

FORMER OFFICIALS AND SUBSIDIES TO STATE-OWNED ENTERPRISES

HEECHUL MIN*

Hansung University

Former officials in business are often blamed for abusing their connections to the government to distort public policy to their advantage. This paper examines the extent of rents to former officials by analyzing subsidy allocation among state-owned enterprises in Korea. Defining connected CEOs as former members of the National Assembly or government officials, I have estimated the effects of connected CEOs on attracting government subsidies. Substantial replacement of CEOs after the change of political leadership, a unique feature of state-owned enterprises of Korea, helps cleaner identification than other related studies relying only on cross-sectional variations. The empirical evidence is consistent with a hypothesis that connected CEOs are more likely than others to attract state subsidy. This relationship seems stronger in case of CEOs from the relevant offices and weaker when the competing recipients have strong connections. Given the data limitation, however, part of the estimated effects may come from expertise rather than connections especially for former bureaucrats.

Keywords: State-owned Enterprise, Subsidies, Political Connection

JEL classification: D73, L32, H25

1. INTRODUCTION

Corruption and rent-seeking are widespread in the world, and there is a growing consensus that they incur considerable economic costs (Ades and Di Tella, 1999; Acemoglu and Verdier, 2000; Hwang, 2002). This paper explores a particular example of rent-seeking: rent-seeking by former officials in the state-owned enterprises.

Legislators and bureaucrats often seek jobs in business after retiring from public

* This paper is an extensive revision and expansion of the earlier working paper, Min(2008). The working paper version was presented in the 2007 annual conference of the Korean Association of Public Finance. I am indebted to an anonymous referee for valuable comments and suggestions but retain responsibility for any remaining errors. This research was financially supported by Hansung University.

offices or during an interval between positions. In some cases, retiring officials are legally prevented for a certain period from taking jobs in the industries affected by their legislation and regulation. None the less, former officials in business are very common even in developed countries and often a subject of significant debate. In the English speaking world, “revolving door” means the movement of personnel between positions as legislators and regulator and the relevant industries. The close nexus between the government and business may allow them to reciprocate privileges to the detriment of the society. Although the economic theory predicts such rent-seeking behavior by former officials (Shleifer and Vishny, 1994), the empirical evidence remains largely limited and anecdotal.

This paper examines the extent of rents to former officials and the mechanism through which rent provision occurs, using the detailed data on state-owned enterprises of Korea from 2001 to 2005. Defining connected CEOs as former members of the National Assembly or government officials, I estimated the effects of connected CEOs on attracting government subsidies. The empirical evidence is consistent with a hypothesis that connected CEOs are more likely than others to attract state subsidy. This relationship seems stronger in case of CEOs from the relevant offices and weaker when the competing recipients have strong connections. These findings show a specific manner in which rents are provided to former officials.

This paper adds to the small but growing literature that examines the role of politicians and bureaucrats in business (Bertrand *et al.*, 2006; Khwaja and Mian, 2005; Cohen, 1986; Miwa and Ramseyer, 2005; Horiuchi and Shimizu, 2001). The evidence from Korea is unique in the following senses. First, the data from Korean state-owned enterprises exhibit wider within-firm variations in connection variables than usual private firms. Due to the corporate governance of state-owned enterprises, the change of political leadership often results in substantial replacement of CEOs. Using changes in connection variables before and after the Presidential election, I estimate an empirical model controlling for firm fixed effects. It allows for cleaner identification of the connection effects than previous studies. Secondly, detailed information on CEOs is available on the Korean state enterprise, which allows the researcher to measure not just the presence of connections but also the strength. It makes possible a richer analysis on rents to former officials than in the other papers.

This paper is organized as follows. Section 2 outlines the institutional environment. Section 3 describes the data set and section 4 provides the main results and some robustness checks. Section 5 concludes.

2. STATE-OWNED ENTERPRISES OF KOREA

As of year 2005, the state-owned enterprise sector of Korea consisted of a total of 26 firms employing 85,000 workers, owned 214 trillion won (211 billion in US dollar) of total assets, and produced 15 trillion won (15 billion in US dollar) of value-added,

contributing 2% of GDP. Its importance in the national economy, however, is more than the number suggests, for they are often monopolistic suppliers in key industries, such as energy, transportation, housing and banking.

CEO appointment has been the subject of much debate, and sometimes that of political scandal. Because the Act on the Management of Public Institutions empowers the President to appoint CEOs of state-owned enterprises, the winner of a Presidential election is often alleged to place politicians in the board of state-owned enterprises as a reward for their support during the election campaign.¹ It is also very common that government officials retire and move to the executives of the state-owned enterprises. Politician CEOs or former-bureaucrat CEOs of state-owned enterprises are often called parachute for obvious reasons.² One interesting fact is that many CEOs do not complete their statutory term of 3 years. According to Choi (2003), only 41% of CEOs finish their tenure.

Each state-owned enterprise is affiliated with a supervising ministry in the government. For example, Korea Electric Power Corporation falls under the jurisdiction of Ministry of Commerce, Industry and Energy. According to the Act on the Management of Public Institutions, state-owned enterprises are required to submit management plans and performance reports to the supervising ministries, and ministers have the authority to supervise the affiliated state-owned enterprises.

The legal authority to allocate subsidies lies in ministers following the Act of the Budgeting and Management Subsidies, but the President appoints ministers and the National Assembly approves the ministry's budget. CEOs of the state-owned enterprises may influence the ministry's subsidy allocation through various channels. It is also possible that former National Assembly members' connections work differently from former bureaucrats'. Former National Assembly members may influence the ministry's decision through connections to the National Assembly (or relevant committee), or to the other politicians in the administration. On the other hand, bureaucrats may be connected to the ministers or the other staff members. Even though connections may take different forms, they all can be called favoritism, meaning the action of offering contracts and resources to members of one's own social group to the detriment of others outside the group (Bramouille and Goyal, 2009).

¹ Numerous newspaper articles documented political appointment of CEOs in state-owned enterprises. See MK Business News (19 March, 2001), Dong-A daily (11 April, 2003), Kookmin Ilbo (23 June, 2005) for example.

² Public officials in Japan often move to private or public firms. Such practice is called Amakudari in Japanese, meaning "descent from heaven".

3. DATA

The financial statements of state-owned enterprises are available from the Ministry of Strategy and Finance. CEO data come mainly from the Dong-A biographical dictionary, but I also consult the National Assembly Information System for committee membership. I find 66 CEOs in the Dong-A biographical dictionary and merge with the firm data, and yet not all 26 state-owned enterprises can be matched to the corresponding CEOs. The final sample includes 22 firms from year 2001 to 2005, consisting of 81 firm-year pairs. The relatively small sample size limits the scope for more disaggregated analysis, but the sample covers most of the whole population of Korean state-owned enterprises.

Table 1 reports summary statistics of key variables. As only a part of the sample enterprises receive non-zero subsidies, I added a separate summary for the sub-sample. Notice that firms in the sample vary much in size. The average asset size is 84 billion won while the standard deviation reaches 138 billion won. The largest firm has a thousand times more assets than the smallest. Given the substantial difference in firm size, subsidies are normalized by assets to facilitate comparison across firms. The subsidy to asset ratio also varies much from 0% to 12%. The other notable feature is that only 29.6% of the sample has positive subsidy and the others receive none at all. When restricted to the non-zero subsidy sub-sample, the average subsidy amount is 400 million won and the average subsidy to asset ratio is 4%. Firms in the sub-sample are on average smaller than in the whole sample, meaning that government subsidies tend to be directed to smaller firms.

Table 1. Summary Statistics

	Whole Sample				Sub-sample with Non-zero Subsidy			
	mean	std dev	min	max	mean	std dev	min	max
subsidy(billion won)	0.12	0.23	0.00	1.00	0.40	0.26	0.03	1.00
assets(billion won)	84.00	138.30	0.60	616.3	47.30	67.50	4.10	307.5
subsidy/assets	0.01	0.03	0.00	0.12	0.04	0.05	0.00	0.12
no. of observations	81				24			

Connection variables are based on the CEOs' employment history. *NA* is a dummy variable defined to be one if the CEO was a National Assembly member before joining the firm, and zero otherwise. Similarly, *BUR* is a dummy variable for a bureaucrat in the central government. In order to characterize differential degrees of connections, the following variables are defined. *rel_NA* is a dummy variable for a member of the relevant standing committee in the National Assembly. A relevant committee means that the committee's jurisdiction includes the state-owned enterprise and its supervising

ministry. *unrel_NA* is a dummy variable for a member of the National Assembly standing committee unrelated to his or her firm, and zero otherwise. Similarly, *rel_BUR* is a dummy variable for a bureaucrat from a supervising ministry while *unrel_BUR* is for a bureaucrat from the other ministries.³ Appendix lists supervising ministries in the government, and relevant standing committees in the National Assembly for state-owned enterprises in the sample.

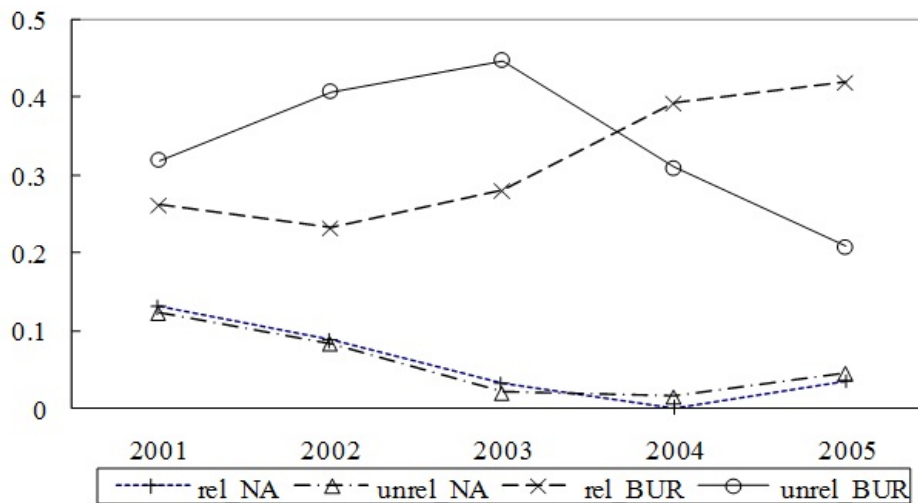


Figure 1. CEO Characteristics Variables

Figure 1 illustrates the trends in connection variables. Notice that a new President of Korea was inaugurated in year 2003, around which substantial changes occurred in the characteristics of CEOs of state-owned enterprises. The unique institutional environment explains considerable replacement of CEOs after the change in political leadership. Figure 1 also shows a notable change in connection variables around 2003. The share of the bureaucrats from supervising ministries (*rel_BUR*) rose but the share of the bureaucrats from unrelated ministries (*unrel_BUR*) dropped. The change seems less

³ If CEOs change in the middle of a year, I take the average of CEOs characteristics weighted by their term in the year. To illustrate the definitions with an example, a new CEO of Korea Gas was appointed in September 2003. The outgoing CEO used to be a member of Commerce, Industry and Energy committee in the National Assembly, and the new CEO was an assistant deputy minister of Commerce, Industry and Energy. As the ministry and the committee are related to the firm, $NA=2/3$, $rel_NA=2/3$, $unrel_NA=0$, $BUR=1/3$, $rel_BUR=1/3$, $unrel_BUR=0$ for Korea Gas in year 2003.

dramatic with the share of the National Assembly members but both rel_NA and $unrel_NA$ became clearly lower in the new administration. The trend in Figure 1 is unique of the sample in this study. It allows the researcher to identify a model using within-firm variation in connection variables. Although not all CEOs finish their statutory tenure, it is not politically sensible that the new president change all CEOs of the state-owned enterprises at the same time. Thus, the composition of CEO characteristics changes even in 2004 and 2005.

3. EMPIRICAL RESULTS

The main purpose of this paper is to examine whether and how much the connected CEOs attract government subsidy while controlling for profitability, size and other firm characteristics that may affect the subsidy provision. I consider an estimation equation similar to Bertrand *et al.* (2006). For firm i in year t , the subsidy to asset ratio y is assumed to take the following form,

$$y_{it} = X_{it}\beta + Z_{it}\gamma + \delta_t + \xi_i + \varepsilon_{it}, \quad (1)$$

where X is a set of CEO connection variables (NA , rel_NA , $unrel_NA$, BUR , rel_BUR , $unrel_BUR$), Z is a set of other firm characteristics including firm size and profitability, δ 's are year-specific constants, and ξ captures unobserved heterogeneity across firms. Time-invariant firm characteristics such as establishment year, industry to which a firm belongs, and a supervising ministry are thought to be absorbed into ξ . Estimating β is of primary interest in this study. Note that Equation (1) is in a linear form although the dependent variable takes zero for a group of observations. The reason is that the model can control for unobserved firm heterogeneity in a more robust way than a nonlinear specification such as a Tobit model. For the purpose of comparison, I also report the Tobit regressions results in the end.

Table 2 reports the estimation results. Column 1 runs a pooled OLS without firm fixed effects. Return on assets has a coefficient estimate of -0.116 and it is statistically significant at 1%. Firms with poor financial performance tend to receive subsidies. Subsidizing financially challenged firms is typical of state ownership and is often cited as a source of inefficiency in its own. But in this paper, I do not examine the implication but use financial performance mainly as a control variable to separate out the effects of connections.

Column 2 estimates a model with firm fixed effects included. The coefficient of NA is 0.007 and that of BUR is 0.008. Both coefficients are estimated precisely and are statistically different from zero at usual significance levels. Given the relatively small sample size, considerable within-firm variation in connections helps precise estimation in a fixed effects model. Also, note that the coefficients of NA and BUR changed significantly from column 2. OLS without firm fixed effects would lead to wrong

estimates as long as connection variables are correlated with unobserved firm characteristics. The estimated coefficients of *NA* and *BUR* imply connected CEOs attract more subsidies. It would measure the degree to which connections distort subsidy allocation as long as the control variables reasonably capture a firm's need for the subsidies. The estimated effects are similar in magnitude whether the CEO was a National Assembly member or a bureaucrat. A former National Assembly member would bring more subsidies than unconnected CEOs by 0.7% of total assets. Similarly, a former bureaucrat tends to draw more subsidies than unconnected CEOs by 0.8% of the firm's assets.

Two points are worth noting on column 2. First, financial performance is not statistically significant as opposed to OLS without fixed effects. As financial performance exhibits persistence and does not vary much over time, its effect is hard to separate from firm fixed effects. Therefore, the result in column 2 is not inconsistent with the government subsidizing poorly performing enterprises. Secondly, the estimated effect of connections is 0.7~0.8% of total assets, which amounts to 600 million won (650 thousand in US dollars) for an average-sized firm in the sample. Though statistically significant, it seems modest in an economic sense. A possible reason is that state subsidy is only one way of granting favor and the other forms may be in action at the same time: such as preferential access to capital, granting monopoly status, etc.

In column 3, the right hand side variables measure different degrees of connections. *rel_NA* is statistically significant but *unrel_NA* is not. The connection effect is significant only when the National Assembly member was from the relevant standing committee. Similarly, the effect is larger for *rel_BUR* than *unrel_BUR* even though both are statistically significant. CEOs from the related committee or from the supervising ministry would have stronger connections to the current policy makers than the other legislators or bureaucrats. The result in column 3 shows that stronger connections lead to stronger effects on subsidies.

Interpreting the result in column 3, some would argue that former officials from the relevant offices are likely to have better expertise and therefore take advantage of the expertise to attract more subsidies from the government. That is, column 3 does not distinguish connection from expertise. In order to address the issue, I run a regression that distinguishes the CEOs appointed in the current administration (*cur_NA* and *cur_BUR*) from the ones appointed in the previous administration (*prev_NA* and *prev_BUR*). As long as CEO expertise does not depreciate very fast, differential effects between two groups may be interpreted mostly coming from connections. Column 4 reports the estimation result. For former National Assembly members, CEOs appointed in the current administration receives higher subsidies than CEOs appointed in the previous administration. The coefficient of *cur_NA* is 0.008 and significant at 5%, but the coefficient of *prev_NA* is statistically insignificant. However, no statistical difference is found among bureaucrat CEOs. Both coefficients of *cur_BUR* and *prev_BUR* are 0.007 and statistically significant. Thus, column 4 presents partial evidence that connections do matter but the result is not robust across types of CEOs. It is possible that

bureaucrats' connections and expertise depreciate differently from politicians'. However, the current data does not allow further detailed analysis. Therefore, the result in this paper needs to be interpreted with caution. Part of the estimated effects may come from expertise rather than connections, especially for former bureaucrats.

Table 2. Linear Regression Result

	1	2	3	4	5
<i>NA</i>	0.034** (0.014)	0.007** (0.003)			0.009*** (0.003)
<i>rel_NA</i>			0.011*** (0.004)		
<i>unrel_NA</i>			0.004 (0.004)		
<i>cur_NA</i>				0.008** (0.003)	
<i>prev_NA</i>				0.004 (0.006)	
<i>other_NA</i>					-0.019*** (0.007)
<i>BUR</i>	-0.009 (0.008)	0.008*** (0.002)			0.007*** (0.002)
<i>rel_BUR</i>			0.009*** (0.003)		
<i>unrel_BUR</i>			0.007*** (0.003)		
<i>cur_BUR</i>				0.007*** (0.003)	
<i>prev_BUR</i>				0.007*** (0.003)	
<i>other_BUR</i>					0.002 (0.003)
<i>roa(t-1)</i>	-0.116*** (0.030)	0.000 (0.008)	0.002 (0.008)	-0.000 (0.008)	0.005 (0.008)
<i>Log(assets)</i>	-0.005*** (0.002)	-0.001 (0.005)	-0.003 (0.005)	-0.000 (0.005)	0.001 (0.004)
Year dummies	included	included	included	included	included
Firm fixed effects	not included	included	included	included	included
N	81	81	81	81	81

Notes: Standard errors are in parentheses. *** p -value<0.01, ** p -value<0.05, * p -value<0.1.

Column 5 adds variables on the other enterprises. *other_NA* is the average of *NA* among the other firms under the same supervising ministry. *other_BUR* is similarly defined. If state-owned enterprises under the same supervising ministry compete for a common pool of subsidies, the other firms' connections also change the chance of receiving subsidies. It is a reasonable prediction because the law empowers the ministers to grant subsidies among the enterprises under his or her supervision as explained in section 2. The coefficient of *other_NA* is -0.019, statistically significant and even larger than the coefficient of *NA* in absolute values. The result supports the previous prediction but no significant effect is found for *other_BUR*. It may be because the connection through former legislators works differently from the one through former bureaucrats but the reason is not clear with the current data. The differential aspects of the two forms of network would be an interesting area for future research.

The results in Table 2 can be summarized as follows. Former legislators or bureaucrats attract more subsidies than the other CEOs. The effect is more evident when the CEO was from the relevant standing committee or the supervising ministry, and the effect becomes weaker when the other recipients of subsidies have strong connections. These are consistent with a hypothesis that former legislators and bureaucrats can distort subsidy allocation through their connections to a policy maker. However, appropriate caution is advised in interpreting the result because part of the estimated effects of connections may come from expertise.

In the following, I check the robustness of the main findings in a couple of ways. Since not all firms receive non-zero subsidy, it is worth checking whether the result is robust in a model that allows the dependent variable to be truncated. I have estimated an unobserved effects Tobit model following Wooldridge (2002) and reports the estimates in column 1 in Table 3. Both *NA* and *BUR* have significantly positive coefficients. Although the estimates cannot be directly compared across models, it has the same qualitative implications as the linear regression. To facilitate interpretation, I calculated two sets of partial effects using the estimated Tobit model. One is the partial effects on the dependent variable conditional on positive *subsidy* (dy/dx given $y > 0$), and the other is the partial effects on the probability of positive *subsidy* ($d\Pr(y > 0)/dx$). The estimated partial effects for each right hand side variable are listed in column 2 and 3. The former National Assembly member would increase the firm's subsidy to asset ratio by 0.3% conditional on positive subsidy, and would increase the probability of receiving subsidy by 5.5%. Similarly, the former bureaucrats raise the subsidy to asset ratio by 0.4% on positive subsidy, and increase the probability of positive subsidy by 6.0%.

Table 3. Tobit Regression Result

	1 coefficients	2 dy/dx given $y > 0$	3 $d \Pr(y > 0)/dx$
<i>NA</i>	0.013** (0.006)	0.003** (0.001)	0.055** (0.026)
<i>BUR</i>	0.014*** (0.005)	0.004*** (0.001)	0.060*** (0.022)
<i>roa(t-1)</i>	-0.014 (0.024)	-0.003 (0.006)	-0.059 (0.099)
<i>Log(assets)</i>	-0.001 (0.003)	-0.000 (0.001)	-0.003 (0.015)
Year dummies	included		
N	81		

Notes: Standard errors are in parentheses. *** p -value<0.01, ** p -value<0.05, * p -value<0.1.

The next robustness check involves alternative dependent variables. In Table 4, I report regressions with the subsidy to sales ratio and the subsidy to equity ratio as dependent variables respectively. Those regressions are not presented as the main findings because state-owned enterprises may take unusual values of sales and equity. State-owned enterprises are often required to provide non-marketable goods and services, and are sometimes under price regulation. Then, sales volume is only a poor measure of firm size. Equity can also be flawed because some state-owned enterprises such as Korea Coal Corporation continue to make loss even to impair capital. However, the regressions with alternative dependent variables are suggestive of the robustness of the main findings. Table 4 reports the results. With the subsidy to sales ratio, *NA* is significant and *BUR* is not. But *BUR* has a p -value of 0.104 barely short of 10% significance. With the subsidy to equity ratio as a dependent variable, *BUR* is marginally significant but *NA* is not. Note that firms with negative equity are dropped for the second model. By and large, the results are comparable to the previous findings.

Table 4. Alternative Dependent Variables

	1 dep. Var.: subsidy/sales	2 dep. var.: subsidy/equity
<i>NA</i>	0.099*** (0.028)	-0.003 (0.007)
<i>BUR</i>	0.038 (0.023)	0.010* (0.006)
<i>roa(t-1)</i>	0.012 (0.076)	-0.015 (0.024)
<i>Log(assets)</i>	-0.016 (0.042)	-0.007 (0.012)
Year dummies	included	included
Firm fixed effects	included	included
N	81	76

Notes: Standard errors are in parentheses. *** p -value<0.01, ** p -value<0.05, * p -value<0.1.

5. CONCLUSION

This paper examines present evidence of rents to former officials and offers a specific manner in which rents are provided, adding to the growing literature on politicians and bureaucrats in business. Using the detailed data on state-owned enterprises of Korea, I show that CEOs who were legislators or bureaucrats are associated with more government subsidies than unconnected ones. The relationship seems stronger in case of CEOs from the relevant standing committee or the supervising ministry. But the effect becomes weaker when the competing recipients have strong connections. The results are robust with alternative functional forms and scale variables. The result, however, need be interpreted with caution because part of the estimated effects may come from expertise rather than connections, especially for former bureaucrats.

Some policy issues flow from the main findings. This paper casts reasonable doubts on the practice of appointing former officials to CEOs of state-owned enterprises. If granting subsidy is not the only form of rents and if policy makers have a wide range of discretion, the adverse effects to resource allocation may be more serious. Of course, the nexus between the government and former officials may arguably help enhancing efficiency in some areas of work under the institutional surroundings of state-owned enterprises. However, no concrete evidence of gains has been presented in the literature. The implications of this paper may extend to former officials in private business. The issue is especially relevant to highly regulated industries such as finance and public utilities as long as the network between policy makers and former officials is concerned.

There remain some issues for further study. First, granting subsidies is only one

method of giving favor to firms. Investigating alternative forms including preferential access to capital and monopoly status would be an important research topic. Secondly, this paper has found that Assembly members are not very different from public officials as far as their effects on subsidies are concerned. In fact, politicians and bureaucrats may differ in networks, means of influence, and incentives. It is interesting to identify their differential effects. Thirdly, it is a challenging task to precisely separate connections from expertise since both variables are measured based on past experience. More detailed data would enable the researcher to systematically distinguish two effects.

APPENDIX

State-owned Enterprises, Affiliated Ministries and Standing Committee

State-owned Enterprise	Supervising Ministry in the Government	Related Standing Committee in the National Assembly
Korea Racing Authority	Agriculture and Forestry	Agriculture, Forestry, Maritime Affairs and Fisheries
Busan Port Authority Korea Container Terminal Authority	Maritime Affairs and Fisheries	
Korea Gas Korea Resources Corporation Korea Coal Corporation Korea District Heating Korea Petroleum Development Corporation Korea Electric Power Corporation	Commerce, Industry and Energy	Commerce, Industry and Energy
Korea Water Resources Corporation Incheon International Airport JEJU International City Center Korea Appraisal Board Korea Airports Corporation Korea Land Corporation Korea National Housing Corporation Korea Housing Guarantee Corporation Korea Highway Corporation	Construction and Transportation	Construction and Transportation
Korea National Tourism Organization Korea Broadcasting Advertising Corporation	Culture and Tourism	Culture and Tourism
Workers Accident Medical Corporation	Labor	Environment and Labor
Korea Minting and Security Printing Corporation	Finance and Economy	Finance and Economy

REFERENCES

- Acemoglu, D., and T. Verdier (2000), "The Choice between Market Failures and Corruption," *American Economic Review*, 90(1), 194-211.
- Ades, A., and R. Di Tella (1999), "Rents, Competition and Corruption," *American Economic Review*, 89(4), 982-994.
- Bertrand, M., F. Kramarz, A. Schoar, and D. Thesmar (2006), "Politically Connected CEOs and Corporate Outcomes: Evidence from France," mimeo.
- Bramoulle, Y., and S. Goyal (2009), "Favoritism," Cambridge Working Papers in Economics, 0942.
- Choi, J.W. (2003), *Reform Plan for Governance of State-owned Enterprises*, mimeo (in Korean).
- Cohen, J. (1986), "The Dynamics of the Revolving Door on the FCC," *American Journal of Political Science*, 30, 689-708.
- Horiuchi, A., and K. Shimizu (2001), "Did Amakudari Undermine the Effectiveness of Regulator Monitoring in Japan?" *Journal of Banking and Finance*, 25, 573-596.
- Hwang, J. (2002), "A Note on the Relationship between Corruption and Government Revenue," *Journal of Economic Development*, 27(2), 161-178.
- Khwaja, A.I., and A. Mian (2005), "Do Lenders Favor Politically Connected Firms? Rent Provision in an Emerging Financial Market," *Quarterly Journal of Economics*, 120, 1371-1411.
- Min, H. (2008), "Analysis of the Effects of Political Connections on Subsidies," *Monthly Public Finance Forum*, 139, (in Korean).
- Miwa, Y., and M.J. Ramseyer (2005), "Who Appoints Them, What Do They Do? Evidence on Outside Directors from Japan," *Journal of Economics and Management Strategy*, 14, 299-337.
- Shleifer, A., and R.W. Vishny (1994), "Politicians and Firms," *Quarterly Journal of Economics*, 995-1025.
- Wooldridge, J.M. (2002), *Econometric Analysis of Cross Section and Panel Data*, MIT Press.

Mailing Address: Heechul Min, Department of Economics, Hansung University, 389 Samseon Dong 3 Ga, Seongbuk Gu, Seoul 136-792, Korea. Tel: 82 2 760 8007. E-mail: hmin@hansung.ac.kr.

Received March 3, 2011, Revised May 31, 2011, Accepted June 20, 2011.