CEO pair where the CEO's tenure is greater than the median value of the total CEO tenure. As a result, consistent with the hypothesis, when the CEO's tenure is greater than the median, pay-for-performance sensitivity and board independence decrease, and investment increases as the movement opportunity increases. On the other hand, when it is less than the median, pay-for-performance sensitivity and board independence increase while corporate investment decreases. As predicted by Fama (1980), the substitute relationship should be stronger when the tenure is less than the median because it is more sensitive to labor market mobility opportunities. However, the empirical evidence does not support the story of Fama (1980). On the other hand, consistent with Hermalin and Weisbach (1998), the substitute relationship emerges when CEO power is strong. When CEO power is weak, board independence becomes stronger as mobility opportunities increase, and CEO pay tends to be more aligned with performance. These can be seen as optimally implemented policies to evaluate the CEO based on performance. Also, investment increases when CEO tenure is greater than the median, which is consistent with Jensen's (1992) prediction. On the contrary, when the tenure is less than the median, corporate investment decreases. This can be interpreted as a result of conservative investment decision-making without risk-

taking due to an increase in labor market opportunities.

To bolster the above evidence, I test whether the story of the career concern model does not appear empirically in the Korean market by using CEO age. According to Fama (1980), younger CEOs are relatively more sensitive to career concerns than older CEOs. Therefore, when labor market opportunities arise, the CEO's self-motivation reduces agency costs and the need for internal incentive mechanisms. Empirical evidence shows the opposite result with this prediction. For older CEOs, board independence significantly decreases and investment significantly increases. In terms of CEO power, since older CEOs have more experience than younger CEOs and have relatively stronger power, it is consistent with the prediction of the entrenchment model that the incentive mechanisms are weakened due to increased mobility opportunities. In other words, it empirically shows that the channel of the association between CEO mobility and corporate policies is not the labor market incentive but CEO power.

Table 5. The Interactive Effects of CEO mobility on Corporate Policies

Panel A presents the results of second stage 2SLS estimation results for the interactive effects of CEO mobility with short tenure on CEO pay-for-performance sensitivity, monitoring intensity, and corporate investment from 2003 to 2019. *Short Tenure* is 1 if the CEO's tenure is less than the median value (8 years) of the total CEO tenure and 0 otherwise. Instrumental variables are the *Death CEO* and *Death CEO × Short Tenure*. Panel B shows the interactive effects of CEO mobility with CEO age. *Older CEO* is 1 if the CEO's age is greater than the median value (61) and 0 otherwise. Numbers in parentheses are t-statistics based on robust standard errors clustered at the industry and year levels.

Panel A. Second stage regression – CEO tenure			
<i>Dependent Variable:</i>	Pay_perf	Independence	Investment
	(1)	(2)	(3)
<i>Mobility_{CEO}</i>	-0.136 (-0.23)	-0.004*** (-3.08)	0.005** (2.22)
<i>Mobility_{CEO} × Short Tenure</i>	0.569* (1.98)	0.010*** (3.95)	-0.011*** (-3.20)
Short Tenure	-1.309 (-1.63)	-0.019*** (-3.77)	0.017*** (2.92)
Industry GDP Growth	4.077 (0.97)	-0.004 (-0.13)	0.212*** (2.69)
Industry Tobin's <i>q</i>	0.194 (0.13)	0.006 (0.87)	0.011 (1.34)
CEO Turnover	0.437 (1.64)	0.009*** (5.32)	-0.007*** (-3.59)
Lagged CEO Turnover	0.018 (0.08)	0.005*** (2.90)	-0.002 (-0.91)
CEO Tenure	1.111 (1.37)	-0.002 (-0.92)	-0.002* (-1.87)
Size	0.053 (0.11)	0.027*** (10.29)	0.038*** (5.84)
ROA	0.964 (0.53)	-0.039*** (-3.71)	0.108*** (5.23)
Cash Flow	0.005 (0.24)	0.000 (-0.02)	0.000 (-0.47)
CASH/TA	-4.564** (-2.36)	-0.005 (-0.44)	0.005 (0.52)
Leverage	-0.232 (-0.18)	-0.008 (-0.90)	0.000 (-0.04)
PPE/TA	-3.202* (-1.87)	0.029*** (3.35)	0.369*** (13.84)
M/B	0.081* (1.98)	0.001 (0.99)	0.004*** (4.38)
N	1,353	23,317	23,317
Year Fixed Effect	YES	YES	YES
CEO-Firm Fixed Effect	YES	YES	YES
F-stat	2.28	13.49	55.19
R ²	0.324	0.764	0.422

Panel B. Second stage regression – CEO age

<i>Dependent Variable:</i>	Pay_perf	Independence	Investment
	(1)	(2)	(3)
<i>Mobility</i> _{CEO}	0.934 (1.25)	0.002** (2.27)	-0.002 (-1.35)
<i>Mobility</i> _{CEO} × Older CEO	-0.941 (-1.11)	-0.007*** (-3.39)	0.006* (1.91)
Older CEO	0.880 (1.12)	0.015*** (3.68)	-0.013** (-2.00)
Industry GDP Growth	3.359 (0.71)	-0.003 (-0.12)	0.212*** (2.68)
Industry Tobin's <i>q</i>	0.414 (0.26)	0.006 (0.96)	0.010 (1.16)
CEO Turnover	0.447 (1.66)	0.009*** (5.31)	-0.006*** (-3.31)
Lagged CEO Turnover	0.009 (0.04)	0.004*** (2.82)	-0.002 (-0.78)
CEO Tenure	1.133 (1.42)	-0.002 (-1.13)	-0.001 (-1.28)
Size	0.017 (0.04)	0.027*** (10.62)	0.038*** (5.79)
ROA	0.757 (0.44)	-0.040*** (-3.73)	0.108*** (5.26)
Cash Flow	0.005 (0.24)	0.000 (0.08)	0.000 (-0.57)
CASH/TA	-4.335** (-2.23)	-0.005 (-0.45)	0.005 (0.57)
Leverage	-0.535 (-0.41)	-0.007 (-0.83)	-0.001 (-0.09)
PPE/TA	-3.487* (-2.00)	0.029*** (3.34)	0.369*** (13.82)
M/B	0.080* (1.88)	0.001 (0.99)	0.004*** (4.41)
N	1,353	23,317	23,317
Year Fixed Effect	YES	YES	YES
CEO-Firm Fixed Effect	YES	YES	YES
F-stat	2.09	12.41	55.48
R ²	0.322	0.764	0.422

4.2. Channel of Substitute Relationship: CEO Power

To reinforce the argument that the substitute relationship between CEO mobility and corporate policies comes from CEO power, I test whether the substitute occurs in a firm-CEO pair with stronger CEO power characteristics. CEO power is proxied by CEO-chair duality, family shareholdings, and family CEO. For CEOs with these characteristics, the career concern incentive is very small or invariant, so the incentives arising from increased labor market opportunities are very small, so it can be expected that the agency cost will not decrease. Rather, since CEOs with these characteristics tend to be risk-averse or pursue private benefits of control, it may further increase agency costs by weakening the corporate incentive mechanism to take advantage of an increase in outside options (i.e., bargaining power) arising from improved mobility opportunities.

First, in firms where the CEO is the chairman of the board of directors, board independence tends to decrease with increasing mobility opportunities. On the other hand, firms with separate CEO-Chair systems show no significant change in board independence from increased mobility opportunities. Second, when the family member is a major shareholder, pay-for-performance sensitivity decreases, while the pay-for-performance sensitivity increases when the family member is not a major shareholder. Lastly, when a family member within a large business group is in charge of the CEO position, board independence significantly decreases, whereas, in firms without a family CEO, board independence significantly increases, and pay-for-performance sensitivity increases. In particular, since family CEOs are almost insensitive to labor market movement opportunities, the substitute relationship that arises from this characteristic is due to CEO power, not labor market incentives. This series of empirical evidence shows that CEO power is the channel of the substitute relationship between mobility and corporate policies.

Table 6. The Interactive Effects of CEO mobility with CEO power on Incentive Mechanisms

This table presents the results of the second stage 2SLS estimation results for the interactive effects of CEO mobility with CEO power on pay-for-performance sensitivity and monitoring intensity from 2003 to 2019. *CEO Power* is proxied by CEO-chair duality, family shareholdings, and family CEO. Instrumental variables are the *Death CEO* and *Death CEO* \times *CEO Power*. In the case of CEO-chair duality, it is not feasible to estimate the result when the dependent variable is *Pay_perf* since there is collinearity in the subsample. Numbers in parentheses are t-statistics based on robust standard errors clustered at the industry and year levels.

<i>Dependent Variable:</i>	Pay_perf			Independence	
	(1)	(2)	(3)	(4)	(5)
<i>Mobility_{CEO}</i>	1.797** (2.29)	2.945** (2.38)	0.000 (-0.12)	0.004 (1.02)	0.004* (1.71)
<i>Mobility_{CEO} \times CEO Power</i>	-2.730** (-2.40)	-0.529 (-0.46)	0.000 (-0.08)	-0.008* (-1.73)	-0.013** (-2.04)
CEO Power	2.587*** (3.64)	2.730 (0.92)	0.002 (0.32)	0.048*** (2.93)	0.028 (1.60)
Industry GDP Growth	3.518 (0.82)	9.857 (0.63)	-0.001 (-0.04)	-0.024 (-0.74)	-0.024 (-0.48)
Industry Tobin's <i>q</i>	0.773 (0.51)	3.473 (0.74)	0.006 (0.84)	0.010 (1.09)	0.012 (0.63)
CEO Turnover	0.494* (1.80)	1.147 (0.99)	0.008*** (5.01)	0.007*** (3.92)	0.011** (2.27)
Lagged CEO Turnover	0.034 (0.16)	-0.889 (-0.70)	0.004*** (2.71)	0.004** (2.10)	0.001 (0.23)
CEO Tenure	1.193 (1.48)	0.626 (0.42)	-0.002 (-1.08)	0.001 (0.61)	0.004 (1.03)
Size	-0.175 (-0.35)	3.928 (1.32)	0.028*** (10.95)	0.023*** (7.42)	0.002 (0.29)
ROA	0.273 (0.16)	4.425 (0.60)	-0.041*** (-3.82)	-0.019 (-1.49)	0.067 (0.90)
Cash Flow	-0.001 (-0.05)	0.022 (0.76)	0.000 (0.01)	0.000 (-0.16)	-0.004*** (-2.75)
CASH/TA	-4.160** (-2.16)	-8.052 (-0.74)	-0.004 (-0.37)	0.005 (0.32)	0.139** (2.50)
Leverage	-0.197 (-0.15)	1.198 (0.25)	-0.008 (-0.92)	-0.003 (-0.35)	0.024 (0.64)
PPE/TA	-3.815** (-2.18)	-3.672 (-0.65)	0.028*** (3.29)	0.039*** (3.43)	0.031 (0.81)
M/B	0.085** (2.10)	-0.111 (-0.37)	0.001 (0.94)	0.000 (-0.23)	0.001 (1.12)
N	1,353	441	23,317	16,146	2,320
CEO Power	Family Firm	Family CEO	Family Firm	CEO-Chair	Family CEO
Year Fixed Effect	YES	YES	YES	YES	YES
CEO-Firm Fixed Effect	YES	YES	YES	YES	YES
F-stat	4.30	1.87	12.26	7.94	1.90
R ²	0.325	0.361	0.764	0.768	0.844

4.3. CEO Mobility and Firm Value

Finally, I investigate the impact of increasing CEO mobility on future corporate value. The career concern model predicts that improved mobility opportunities reduce agency costs, thus increasing future firm value. On the other hand, under the entrenchment model, rent extraction due to CEO power should occur, resulting in a decrease in future firm value. This is because the risk-averse or private interest-seeking incumbent CEOs weaken the incentive mechanisms to avoid being replaced by rival CEOs in the labor market. As a result of empirically confirming this, the firm value measured by Tobin's q decreases significantly at $t+1$ when mobility opportunities increase. This is in contrast to Graham et al. (2019), suggesting that, unlike the United States, improved mobility does not reduce the need for incentive mechanisms due to labor market incentives, but rather weakens those policies due to CEO power.

Table 7. The Effect of the CEO Mobility on Firm Value

This table presents the 2SLS estimation results for the impact of CEO mobility on firm values measured by Tobin's q from 2003 to 2019. The instrumental variable is *Death*, which is calculated as the lagged *Connected Industry Death* divided by *N. of CEOs*. Each weight and connectedness is determined by the frequency with which the CEO has moved between the one-digit (alphabet) KSIC industries in the last three years. The numbers in parentheses are t-statistics based on standard error clustered at the industry and year level.

Panel A. First stage regression

<i>Dependent Variable:</i>	<i>Mobility_{CEO}</i>		
	(1)	(2)	(3)
<i>Death_{CEO}</i>	0.202*** (3.44)	0.196*** (2.95)	0.236*** (3.50)
Industry GDP Growth	-0.008 (-0.60)	-0.005 (-0.38)	-0.007 (-0.51)
Industry Tobin's q	-0.001 (-0.41)	-0.001 (-0.37)	-0.001 (-0.37)
CEO Turnover	0.000 (0.41)	0.000 (0.32)	0.000 (0.32)
Lagged CEO Turnover	0.000 (0.38)	0.000 (0.69)	0.000 (0.40)
CEO Tenure	0.000* (1.72)	0.000 (1.53)	0.000 (1.28)
Size	0.000 (0.47)	0.000 (1.04)	0.000 (1.07)
ROA	0.001 (1.01)	0.001 (1.13)	0.000 (0.72)
Cash Flow	0.000 (-0.28)	0.000 (0.00)	0.000 (0.24)
CASH/TA	-0.001* (-1.68)	-0.001 (-1.57)	-0.001 (-1.48)
Leverage	0.000 (-0.14)	0.000 (0.24)	0.000 (-0.11)
PPE/TA	0.001 (1.06)	0.001 (1.42)	0.001 (1.34)
N	23,317	21,486	19,607
Sample	Tobin's q (t)	Tobin's q (t+1)	Tobin's q (t+2)
Year Fixed Effect	YES	YES	YES
CEO-Firm Fixed Effect	YES	YES	YES
R ²	0.544	0.493	0.479

Panel B. Second stage regression

<i>Dependent Variable:</i>	Tobin's q (t)	Tobin's q (t+1)	Tobin's q (t+2)
	(1)	(2)	(3)
<i>Mobility</i> _{CEO}	0.017 (1.19)	-0.018** (-2.10)	-0.001 (-0.24)
Industry GDP Growth	-0.008 (-0.03)	-0.403* (-1.67)	0.069 (0.36)
Industry Tobin's <i>q</i>	0.575*** (6.12)	0.130 (1.58)	-0.119* (-1.96)
CEO Turnover	-0.013* (-1.86)	-0.004 (-0.48)	-0.009 (-0.88)
Lagged CEO Turnover	-0.018** (-2.46)	-0.003 (-0.33)	-0.002 (-0.25)
CEO Tenure	-0.004 (-0.46)	-0.001 (-0.10)	0.010 (1.49)
Size	-0.198*** (-7.57)	-0.202*** (-7.77)	-0.230*** (-8.47)
ROA	0.581*** (5.32)	0.438*** (4.75)	0.218*** (3.23)
Cash Flow	-0.009*** (-3.19)	-0.001 (-0.46)	0.003 (0.75)
CASH/TA	0.975*** (9.15)	0.620*** (7.14)	0.095 (0.98)
Leverage	0.141* (1.77)	0.003 (0.04)	0.219*** (3.04)
PPE/TA	-0.082* (-1.66)	0.066 (1.00)	0.063 (0.99)
N	23,317	21,486	19,607
Year Fixed Effect	YES	YES	YES
CEO-Firm Fixed Effect	YES	YES	YES
F-stat	25.12	15.15	9.11
R ²	0.756	0.749	0.751

5. Conclusion

Using novel data that can track executives' careers, this paper identifies CEOs' mobility trends in the Korean market over the past 20 years. First, in the recent decade, CEO moves are more concentrated in a specific industry than in the past decade, and the moves to other industries are reduced, resulting in less diversity in CEO moves. This implies that, unlike the U.S. executive labor market, industry- or firm-specific skills are still important in the Korean market. On the other hand, when only considering the CEO moves into affiliated firms, there is little difference in industrial concentration and movement diversity by period. As a result, it indicates that the importance of general managerial skills is relatively high when CEOs move to affiliates. Second, the trend of CEO moves indicates that the rate of former CEOs moving to new firms within three years has risen more in the last decade, and the moves into non-CEO positions have contributed more to the rise. Besides, the proportion of former CEOs moving to higher executive positions is remarkably high when moving into an affiliated firm, while the proportion of moving into outsider director or other executive jobs is high in non-affiliated CEO moves. Third, when moving to CEO position, on average, there is a tendency to move into a firm that is smaller in terms of firm size and profitability, whereas the case of moving to a non-CEO position shows the opposite. Also, average pay decreases when moving to the CEO position, while average pay significantly increases when moving to the non-CEO position. Regardless of the positions moved, in the last 10 years (POST) period, in terms of reputation and rewards, there is a greater tendency to move into a firm that is worse compared to the previous firm. It implies that it is not a good mobility opportunity like promotion.

These trends do not support the argument of Fama (1980) that career concern incentive results in lower agency costs. Unlike the U.S., the Korean market has a concentrated ownership structure that CEOs tend to be immobile and pursue private benefits of control, so they have incentives to weaken corporate governance in response to the increased mobility. As a result, in the firm-CEO pair where CEO

tenure is greater than the median of the total CEO tenure, monitoring intensity decreases and investment increases when CEO mobility increases, but both pay-for-performance sensitivity and monitoring intensity significantly increase and investment decreases in the firm-CEO pair where CEO tenure is less than the median. This is contrary to the prediction of the career concern model but is consistent with the prediction of the entrenchment model. Also, for older CEOs, board independence decreases and investment significantly increases, which is also consistent with the prediction of the entrenchment model. Lastly, the effects of increased mobility opportunities on corporate policies are significantly strong when the CEO takes the chair of the board of directors and when the CEO is a family member, consistent with the prediction of the entrench model. When mobility opportunities increase, a firm value measured by Tobin's q significantly decreases at $t+1$, indicating that future corporate value decreases as a result of rent extraction.

As a contribution of this study, the trends of executive mobility have been shown for the past 20 years in Korea. Also, in a country characterized by a concentrated ownership structure, this study shows that the effect of CEO mobility on corporate policies is an inefficient result by the channel called CEO power, which is different from the empirical results in the U.S. with a distributed ownership structure that supports efficient corporate decision-making.

Appendix

Table A1. Variable Sources and Definitions

Variable	Definition	Source
<i>CEO & BOD Characteristics</i>		
Independence	The number of outside directors over the total number of registered directors	TS-2000
CEO Turnover = 1	1 if a CEO is changed relative to the previous year, 0 otherwise	TS-2000
CEO Tenure	The number of years for which the CEO has been chief executive in a given firm as of year	TS-2000
Total CEO Tenure	The total number of years for which an individual serves as CEO of a given firm	TS-2000
CEO-Chair = 1	1 if the CEO and chair of the board are the same person, 0 otherwise	FSS DART
Pay-perf	$\frac{[(\text{Salary}_{t+1} + \text{Bonus}_{t+1}) - (\text{Salary}_t + \text{Bonus}_t)]}{\{(\text{Annual closing price}_t - \text{Annual closing price}_{t-1}) / \text{Annual closing price}_{t-1}\}}$	TS-2000
<i>Firm Characteristics</i>		
Leverage	(Debt in current liabilities + Long-term debt) / Total assets	FnGuide
Cash Flow	(Income before extraordinary items + Depreciation and amortization) / Lagged property, plant, and equipment	FnGuide
Size	Logged total asset converted to 2017-won value	FnGuide
ROA	Net income / Total assets	FnGuide
PPE/TA	Property, plant, and equipment / Total assets	FnGuide
M/B	(Annual closing price * Common shares outstanding + Debt in current liabilities + Long-term debt) / Common equity	FnGuide
CASH/TA	Cash and short-term investments / Total assets	FnGuide
Tobin's q	(Annual closing price * Common shares outstanding + Debt in current liabilities + Long-term debt) / Total assets	FnGuide
Investment	Capital Expenditures / Total assets	FnGuide
<i>Industry Characteristics</i>		
Industry Tobin's q	One-digit KSIC (alphabet) average Tobin's q	FnGuide
Industry GDP Growth	One-digit KSIC (alphabet) GDP growth rate	BOK ECOS

Table A2. Frequency of CEO Moves by Time

1998-2010: 202 Moves (Mean 1.82, HHI 0.109) – All CEO Moves																						
KSIC-From \ KSIC-To	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
0. Agriculture, Forestry, Fishing												0.50										0.0
1. Mining																						0.5
2. Manufacturing																						0.0
3. Electricity, Gas, Steam & Air Conditioning Supply				30.20			0.99	1.98	0.50	0.50	1.49	3.47		3.96	0.50							43.6
4. Water, Sewage & Waste Treatment, Raw Material Recycling					0.50		1.49	0.50						0.50								3.0
5. Construction																						0.0
6. Wholesale & Retail Trade				3.96			1.98		0.50			0.50										6.9
7. Transportation				3.47				1.49	0.50		0.99	0.99		0.50								7.9
8. Accommodation & Restaurant								0.50	0.50			0.50										1.5
9. Information Service								0.50														0.5
10. Finance & Insurance			0.50	1.98				0.99	0.50		4.95	2.48		1.98								13.4
11. Real Estate	0.50			3.96			0.50		0.50		0.99	2.97										9.4
12. Professional, Scientific & Technical Service				0.50																		0.5
13. Business Facility Management, Business Support & Rental Service				5.45	0.50		1.98				0.50	0.50					0.50					9.4
14. Public Administration				0.50				0.50			0.50			0.50								2.0
15. Education Service																						0.0
16. Health Service											0.50											0.5
17. Arts, Sports and Leisure Service																						0.0
18. Associations & Organizations, Repair & Other Personal Service				0.50	0.50																	1.0
19. Activities of households as employers																						0.0
20. Activities of extraterritorial organizations and bodies																						0.0
Total	0.0	0.5	0.5	50.5	1.5	0.0	6.9	6.4	3.0	0.5	9.9	11.9	0.0	7.4	0.5	0.0	0.5	0.0	0.0	0.0	0.0	100
2011-2019: 422 Moves (Mean 1.85, HHI 0.139) – All CEO Moves																						
KSIC-From \ KSIC-To	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
0. Agriculture, Forestry, Fishing																						0.0
1. Mining																						0.0
2. Manufacturing																						0.0
3. Electricity, Gas, Steam & Air Conditioning Supply				33.89		0.24	0.95	3.79			3.08	0.95		3.32	0.24		0.24		0.24			46.9
4. Water, Sewage & Waste Treatment, Raw Material Recycling				0.24								0.24										0.5
5. Construction				0.24																		0.2
6. Wholesale & Retail Trade				0.71	0.24		1.18	0.24			0.71			0.24								3.3
7. Transportation				6.40			0.47	2.13	0.24		0.95	0.47										10.7
8. Accommodation & Restaurant				1.18					0.24		0.47			0.47								2.4
9. Information Service																						0.0
10. Finance & Insurance				4.03			0.24	1.90			7.11	0.47	0.24	0.95			0.47		0.24			15.6
11. Real Estate				3.08			0.47	0.95			0.95	2.37		0.24			0.24					8.3
12. Professional, Scientific & Technical Service																						0.0
13. Business Facility Management, Business Support & Rental Service				8.06	0.47			1.18			0.71						0.24					10.7
14. Public Administration				0.24							0.24											0.5
15. Education Service																						0.0
16. Health Service											0.24											0.2
17. Arts, Sports and Leisure Service																						0.0
18. Associations & Organizations, Repair & Other Personal Service				0.71																		0.7
19. Activities of households as employers																						0.0
20. Activities of extraterritorial organizations and bodies																						0.0
Total	0.0	0.0	0.0	58.8	0.7	0.2	3.3	10.2	0.5	0.0	14.5	4.5	0.2	5.2	0.2	0.0	1.2	0.0	0.5	0.0	0.0	100

1998-2010: 120 Moves (Mean 2.22, HHI 0.118) – Excluding CEO Moves to Affiliated Firms

KSIC-From \ KSIC-To	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
0. Agriculture, Forestry, Fishing												0.83										0.0
1. Mining																						0.8
2. Manufacturing																						0.0
3. Electricity, Gas, Steam & Air Conditioning Supply				31.67			0.83	1.67	0.83	0.83	2.50	4.17		1.67	0.83							45.0
4. Water, Sewage & Waste Treatment, Raw Material Recycling					0.83		0.83	0.83						0.83								3.3
5. Construction																						0.0
6. Wholesale & Retail Trade				2.50			1.67					0.83										5.0
7. Transportation				5.00					0.83	0.83		0.83		0.83								8.3
8. Accommodation & Restaurant								0.83	0.83			0.83		0.83								2.5
9. Information Service																						0.0
10. Finance & Insurance			0.83	2.50				0.83	0.83		4.17	3.33										12.5
11. Real Estate		0.83		6.67							1.67	2.50										11.7
12. Professional, Scientific & Technical Service				0.83																		0.8
13. Business Facility Management, Business Support & Rental Service				2.50			1.67				0.83	0.83										5.8
14. Public Administration				0.83				0.83			0.83											2.5
15. Education Service																						0.0
16. Health Service																						0.0
17. Arts, Sports and Leisure Service																						0.0
18. Associations & Organizations, Repair & Other Personal Service				0.83	0.83																	1.7
19. Activities of households as employers																						0.0
20. Activities of extraterritorial organizations and bodies																						0.0
Total	0.0	0.8	0.8	53.3	1.7	0.0	5.0	5.8	3.3	0.8	10.0	14.2	0.0	3.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0	100

2011-2019: 263 Moves (Mean 2.17, HHI 0.163) – Excluding CEO Moves to Affiliated Firms

KSIC-From \ KSIC-To	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
0. Agriculture, Forestry, Fishing																						0.0
1. Mining																						0.0
2. Manufacturing																						0.0
3. Electricity, Gas, Steam & Air Conditioning Supply				37.64		0.38	1.52	4.94			3.80	1.52		3.80	0.38		0.38		0.38			54.8
4. Water, Sewage & Waste Treatment, Raw Material Recycling				0.38								0.38										0.8
5. Construction				0.38																		0.4
6. Wholesale & Retail Trade				0.76	0.38		1.14				0.76	0.38										2.3
7. Transportation				7.98			0.38	1.14	0.38		0.76											11.0
8. Accommodation & Restaurant				1.52					0.38		0.76			0.38								3.0
9. Information Service																						0.0
10. Finance & Insurance				2.66			0.38	2.66			5.70	0.38		0.76					0.38			12.9
11. Real Estate				2.66			0.38	0.76			0.76	1.14		0.38			0.38					6.5
12. Professional, Scientific & Technical Service																						0.0
13. Business Facility Management, Business Support & Rental Service				4.56				1.14			0.76											6.5
14. Public Administration											0.38											0.4
15. Education Service																						0.0
16. Health Service																						0.4
17. Arts, Sports and Leisure Service											0.38											0.0
18. Associations & Organizations, Repair & Other Personal Service																						1.1
19. Activities of households as employers				1.14																		0.0
20. Activities of extraterritorial organizations and bodies																						0.0
Total	0.0	0.0	0.0	59.7	0.4	0.4	3.8	10.6	0.8	0.0	13.3	3.8	0.0	5.3	0.4	0.0	0.8	0.0	0.8	0.0	0.0	100

1998-2010: 82 Moves (Mean 3.57, HHI 0.111) – Only Including CEO Moves to Affiliated Firms

KSIC-From \ KSIC-To	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
0. Agriculture, Forestry, Fishing																						0.0
1. Mining																						0.0
2. Manufacturing																						0.0
3. Electricity, Gas, Steam & Air Conditioning Supply				28.05			1.22	2.44				2.44		7.32								41.5
4. Water, Sewage & Waste Treatment, Raw Material Recycling							2.44															2.4
5. Construction																						0.0
6. Wholesale & Retail Trade				6.10			2.44		1.22													9.8
7. Transportation				1.22				2.44			2.44	1.22										7.3
8. Accommodation & Restaurant																						0.0
9. Information Service								1.22														1.2
10. Finance & Insurance				1.22				1.22			6.10	1.22		4.88								14.6
11. Real Estate							1.22		1.22			3.66										6.1
12. Professional, Scientific & Technical Service																						0.0
13. Business Facility Management, Business Support & Rental Service				9.76	1.22		2.44										1.22					14.6
14. Public Administration																						1.2
15. Education Service																						0.0
16. Health Service											1.22											1.2
17. Arts, Sports and Leisure Service																						0.0
18. Associations & Organizations, Repair & Other Personal Service																						0.0
19. Activities of households as employers																						0.0
20. Activities of extraterritorial organizations and bodies																						0.0
Total	0.0	0.0	0.0	46.3	1.2	0.0	9.8	7.3	2.4	0.0	9.8	8.5	0.0	13.4	0.0	0.0	1.2	0.0	0.0	0.0	0.0	100

2011-2019: 159 Moves (Mean 2.94, HHI 0.118) - Only Including CEO Moves to Affiliated Firms

KSIC-From \ KSIC-To	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
0. Agriculture, Forestry, Fishing																						0.0
1. Mining																						0.0
2. Manufacturing																						0.0
3. Electricity, Gas, Steam & Air Conditioning Supply				27.67				1.89			1.89			2.52								34.0
4. Water, Sewage & Waste Treatment, Raw Material Recycling																						0.0
5. Construction																						0.0
6. Wholesale & Retail Trade				0.63			1.26	0.63			1.89			0.63								5.0
7. Transportation				3.77			0.63	3.77			1.26	0.63										10.1
8. Accommodation & Restaurant				0.63										0.63								1.3
9. Information Service																						0.0
10. Finance & Insurance				6.29				0.63			9.43	0.63	0.63	1.26			1.26					20.1
11. Real Estate				3.77				1.26			1.26	4.40										11.3
12. Professional, Scientific & Technical Service							0.63															0.0
13. Business Facility Management, Business Support & Rental Service				13.84	1.26			1.26			0.63						0.63					17.6
14. Public Administration				0.63																		0.6
15. Education Service																						0.0
16. Health Service																						0.0
17. Arts, Sports and Leisure Service																						0.0
18. Associations & Organizations, Repair & Other Personal Service																						0.0
19. Activities of households as employers																						0.0
20. Activities of extraterritorial organizations and bodies																						0.0
Total	0.0	0.0	0.0	57.2	1.3	0.0	2.5	9.4	0.0	0.0	16.4	5.7	0.6	5.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	100

Table A3. The Effects of CEO mobility on Corporate Policies –OLS Results

Panel A presents OLS estimation results for the effect of CEO mobility on CEO pay-for-performance sensitivity, board monitoring, and investment from 2003 to 2019. The control variables are the same as those used in Table 5. Panel B presents the results for the interactive effects of CEO mobility with short tenure on corporate policies. *Short Tenure* is 1 if the CEO's tenure is less than the median value (8 years) of the total CEO tenure and 0 otherwise. Numbers in parentheses are t-statistics based on robust standard errors clustered at the industry and year levels.

Panel A. Baseline

<i>Dependent Variable:</i>	Pay-Perf			Independence			Investment		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Mobility</i> _{CEO}	-0.010 (-0.12)			0.000 (0.09)			0.001 (0.80)		
<i>Mobility</i> _{Turnover}		-0.027 (-0.30)			-0.001 (-1.05)			0.001 (0.75)	
<i>Mobility</i> _{Firm}			-0.022 (-0.27)			0.000 (0.17)			0.001 (1.28)
N	1,353	1,353	1,353	23,317	23,317	23,317	23,317	23,317	23,317
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year Fixed Effect	YES	YES	YES	YES	YES	YES	YES	YES	YES
CEO-Firm Fixed Effect	YES	YES	YES	YES	YES	YES	YES	YES	YES
F-stat	1.48	1.49	1.48	12.57	13.22	12.53	55.43	56.29	55.91
R ²	0.321	0.321	0.321	0.764	0.764	0.764	0.422	0.421	0.422

Panel B. Interaction

<i>Dependent Variable:</i>	Pay-perf	Independence	Investment
	(1)	(2)	(3)
<i>Mobility</i> _{CEO}	-0.066 (-0.58)	-0.001 (-0.40)	0.004** (2.01)
<i>Mobility</i> _{CEO} × Short Tenure	0.143 (0.89)	0.001 (0.56)	-0.004** (-2.43)
<i>Short Tenure</i>	-0.035 (-0.11)	-0.005 (-1.63)	0.004 (1.36)
N	1,353	23,317	23,317
Controls	YES	YES	YES
Year Fixed Effect	YES	YES	YES
CEO-Firm Fixed Effect	YES	YES	YES
F-stat	1.47	11.32	56.56
R ²	0.322	0.764	0.422

Table A4. The Effects of CEO mobility on Corporate Policies –2SLS Results

These tables present 2SLS estimation results for the effect of CEO mobility on CEO pay-for-performance sensitivity, board monitoring, and investment from 2003 to 2019. The control variables are the same as those used in Table 5. The instrumental variable (*Death*) in Panel A is defined as in Table 7. Numbers in parentheses are t-statistics based on robust standard errors clustered at the industry and year levels.

Panel A. First stage regression

<i>Dependent Variable:</i>	<i>Mobility</i> _{CEO}	<i>Mobility</i> _{Turnover}	<i>Mobility</i> _{Firm}	<i>Mobility</i> _{CEO}	<i>Mobility</i> _{Turnover}	<i>Mobility</i> _{Firm}
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Death</i> _{CEO}	0.140 (0.93)			0.202*** (3.44)		
<i>Death</i> _{Turnover}		0.107 (0.77)			0.153** (2.30)	
<i>Death</i> _{Firm}			0.182* (1.67)			0.200*** (3.75)
N	1,353	1,353	1,353	23,317	23,317	23,317
Sample		Pay-perf			Independence & Investment	
Controls	YES	YES	YES	YES	YES	YES
Year Fixed Effect	YES	YES	YES	YES	YES	YES
CEO-Firm Fixed Effect	YES	YES	YES	YES	YES	YES
R ²	0.659	0.601	0.654	0.544	0.626	0.466

Panel B. Second stage regression

<i>Dependent Variable:</i>	Pay-perf			Independence			Investment		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Mobility</i> _{CEO}	0.354 (0.60)			0.000 (-0.19)			0.000 (0.20)		
<i>Mobility</i> _{Turnover}		-0.249 (-0.22)			-0.002 (-1.41)			0.001 (0.40)	
<i>Mobility</i> _{Firm}			0.091 (0.19)			0.000 (-0.33)			0.000 (0.16)
N	1,353	1,353	1,353	23,317	23,317	23,317	23,317	23,317	23,317
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year Fixed Effect	YES	YES	YES	YES	YES	YES	YES	YES	YES
CEO-Firm Fixed Effect	YES	YES	YES	YES	YES	YES	YES	YES	YES
F-stat	1.54	1.47	1.48	12.44	12.57	12.42	55.64	55.26	56.49
R ²	0.321	0.321	0.321	0.764	0.764	0.764	0.421	0.421	0.421

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국문 초록

본 연구는 최고경영자(CEO) 이동이 기업정책에 미치는 영향을 집중된 소유구조 하에서 살펴본다. 집중된 소유구조 하에서 CEO는 노동시장을 통한 이동에 위험 회피적 성향을 가지고 사적이익을 추구하려는 인센티브가 있다. 이러한 특징으로부터 CEO는 이동기회 증가에 대한 반응으로 더 좋은 직장으로 이동하려는 인센티브를 가지기보다 기업지배구조를 약화시키며 본인의 통제권을 유지하기 위한 참호구축(entrenchment)을 할 인센티브를 가질 것이라 예측한다. 가설과 일치하게, 이동기회 증가에 따라 성과대비보수 민감도와 이사회 의 모니터링의 감소하는 반면 투자는 증가한다. 그리고 이러한 경향은 CEO파위가 강할 때 더 크게 나타나면서, 그 채널이 노동시장으로부터의 내재적 인센티브가 아닌 CEO파위(CEO power) 때문이라는 걸 나타낸다. 또한, 이동기회가 증가할 때 미래의 기업가치가 감소하면서, CEO파위로 인한 지대추출(rent extraction)이 발생해서 기업가치가 떨어질 것이라는 참호구축의 예측과 일치하는 실증 증거를 보인다. 이러한 결과는 분산된 소유구조를 특징으로 하는 미국시장의 실증증거와는 반대되는 결과로 집중된 소유구조에서 노동시장의 메커니즘이 효율적으로 작동하지 않는다는 것을 암시한다.

주요어 : CEO 이동, CEO 파워, 노동시장 인센티브, 대리인 비용, 인센티브 메커니즘, 경영진 참호구축

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