Top Leadership and Performance of Quasi Government Organizations in Korea


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ABSTRACT

This research explores the determinants of organizational performance of quasi-autonomous non-governmental organizations, namely quangos, in Korea. Although we have observed the growth of the quangos in various policy fields, empirical studies examining the top leadership and performance of quangos remain largely underdeveloped. Using panel data of 13 quangos in Korea from 1999 to 2007, this research seeks to fill the gap by examining how several characteristics of top management of quangos, including politicization of the board, chief executive succession, and insider/outsider origin of chief executives, affect their performance measured by performance evaluation index (PEI) and consumer satisfaction index (CSI). Analysis results show that some leadership characteristics have a significant positive effect on the PEI; while the CSI was more influenced by contextual factors such as the presidential change and unemployment rate, while leadership characteristics were not statistically significant.
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INTRODUCTION

Quasi-autonomous non-governmental organizations (hereafter, quangos) have unique characteristics. In the past, traditional bureaucracies and hierarchical structures took the lead, but as the idea of New Public Management proliferated since the 1980s, quangos have been increasing rapidly. Similar terms also include NDPBs (Non Departmental Public Bodies), NGOs (Non Governmental Organizations), QAOs (Quasi-Autonomous Organizations), intermediate organizations, and the third sector. While representing no tangible or clear organizations, quangos provide a continuum on which a diverse range of bodies can be placed (Flinders and Smith, 1999).

Quangos expend public money and fulfill public functions, but exist with some degree of independence. Located somewhere between the public and private sector, these organizations are relatively free from government regulations (Durant 1995), but are within the reach of governmental influence and political pressures (Koppell 2003, 2007; Lewis 2003; Bertelli 2005, 2006). For the lack of democratic connection between electors and government (Skelcher 1998; Cole 2000), quangos have been suffered from the potential moral hazard and inefficiencies (Lægreid and Roness 2003; Newland 1996; Nolan 2001). Thus, political control through executive appointment of leadership is one of the essential means to ensure accountability and performance that is directly linked to the betterment of society and the improvement of public service.

The top management team of quangos, the CEO and the board of directors, are required to manage complex public service networks, but their leadership is susceptible to
both internal and external challenges and pressures (Ingraham and Van Slyke 2006). They strive to be responsible to the performance of the organizations as well as legitimacy and democratic accountability to elected officials (Denis et al. 2005). Therefore, it is inevitable for them to cooperate with and get support from the government department and political parties in order to elevate performance of quangos.

The major research question of this paper is, “Does top leadership of quangos matter for performance?” More specifically, “Which characteristics of top management, including chief executives and board of directors, influence performance of quangos?” Using panel data of 13 quangos in Korea from a nine-year period, this article attempts to answer the question. Main characteristics of top management include the degree of politicization of the boards, chief executive succession, and insider/outsider origin of CEOs.

In the upcoming section, we provide a research framework by reviewing the roles of top management in quangos and several performance models. Then, several hypotheses regarding leadership and organizational characteristics will be presented as well as the description of the data, measurements, and analytic method. Following this, we present the theoretical model using panel data models and analysis results. It concludes with implications, limitations, and topics for future research.

**RESEARCH FRAMEWORK**

Figure 1 illustrates the framework of this research. Three components, including leadership, organizational, and contextual characteristics are mainly addressed to explain organizational performance of quangos. As leadership characteristics, we consider three factors: politicization of boards, chief executive succession, and insider/outsider career of
CEOs. Four organizational characteristics including organizational size, organizational age, government funding proportion, and age of unions are included. Finally, change of administration and annual average unemployment rate constitute contextual factors.

[Figure 1 about here]

**Organizational Performance**

Performance is a concept hard to catch, especially in public organizations which contains multiple goals, principals, and stakeholders (Brewer and Selden 2000; Boyne et al. 2005; Van Slyke and Alexander 2006). Nevertheless, as Moynihan and Pandey (2004: 421) said, we are living in “an era of government by performance.” There has been steady concern about performance and several scholars provided models explaining organizational performance. For example, Lynn, Heinrich, and Hill (2000) provided a reduced-form model explaining outcomes of governance with five elements which include environmental factors, client characteristics, treatments, structures, and managerial roles and actions. Boyne (2003) indicated five determining factors of performance: resources, regulation, market structure, organization, and management. Recently, Cho and Ringquist (2011) use four components in explaining perceived organizational performance: managerial, organizational, environmental factors, and individual characteristics. Because this research employs objective measures of organizational performance, not a perceived measure, the three components, including leadership characteristics (reflecting managerial characteristics), organizational characteristics, and contextual characteristics, are considered for the analysis.

The relationship between public management and organizational performance has
been studied intensively (e.g. O’Toole and Meier 2003; Boyne 2003), and there is an overall consensus that management is one of key determinants of performance (Boyne 2003; Moynihan and Pandey 2004). To build and sustain qualified management of organizations, the role of leadership cannot be underestimated (Hicklin et al. 2008; Meier et al. 2007; Forbes and Lynn 2005; Moynihan and Pandey 2004; Yang and Hsieh 2007). In quangos, both chief executives and board of directors play critical roles of leadership. Working as a representative of organizations, a chief executive plays critical roles in diverse activities such as setting up strategic planning, acquiring resources, and making alliances with internal and external stakeholders (Boyne et al. 2005; Boyne and Dahya 2002). The board of directors has the power to make important decisions to the organizations, such as hiring and firing, monitoring and resolving conflicts among the interests (Nicholson and Kiel 2007; Baysinger and Butler 1985). In summary, top management, including a chief executive and board of directors, will have substantial influence on organizational performance, and quangos are not an exception. Now we will review how several characteristics of top management will make a difference in performance of quangos.

We also include organizational and contextual characteristics that can influence performance of quangos. Organizational characteristics such as the number of full-time employees, size of total revenue, organizational age, government fund proportion, and internal voice makers such as unions will be included to the empirical model. Contextual factors may have substantial effect on performance, especially in quasi public organizations. Political pressure is one of the distinctive characteristics making significant changes in quangos. Additionally, economic factors will determine the general condition of quangos’ performance, as quangos are in between the public and the private sector.
Leadership Characteristics

Board of Directors: Politicization

The board of directors in quangos has the responsibility of enhancing legitimacy and integrity of public services while improving efficiency of management, where the board composition and the degree of politicization of the board has been always an issue. Often referred to the growth of positions occupied by political appointees (Lewis 2008), politicization of public organizations is commonly justified as a mechanism assuring democratic accountability (Perry and Rainey 1988). However, there might be a trade-off between enhanced accountability and potential decrease of flexibility. That requires empirical evidence, but one cannot find much research on the topic for government agencies as well as quangos (Lewis 2007, 2009).

Then, what is the expected effect of politicization on performance? There are competing views. On one hand, politicization may help increase performance by prioritizing presidential agenda in policy making and implementation (Wood and Waterman 1991; Nathan 2000; Maranto 2005; Moe 1999). High responsiveness of political appointees can clarify organizational goals and priority among them. Then, as the goal setting theory argues, those clear goals may facilitate directed efforts of organizations, which in turn lead to enhanced performance of quangos (Locke and Latham 1990). In addition, political appointees are likely to make a difference by inspiring vitality into routinized organizations (Aberbach and Rockman 2009; Rourke 1984). With political support from the president and elected officials, organizations led by political appointees are less likely to face political conflicts and more likely to elicit cooperation between the
public and the private sector (Heclo 1987; Bok 2003).

On the other hand, scholars have warned potential negative effects of politicization. Political appointees are not only less concerned about policies with narrow, short-term views, but also impair the continuity and stability of the organizations (Pfiffner 1999; Cohen 1998; Light 1987; Mackenzie 2001; Lewis 2007, 2008). They may suffer from lack of experience and expertise, which hampers performance (Boylan 2004; Lewis 2007). In addition, by not understanding bureaucratic culture, they may conflict with career bureaucrats. Politicization of quangos may be against the original purpose of quangos, which is to provide public service effectively regardless of regime changes. Since the politicization of the board of quangos in Korea has been the target of criticism for a long time (e.g. Lee 2001), we expect a negative relationship between the degree of politicization and performance of quangos.

*Hypothesis 1: The degree of politicization will negatively affect organizational performance of quangos.*

**Chief Executive Succession**

As top decision makers, the influence of CEOs is substantial in quangos like any other organization. Since chief executives interpret vague and sometimes conflicting goals and translate them into policy (Lewis 2009), their influence on performance is to be carefully assessed. Although the available literature, especially in the business sector, offers rich insights into the effect on performance in terms of turnover of top management team, the issue had barely been touched upon in the public sector.

Chief executives are appointed based on various features, including expertise,
previous experience, and political affiliation with the current government. Although the
tenure of CEOs is fixed in law, they are vulnerable to political changes and performance
evaluation (McCabe et al. 2008). Out of various characteristics of chief executives, this
research focuses on the chief executive succession and their previous career based on the
insider/outsider origin.

There is much literature examining the links between senior management turnover
and organizational performance, especially in the private sector. However, there are
strikingly only a few studies that deal with succession or turnover of CEOs in the context of
public organizations (Miller 1993; Wilson 1994; Boyne and Dahya 2002; Hill 2005; Boyne
et al. 2009). One can divide the research of chief executive succession into two streams. On
one hand, there was an attempt to identify causes of turnover, viewing it as a reaction to
the organizational problems (Thompson 1967; Salancik et al. 1980), especially in the
private sector (Dalton and Kesner 1983, 1985; Futado and Karan 1990; Cannella 1993;
Boyne et al. 2010). On the other hand, studies investigate chief executive succession as an
Some of previous studies reported that the leadership influence on organizational
outcomes is somewhat limited (Lieberson and O’Connor 1972; Weiner and Mahoney 1981;

Then, what are the expected effects of chief executive succession on performance of
quangos? Like the politicization of board, one can think of competing arguments for the
relationship. A new leadership can be seen as both a crisis and opportunity (Ingraham and
Van Slyke 2006). The change of CEOs may bring fresh air and energy to quangos suffering
from moral harzards, but also poses threat to the stability of the organizations. Thus,
managerial succession or turnover may be harmful to stable and consistent organizations, but it can be also beneficial to organizations under strategic, fast-changing environments because a new CEO is more likely to take new initiatives rather than work with old priorities (Miller 1993). The tenure of CEOs of quangos in Korea is stipulated by the law as three years, but the contract can be renewed every year based on performance evaluations. The fixed term of CEOs in the quasi governmental sectors will allow some level of discretion and autonomy from the political intervention. The importance of managerial and personnel stability has been emphasized by several management scholars (e.g. O'Toole and Meier 2003; Terry 1995). Despite the potential inertia, managerial continuity of CEOs enables quangos to set long-term strategic planning and to follow the plan without losing managerial efficiency and consistency. Accumulated knowledge will also help improve performance. Thus, although chief executive succession may bring positive changes by “an injection of fresh managerial blood” (Boyne and Dahya 2002: 185), we expect that benefits coming from stability and continuity in organizational management overwhelm the negativities, such as stagnation, conservatism, and protectionalism that lead to moral hazard.

_Hypothesis 2: The succession of CEO will be negatively associated with performance of Quangos._

**Insider/Outsider Origin of Chief Executives**

We also consider the influence of the origins of chief executives, thereby including the insider/outsider dimension. In a traditional view, outsiders are more likely to pursue and initiate strategic changes than insiders because outsiders are less bounded to the
established administrative structures and values (Futado and Karan 1990; Canella et al. 1993). However, insiders take more flexible and incrementalistic approach to organizational changes, which might be appropriate to the organizations under the unpredictable and uncertain situations (Goodstein and Boeker 1991; Dalton and Kesner 1983).

The insider/outsider succession, conceptually linked to the publicness (Boyne et al. 2009; O’Toole and Meier 2006), are commonly discussed with organizational performance in the private sector (Dalton and Kesner 1983, 1985; Canella et al. 1993). In terms of expertise, it is important to include previous occupations and experiences of chief executives (Donahue 2003). It has been generally accepted that outsiders are more able than insiders, while insiders are well aware of the technical knowledge regarding specific work and internal operations. In public settings, however, such arguments are liable to be criticized since types of expertise vary considerably, such as technical, managerial, and political. Even within the government, in-and-outers who have experience in both the private and the public sector are increasing demand for the expertise (MacKenzie 1987; Donahue 2003; Bok 2003).

In Korean quangos, under the authoritarian legacy and top-down decision making systems, many outsiders with irrelevant backgrounds have been appointed as chief executives with the political string. It has been regarded as the underlying cause of moral hazards and corruptions, although quangos have done a critical role in economic and social development. In a negative sense, nakhasan, a widely used term which means parachute in Korean, is a type of patronage system designating to the post without considerations of appropriateness, just like parachuting to the ground. Accordingly, many of previous
literature on the political appointment to the quango executives focus on the negative impacts and reform measures to fix it. Thus, we expect chief executives from inside organizations are more likely to produce positive performance outcome.

*Hypothesis 3: CEOs from within quangos will be positively associated with performance of quangos.*

**Organizational Characteristics**

**Organizational Size and Age**

Organizational size and age is an organizational resource in itself but also facilitates obtaining and sustaining other resources. According to the contingency theory and population ecology literature, larger and older organizations are at an advantage over relations with other organizations and organizational environment (Thompson 1967; Hannan and Freeman 1989).

Several scholars have examined the size of organizations on performance. Although size is likely to be treated as an independent variable that shapes organizational structure, it is sometimes regarded as performance itself as well (Scott 1998). Organizational size is measured in various indicators, such as the number of full-time employees, the number of customers, total revenue, and physical capacity and output. But, most studies have used the number of employees since it reflects “both the capacity of the organization for performing work as well as the current scale of actual performance” (Scott 1998: 260). Total revenue of an organization is regarded as direct and visible size of financial resources that is available to the organizations (Seidel 1991).

Generally, larger organizations have more opportunities to develop and advance
experienced staff to the top management team. For example, Boyne (2003) found that the larger the size, all else being equal, the higher the quality of services. Specifically, the demographic composition of the top management team is heavily relied upon the organizational size (Dalton and Kesner 1983; Datta and Guthrie 1994; Furtado and Karan 1990). Dalton and Kesner (1983) investigated the relationship between the insider/outsider selection and the organizational size of private firms. According to them, larger firms may have relatively higher rates of internal succession. Moreover, larger organizations are less vulnerable to political influence (Kaufman 1976; Seidman 1988) by appointing outsiders with political affiliations. In terms of the political benefits, however, the patronage motive and benefit of politicization are getting stronger at the same time.

In addition, we have included organizational age as an independent variable that affects performance. According to Warwick (1975), older organizations are more able to buffer internal and external pressures and their environments are more favorable, which make them much easier to produce good performance. Older quangos may have more experienced staff who have promoted from inside organizations.

Hypothesis 4: Larger and older quangos will show better performance than others.

Government funding proportion

Government funding plays a critical role in providing public service by quasi government organizations. Since public goods and service apply economies of scale, it is more efficient and desirable to be provided by one reliable supplier, namely quangos. Quangos hived off from government are not only short of resources and capacity to provide stable services at a low price, but also in need of guidance and direction from sponsor department and
According to the resource dependency theory, the higher proportion of government funding means higher dependence on government (Pfeffer and Salancik 1978). Higher dependency elevates the probability to the managerial intervention from the sponsor department. That may negatively affect quangos’ autonomy if government imposes its own political interests over quangos’ management. However, government funding also works as a stable source for sustainability. Thus, in spite of some potential negative effect, we assume that the higher proportion of government funding will increase performance of quangos.

*Hypothesis 5: Quangos with higher proportion of government funding will show better performance than others.*

**Age of Unions**

The union of quangos is one of the most important channels of voicing internal demands of employees. The relationship between existence or militancy of unions and organizational performance is one of the popular themes in the field of management as well as sociology and labor economics. Unions of quangos as voice makers wield influence on overall operation, corporate governance, and appointment of executives. Many studies examining the effect of union activity on company performance report potential performance gains from establishing more direct and open channels for collective voice (Mitchell and Stone 1992; Cooke 1994).

Yet, unions of quangos in Korea had been criticized as advocates of their own fringe benefits such as allowances, welfare, and special leaves in exchange of approving the decisions from sponsor government department. Unions established during the transition
to democracy in 1987 took more active roles in reforming quangos since the end of 1997 financial crisis. Despite the limited access to top decisions, the influence of unions is substantial to the concerned quangos and appointers, as the resistance or opposition of unions can be a serious political burden to them. The moral hazard and corruption of quangos, nevertheless, is partly due to the collusion between union of quangos and political power. Thus, we expect the unions that have existed longer will be negatively related with performance of quangos.

Hypothesis 6: Quangos with aged union will show worse performance than others.

Contextual Characteristics

Change of Administration and Unemployment Rate

As contextual characteristics, we include political and economic variables, such as presidential change and annual average unemployment rate. Since quangos are under political control, political regime changes are expected to influence quangos’ performance. According to previous studies, there is a distinctive presidential preference for selecting executives of quangos (Lewis 2008; Kim and Park 2010). Moreover, performance of quangos relies on overall economic situations since quangos are in between sectors. We use annual average unemployment rate in order to capture the vitality of national economy because it is the most frequently used indicator of economic condition.

METHODS

Data and Measurements

Dependent Variables
Table 1 explains measurements of each variable included for the analysis. In this study, two performance measures are used for dependent variables, including performance evaluation index (PEI) and consumer satisfaction index (CSI). In Korea, the performance of 13 major quangos has been evaluated since 1999 as the revision of the law of government corporations after the financial crisis causing bailout from International Monetary Fund. To ensure accountability and performance, the performance evaluation team comprised of outside experts such as professors, certified public accountants, and independent researchers, was required to assess organizational performance with 100 point ratings every year. The consumer satisfaction index (CSI) measuring the level of public service satisfaction is produced by face-to-face interviews with the customers by several private survey institutions. We use the PEI and CSI from 1999 until 2007 to be consistent with the previous results as it is assessed by 6 grades to alleviate excessive competition among the quangos since 2008.

[Table 1 here]

There are potential problems to use the indices as performance variables. The measurement issues of the indices themselves require specific clarification. Despite the positive effect brought by the performance evaluation of the quangos, there are continuing debates over the validity, reliability, and impartiality of the evaluation. The fact that the indices depend heavily on the judgment of the evaluators implies some degrees of biases by the halo effect (Lee and Choi 2009; Cooper 1981). Especially for the CSI, several issues are being raised concerning how to define customers in the public sector, how to measure the level of satisfaction, how valid the measures and methods, as the concept of satisfaction refers to the cognitive state as well as the emotional response (Lee and Hong 2005). Since
the purpose of performance evaluation is to reward and punish, there is always an
incentive to distort or disguise the results. If there is a room for the intentional distortion
or political influence, performance measurement can obscure as much as it reveals (Pollitt
2006; Talbott 2005). Moreover, the result may be deliberatively kept simple for
communication purposes, or show leniency tendency without any distinct improvement
(Pollitt 2006; Saal et al. 1980). Ingraham et al. (2003) noted that the performance
measurement without consideration of the context can be misleading and destructive in
the public sector.

Despite these caveats, these two indices are regarded as the appropriate second-
best measures to capture the organizational response to the changes of board composition,
leadership succession and tenure. Additionally, the performance evaluation system of
Korea has been recognized as a relatively success to provide a foundation for performance
management which motivates internal staffs. It has been introduced and distributed to the
local government corporations, government RandD research, and other countries (Ministry
of Strategic Planning and Finance 2007).

Independent Variables: Three Characteristics of Top Management

The degree of politicization of board is challenging to define and measure because the
intention of the appointers and political affiliation of every board member of quangos
cannot be easily identified (Skelcher 1998; Donahue 2003). As a result, the primary
occupation, the largest part of the prior career is the most commonly used as a proxy
variable to the ideological orientation and the extent of the political influence on the
appointees. The degree of politicization of the board of directors, in this paper, is measured
by the ratio of the number of politicians, military personnel, and private consultants or experts that have political or partisan affiliations, to total number of board members of an organization.

Strictly speaking, the board members are all political appointees in a sense that they are appointed under the political consideration of the president and the minister of government departments. Although the political mechanism for choosing board-level decision-makers can be varied, politicians, military personnel, and consultants from private sectors are likely to have the political supports from presidents especially in Korea. Although simplification through operational definition was inevitable, there might be some concerns about using the prior jobs as a proxy variable for politicization that contains intentions of the appointer and political affiliations of the appointees. Undoubtedly, there are some cases requiring a degree of judgment in classifying several categories; however, it is rather clear to judge someone who was promoted from the organizations and government departments.

The managerial change is coded as a dummy variable, where the years of chief executive succession events are coded as 1. The leadership quality of chief executives is assessed by insider or outsider origin within the quangos. Chief executives promoted from the inside individual organizations are coded as 1. Major careers of the chief executives are obtained mainly from Who’s Who in Korea (on-line version) and public organization information system (www.alio.go.kr), which contains variety of information on corporate governance as well as business management.

[Table 1 here]
Control Variables: Organizational and Contextual Characteristics

As organizational characteristics, we consider organizational size and age, government funding proportion, and age of unions. Organizational size of quangos is measured in two ways: the number of full-time employees and the size of total revenue. Organizational age is defined as [(the current year minus the year of establishment) plus one]. If a quango was established in 1983, the age of the organization is 27 [(2009 minus 1983) plus 1]. Government funding proportion is measured by the ratio of government funding to total revenue of a quango. The age of unions is measured in the same way as calculating organizational age.

As contextual characteristics, we include change of administration and unemployment rate; change of administration (0, 1) is coded 0 for President Kim Dae-jung (1999~2002), 1 for President Roh (2003~2007). The annual average unemployment rate is provided by the Korean Statistical Information Service (KOSIS).

Analytic Method

The scope of the analysis covers 13 quangos from 1999 to 2007 that are classified as government corporations.\(^1\) Recent data was excluded from the analysis because of the scheme of performance evaluation was recently changed. As we use panel data, we are able to distinguish group effects from individual effects, reduce the problem of collinearity

\(^1\) The 13 quangos include Korea National Housing Corporation, Korea Coal Corporation, Korea National Oil Corporation, Korea Expressway Corporation, Korea Water Resource Corporation, Korea Electric Power Corporation (KEPCO), Korea Agro-Fisheries Trade Corporation (AT), Korea Rural Community Corporation, Korea Trade-Investment Promotion Corporation (KOTRA), Korea National Tourism Corporation, Korea Minting and Security Printing Corporation. Korea Resource Corporation, Korea Land Corporation.
among explanatory variables, and control the effects of missing or unobserved variables (Hsiao 2007). Below is our model equation.

\[ Y_{it} = \alpha + \sum_{i=1}^{3} \beta_{n}X_{nit} + \sum_{i=1}^{5} \gamma_{n}X'_{nit} + \sum_{i=1}^{2} \delta_{n}X''_{nit} + \mu_{i} + \eta_{t} + \varepsilon_{it} \]

As the data set is an unbalanced panel, \( T_{i} \) represents a different time scope for each panel group.\(^2\) \( \alpha \) is a scalar, \( \beta \) is \( 3 \times 1 \) and \( X_{it} \) is the \( it \)-th observation on three explanatory variables reflecting leadership characteristics. Likewise, \( \gamma \) is \( 5 \times 1 \) and \( X'_{it} \) for organizational characteristics; \( \delta \) is \( 2 \times 1 \) and \( X''_{it} \) for contextual factors. \( \mu_{i} \) stands for unobserved characteristics of \( i \)-th quango or cross-sectional specific components, and \( \eta_{t} \) stands for unobserved characteristics of \( t \)-year or time-series specific components, and \( \varepsilon_{it} \) is the idiosyncratic errors of the model. Panel data can be estimated using several different models according to the assumption of the characteristics of residuals. In this paper, the results of four models are presented.

The panel generalized least square (GLS) assuming heteroscedasticity and autocorrelations among the residuals estimates the ordinary least square by pooling the time series and cross sectional observations. This is the weighted average estimate of between effects and fixed effects models. The between regression model on group means assumes that the residuals are heterogeneous among panel groups (\( \mu_{i} \)) but not correlated in the same group. The fixed effects model assumes \( \mu_{i} \) and \( \eta_{t} \) as the fixed parameters to be estimated in the model. If the \( \mu_{i} \) are thought of as fixed parameters to be estimated, most variations of dependent variables can be explained by the variations of residual \( \mu_{i} \)

\(^{2}\) For example, Korea Rural Community Corporation was established in 2000.
representing the characteristics of individual panel groups. The within group estimators of least square dummy variable will be presented in the third column. The random effects model assuming the residuals as random variables with a normal distribution will estimate generalized least square. It is more appropriate to the estimation with randomly drawn individual groups from a large population (Hsiao 2007). We conducted the Hausman test to determine whether some elements of $X_{it}$ are correlated with the cross section specific components ($\mu_i$) and which models are more appropriate to the estimation of our models.

RESULTS AND DISCUSSIONS

Descriptive statistics and correlations among the study variables are presented in Table 2 and Table 3. From Table 2, the two performance measures have similar mean score, but customer satisfaction has larger standard deviation.

[Table 2 and 3 here]

Results for the panel data analysis of organizational performance are presented in Table 4 and Table 5. It displays all the result of the pooled GLS models, Between effects, Fixed effects (within), and Random effects models. A quick glance at signs and significance suggests that our hypotheses are partly supported and requires specific explanations. The panel data models for each dependent variables, performance evaluation index (PEI) and consumer satisfaction index (CSI), show estimation results for each of the pooled GLS, the between regression, fixed effects, and random effects models. Based on the F-test and Hausman test, the random effects model seems more appropriate to estimate for PEI.

[Table 4 here]

According to hypothesis 1, we expected the coefficient estimate for PEI relative to
the degree of politicization to be negative. The results of model 1, however, do not support this expectation as the politicization of the boards is found to increase performance evaluation score. Although filling the boards with the political allies has been regarded as the cause of corruption, it seems that the politicization of the board members brings positive effects on performance evaluation by engaging diversity and freshness to the organizations trapped in moral hazard. The chief executive succession also increase the PEI score by adopting new managerial strategies. The leadership quality of chief executives with inside origins showed expected positive sign in Hypothesis 3, but failed to reach the significance level. Although not entirely persuasive, these results are at least suggestive that top leadership of quangos might have lasting effects on performance evaluation.

Among the organizational factors, the ratio of government funding and the size of total revenue were statistically significant and positively related to the PEI. Estimates suggest that one percent increase in total revenue leads to an approximately one point increase in the performance evaluation index. The positive significant sign of government funding implies that the more financially supported from the government, the higher the score. It supports the assumption underlying many studies of accountability and cooperation between sponsor department and quangos as extended arms of government. Since performance evaluation includes overall achievement of the planned objectives, the relationship with government is essential to improve effectiveness of primary activities of function, efficiency of management, and outcome of the activities.

The strength of unions measured by the age of union also significantly affect performance evaluation score and the relationship was in the expected direction. As quangos have been regarded as agents without a principal, they are attractive tools to
government officials who are interested in the top positions of quangos as well as to the staff members of quangos who seek more fringe benefits from the organization. For that reason, unions of quangos are likely to constitute a vicious circle of moral hazard and inefficiencies. In line with the expectations, the coefficient estimates of the variable are negative.

The signs for the contextual variables concerning partisan interests and economic conditions generally fit what might be expected and they came close to significant, but they failed to reach the threshold. Despite the potential vulnerability, the change of administration and unemployment rate did not significantly affect performance evaluation score.

[Table 5 here]

In Table 5, we displayed analysis result for Model 2 with the dependent variable of consumer satisfaction index (CSI). Since the Wu-Hausman test of the contrast between the within and random effects estimates cannot reject the null hypothesis that \((X_{it}, \mu_i)\) is uncorrelated, we prefer the within estimates on the efficient grounds. Although the sign of the explaining variables concerning top leadership characteristics showed the expected direction, they all failed to reach the significance level. The overall fit is less satisfying. On the contrary, the organizational and contextual variables turned out to be strong determinants of consumer satisfaction scores.

The control variables for organizational characteristics revealed to influence CSI statistically significantly are organizational age and size of total revenue, government funding proportion. The positive coefficient estimates suggest that our theoretical expectations are supported: when other things being equal, larger and older quangos with
higher proportion of government funding will be likely to get higher scores in consumer satisfaction. Since consumer satisfaction to the public service is partly based on the trust level among general public, old quangos with accumulated expertise and experience might have better relationships with public. The higher proportion of government funding to total revenue leads to positive results in the CSI, which is also true for the PEI. Financial characteristics of quangos have a statistically significant positive effect on both the performance evaluation and consumer satisfaction index.

Additionally, Table 5 clearly shows the importance of the contextual variables for performance measured by consumer satisfaction. In the case of the CSI, the importance of contextual factors seems consistent and reliable. The political change of administration to the recent President is to be significant and positively related to the higher satisfaction score. The result can be interpreted as the evidence for the improvement of performance during the President Roh Administration, however, at least primarily, for the influence of the political changes on performance of quangos. Meanwhile, the annual average unemployment rate was negatively related to the index, reflecting the overall decrease of satisfaction during the economic downturn. Therefore, it seems organizational and contextual characteristics that matter for CSI rather than top leadership characteristics.

CONCLUSIONS

This article set out to develop a preliminary model of organizational performance of quangos and examine the effect of top leadership on the two performance indices, Performance Evaluation Index (PEI) and Consumer Satisfaction Index (CSI). This model was applied to 13 quangos in Korea.
Analysis results of Model 1 show that leadership characteristics concerning politicization of the boards and chief executive succession have a significantly positive effect on the PEI. Organizational characteristics such as the size of total revenue, government funding proportion, and the age of union have a distinctive effect as well, while contextual factors such as political change and unemployment rate were not significant. In Model 2, on the contrary, consumer satisfaction index was more influenced by contextual factors such as the presidential change and unemployment rate, while leadership characteristics were not statistically significant. As many contextualists argue, the reason might be because leadership affects performance in complicated and indirect ways (Goldston 2001; Van Slyke and Alexander 2006), though more research is desired.

This study has some implications for public administration and research and theory. Most importantly, it attempted to contribute to leadership research in quasi government sectors with panel studies that control organizational and contextual factors. Since leadership literature has shown conflicting results (Van Slyke and Alexander 2006), an attempt to assess the relative influence to performance indices has implications to leadership studies as well as performance management. Second, this study presented evidence to explain why politicization is still very powerful around the quasi government sector, not just in the executive branch. The positive effect on performance of quangos in Korean context provides comparative bases on these fields. The result of this research bears out the difficulties of studying performance in public organizations, which is mostly confusing and conflicting to each other across the indices. Despite the importance and the duration of this topic, defining and measuring performance has always been one of the big challenges to scholars in the field of public management.
REFERENCES


Figure 1 Research Framework

**Leadership Characteristics**
- Degree of Politicization
- Chief Executive Succession
- Insider/Outsider Origin

**Organizational Characteristics**
- Organizational Size (Number of employees, Total Revenue)
- Organizational Age
- Government Funding Proportion
- Age of Union

**Contextual Factors**
- Change of Administration
- Unemployment rate

**Organizational Performance**
- Performance Evaluation Index (PEI)
- Consumer Satisfaction Index (CSI)
<table>
<thead>
<tr>
<th>Variables</th>
<th>Descriptions</th>
<th>Measures</th>
<th>Data Sources</th>
</tr>
</thead>
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<td>Performance Evaluation Index (PEI)</td>
<td>Performance Evaluation Report issued by the Ministry of Planning and Finance,</td>
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<td></td>
<td></td>
<td>Customer Satisfaction Index (CSI)</td>
<td>Public Organization Information System (<a href="http://www.alio.go.kr">www.alio.go.kr</a>),</td>
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<td>Leadership Variables</td>
<td>Politicization of the board of directors</td>
<td>(the number of former politicians, military</td>
<td>Korean Statistical Information Service (KOSIS) (<a href="http://kosis.kr">http://kosis.kr</a>),</td>
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<tr>
<td></td>
<td></td>
<td>personnel, private consultants / total number</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chief Executive Succession</td>
<td>(0,1) coded 1 if there is management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Previous career of CEOs</td>
<td>succession or turnover of CEOs</td>
<td></td>
</tr>
<tr>
<td>Organizational</td>
<td>Organizational size</td>
<td>The number of full-time employees</td>
<td>Who's Who in Korea,</td>
</tr>
<tr>
<td>Variables</td>
<td></td>
<td>The size of total revenue (million)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organizational age</td>
<td>(The current year - year of establishment) + 1</td>
<td>Each agency’s websites and white papers.</td>
</tr>
<tr>
<td></td>
<td>Government Funding Ratio</td>
<td>(government funding/ total revenue) × 100</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Age of Union</td>
<td>(The current year - year of establishment) +1</td>
<td></td>
</tr>
<tr>
<td>Contextual Variables</td>
<td>Presidential change</td>
<td>(0,1) coded 1 for President Roh</td>
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</tr>
<tr>
<td></td>
<td>Unemployment rate</td>
<td>The yearly average rate of national</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>unemployment</td>
<td></td>
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### Table 2  
**Descriptive Statistics**

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<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
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<td>75.792</td>
<td>5.2575</td>
<td>60.24</td>
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<td>Customer Satisfaction</td>
<td>115</td>
<td>74.710</td>
<td>11.345</td>
<td>44</td>
<td>96.3</td>
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<td>Degree of politicization</td>
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<td>53.681</td>
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<td>.4713</td>
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<td>.3058</td>
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<td>34608</td>
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<td>12.164</td>
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<td>58</td>
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<td>ln(Total Revenue)</td>
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<td>14.085</td>
<td>1.7172</td>
<td>11.619</td>
<td>17.376</td>
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### Table 3  
**Correlations Among Variables**

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<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
<th>(10)</th>
<th>(11)</th>
<th>(12)</th>
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<td>(1) Performance Evaluation</td>
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<td>(2) Customer Satisfaction</td>
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<td>1.000</td>
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</tr>
<tr>
<td>(3) Degree of Politicization</td>
<td>0.304*</td>
<td>0.154</td>
<td>1.000</td>
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<td>(4) Succession of CEOs</td>
<td>0.086</td>
<td>0.183*</td>
<td>0.105</td>
<td>1.000</td>
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<td>(5) Insider/Outsider</td>
<td>0.003</td>
<td>-0.054</td>
<td>-0.174</td>
<td>-0.426*</td>
<td>1.000</td>
<td></td>
<td></td>
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<td>(6) Number of Employees</td>
<td>0.245*</td>
<td>-0.020</td>
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<td>-0.190</td>
<td>0.087</td>
<td>1.000</td>
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<tr>
<td>(7) Organizational Age</td>
<td>-0.19*</td>
<td>0.208*</td>
<td>-0.152</td>
<td>-0.116</td>
<td>-0.04*</td>
<td>0.020</td>
<td>1.000</td>
<td></td>
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<tr>
<td>(8) Government Funding</td>
<td>0.135</td>
<td>-0.062</td>
<td>-0.112</td>
<td>0.035</td>
<td>-0.115</td>
<td>-0.289</td>
<td>0.078</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(9) ln(Total Revenue)</td>
<td>0.337*</td>
<td>-0.010</td>
<td>0.104</td>
<td>-0.009</td>
<td>0.010</td>
<td>0.619*</td>
<td>-0.277</td>
<td>-0.459*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(10) Age of Union</td>
<td>-0.359*</td>
<td>0.131</td>
<td>-0.069</td>
<td>0.324*</td>
<td>-0.228</td>
<td>-0.39*</td>
<td>0.388*</td>
<td>0.279</td>
<td>-0.371*</td>
<td>1.000</td>
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<td></td>
</tr>
<tr>
<td>(11) Presidential Change</td>
<td>0.142</td>
<td>0.818*</td>
<td>0.199*</td>
<td>0.285*</td>
<td>-0.186</td>
<td>-0.031</td>
<td>0.156</td>
<td>-0.008</td>
<td>0.051</td>
<td>0.137</td>
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<tr>
<td>(12) Unemployment Rate</td>
<td>-0.186</td>
<td>-0.696*</td>
<td>-0.218*</td>
<td>-0.052</td>
<td>-0.025</td>
<td>0.056</td>
<td>-0.086</td>
<td>0.091</td>
<td>-0.046</td>
<td>-0.094</td>
<td>-0.51*</td>
<td>1.000</td>
</tr>
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</table>

Note: Coefficients with mark asterisk are statistically significant at Bonferroni-adjusted .05 levels.
Table 4  Performance Evaluation Index (PEI)

<table>
<thead>
<tr>
<th>Leadership Characteristics</th>
<th>Pooled Panel GLS</th>
<th>Between Regression</th>
<th>Fixed Effect (within)</th>
<th>Random Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Politicization of the Boards</td>
<td>.0176**</td>
<td>.0568</td>
<td>.0211**</td>
<td>.0246**</td>
</tr>
<tr>
<td></td>
<td>(.0075)</td>
<td>(.0302)</td>
<td>(.0104)</td>
<td>(.0101)</td>
</tr>
<tr>
<td>Chief Executive Succession</td>
<td>2.8089***</td>
<td>3.211</td>
<td>1.293</td>
<td>1.857*</td>
</tr>
<tr>
<td></td>
<td>(.7749)</td>
<td>(1.5210)</td>
<td>(1.203)</td>
<td>(.9803)</td>
</tr>
<tr>
<td>Insider/Outsider</td>
<td>1.7425</td>
<td>.2418</td>
<td>.6840</td>
<td>1.180</td>
</tr>
<tr>
<td></td>
<td>(1.221)</td>
<td>(2.584)</td>
<td>(1.702)</td>
<td>(1.418)</td>
</tr>
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</table>

<table>
<thead>
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<th>Organizational Characteristics</th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Employees</td>
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<td>.0000</td>
<td>.0004</td>
<td>.0000</td>
</tr>
<tr>
<td></td>
<td>(.0001)</td>
<td>(.0001)</td>
<td>(.0002)</td>
<td>(.0001)</td>
</tr>
<tr>
<td>ln(Total Revenue)</td>
<td>.9540***</td>
<td>.7986</td>
<td>1.084*</td>
<td>1.085***</td>
</tr>
<tr>
<td></td>
<td>(.3024)</td>
<td>(.2910)</td>
<td>(2.290)</td>
<td>(3.492)</td>
</tr>
<tr>
<td>Organizational Age</td>
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<td>.0334</td>
<td>.7351</td>
<td>.0180</td>
</tr>
<tr>
<td></td>
<td>(.0336)</td>
<td>(.0293)</td>
<td>(.6720)</td>
<td>(.0425)</td>
</tr>
<tr>
<td>Government Funding</td>
<td>.0861***</td>
<td>.0869**</td>
<td>.0749**</td>
<td>.0878***</td>
</tr>
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<td>(.0153)</td>
<td>(.0158)</td>
<td>(.0406)</td>
<td>(.0174)</td>
</tr>
<tr>
<td>The Age of Union</td>
<td>-.2135***</td>
<td>-.1270</td>
<td>-.7215</td>
<td>-.2013***</td>
</tr>
<tr>
<td></td>
<td>(.0453)</td>
<td>(.0615)</td>
<td>(.6152)</td>
<td>(.0404)</td>
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</table>

<table>
<thead>
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<th>Contextual Characteristics</th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Presidential Change</td>
<td>-.1076</td>
<td>-126.73</td>
<td>.1802</td>
<td>.2054</td>
</tr>
<tr>
<td></td>
<td>(.7968)</td>
<td>(60.329)</td>
<td>(1.600)</td>
<td>(.9876)</td>
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<tr>
<td>Unemployment Rate</td>
<td>-.7783*</td>
<td>-72.596</td>
<td>-1.060</td>
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<td>(.4569)</td>
<td>(36.398)</td>
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<td>(.5498)</td>
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<td>73.342**</td>
<td>63.092***</td>
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<td>(30.117)</td>
<td>(6.699)</td>
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</table>

<table>
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</thead>
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<td>Number of Obs</td>
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<td>104</td>
<td>104</td>
<td>104</td>
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<tr>
<td>Number of Groups</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>R-Squared (overall)</td>
<td>-.0068</td>
<td>.0824</td>
<td>.4492</td>
<td></td>
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<tr>
<td>Wald Chi2/ F</td>
<td>Wald chi2(10)</td>
<td>F(10,2)</td>
<td>F(10,81)</td>
<td>Wald chi2(10)</td>
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<td></td>
<td>= 80.19</td>
<td>= 15.82</td>
<td>= 1.18</td>
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<tr>
<td>Prob&gt; Chi2</td>
<td>Prob &gt; chi2</td>
<td>Prob &gt; F</td>
<td>Prob &gt; F</td>
<td>Prob &gt; chi2</td>
</tr>
<tr>
<td></td>
<td>= .0000</td>
<td>= .0609</td>
<td>= .3108</td>
<td>= .0000</td>
</tr>
</tbody>
</table>

Note 1) Panel: heteroskedastic, Correlations: common AR(1) coefficient for all panels (.1274)
Note 2) F test that all u_i=0, F(12, 81) = 1.18 Prob > F = 0.310
Note 3) Hausman test: under H_0: difference in coefficients in the fixed and random effects model are not systematic, Prob > Chi2 = 0.0862
Table 5  Consumer Satisfaction Index (CSI)

<table>
<thead>
<tr>
<th>Leadership Characteristics</th>
<th>Pooled Panel GLS</th>
<th>Between Regression</th>
<th>Fixed Effect (within)</th>
<th>Random Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Politicization of the Boards</td>
<td>-.0015 (0.0108)</td>
<td>-.0129 (0.0358)</td>
<td>.0001 (0.0094)</td>
<td>-.0029 (0.0135)</td>
</tr>
<tr>
<td>Chief Executive Succession</td>
<td>1.559 (1.160)</td>
<td>.0263 (1.925)</td>
<td>-.5986 (1.079)</td>
<td>1.293 (1.299)</td>
</tr>
<tr>
<td>Insider/Outsider</td>
<td>2.459 (1.813)</td>
<td>9.143* (2.450)</td>
<td>.0988 (1.553)</td>
<td>1.415 (1.927)</td>
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</table>

<table>
<thead>
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<th>Organizational Variables</th>
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</thead>
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<tr>
<td>Number of Employees</td>
<td>.0001 (0.0001)</td>
<td>.0002 (0.0001)</td>
<td>.0000 (0.0002)</td>
<td>.0002** (0.0001)</td>
</tr>
<tr>
<td>ln(Total Revenue)</td>
<td>-.5908 (0.4609)</td>
<td>-1.165* (0.3531)</td>
<td>4.647** (2.053)</td>
<td>-.8081* (0.4632)</td>
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<td>Organizational Age</td>
<td>.0203 (0.0499)</td>
<td>.0644 (0.0344)</td>
<td>2.686*** (0.6027)</td>
<td>.0173 (0.0564)</td>
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<tr>
<td>Government Funding</td>
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<td>.0448 (0.0354)</td>
<td>1.222*** (0.0364)</td>
<td>.0262 (0.0236)</td>
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<td>The Age of Union</td>
<td>.0185 (0.0435)</td>
<td>-.0758 (0.0727)</td>
<td>.2871 (0.5516)</td>
<td>.0139 (0.0540)</td>
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<table>
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<th>Contextual Variables</th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Presidential Change</td>
<td>13.625*** (1.141)</td>
<td>121.95 (44.493)</td>
<td>3.748** (1.435)</td>
<td>14.405*** (1.308)</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>-5.579*** (0.6316)</td>
<td>59.861 (27.185)</td>
<td>-1.956*** (0.6516)</td>
<td>-5.816*** (.7288)</td>
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<tr>
<td>Constants</td>
<td>91.682*** (8.064)</td>
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<td>-94.094*** (27.020)</td>
<td>95.475*** (8.669)</td>
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<table>
<thead>
<tr>
<th>Model Specifications</th>
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<td>Number of Groups</td>
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<td>13</td>
<td>13</td>
</tr>
<tr>
<td>R-Squared (overall)</td>
<td>-</td>
<td>.0349</td>
<td>.0584</td>
<td>.8067</td>
</tr>
<tr>
<td>Wald Chi2/ F</td>
<td>Wald chi2(10) = 419.49</td>
<td>F(10,2) = 16.63</td>
<td>F(10,80) = 86.26</td>
<td>Wald Chi2(10) = 384.00</td>
</tr>
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<td>Prob&gt; Chi2</td>
<td>Prob &gt; chi2 = .0000</td>
<td>Prob &gt; F = .0580</td>
<td>Prob &gt; F = .0000</td>
<td>Prob &gt; chi2 = .0000</td>
</tr>
</tbody>
</table>

Note 1) Panel: heteroskedastic, Correlations: common AR(1) coefficient for all panels (.0848)
Note 2) F test that all u_i=0, F(12, 81) =10.45  Prob > F = .0000
Note 3) Hausman test: under H_0: difference in coefficients in the fixed and random effects model are not systematic, Prob > Chi2 = .0000