

## POLICY AND GOVERNANCE

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Korea

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### **Abstract**

In South Korea, it has been widely known that an incumbent president allocates a disproportionately larger amount of intergovernmental transfers to regions with more loyal supporters. It has been also believed that despite a government change in 1997, this positive and linear relationship between support for an incumbent president and allocated public funds did not change. We show that neither is valid. Based on a formal model, we argue that an incumbent president allocates a larger amount not only in his own turf but also in his rival's and a smaller amount in regions where votes are divided more evenly between candidates. This quadratic relationship between vote and money is highly significant under the Kim Young Sam administration (1993--1997) but not significant during the Kim Dae Jung administration (1998--2002).

# Regionalism and Redistribution in South Korea\*

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## Abstract

In South Korea, it has been widely known that an incumbent president allocates a disproportionately larger amount of intergovernmental transfers to regions with more loyal supporters. It has been also believed that despite a government change in 1997, this positive and linear relationship between support for an incumbent president and allocated public funds did not change. We show that neither is valid. Based on a formal model, we argue that an incumbent president allocates a larger amount not only in his own turf but also in his rival's and a smaller amount in regions where votes are divided more evenly between candidates. This quadratic relationship between vote and money is highly significant under the Kim Young Sam administration (1993–1997) but not significant during the Kim Dae Jung administration (1998–2002).

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# 1 Introduction

Regionalism (i.e., persistent loyalty to a distinct region) is one of the most notable features that have brought a variety of political ramifications to Korean politics. Its paramount importance has been most vividly shown in post-democratization presidential elections, particularly in two rival regions—Jeonla provinces in the southwest and Gyeongsang provinces in the southeast. For example, in 1992, Kim Dae Jung, native of Jeonla region, gathered an overwhelming 89% of the Jeonla vote but mere 9% of the Gyeongsang vote. On the other hand, Kim Young Sam who was born in Gyeongsang region gathered 69% of the Gyeongsang vote but only 5% of the Jeonla vote. This situation did not change in the 1997 presidential election. While Kim Dae Jung garnered an astounding 93% of the Jeonla vote, Lee Hoi Chang, a successor of Kim Young Sam, received 60% of the Gyeongsang vote.<sup>1</sup> In fact, such regional affiliation or affinity to a particular political leader with the same regional background has been found to be the best predictor for Korean people’s voting behavior (Lee 1998*b*).

Not surprisingly, scholars of Korean politics and society have widely studied causes and consequences of such regionalism (Kim 1987; Kim 1990*a*; Kim 1990*b*; Moon 1990; Cho 2000). This article follows this line of research but examines a previously under-investigated question: How does regionalism, which is most clearly observed in Korean presidential elections, affect the geographical allocation of public resources?

Existing studies, without much empirical evidence, suggest how and why Korean presidents attempt to allocate government budget disproportionately across regions. First, many scholars shared a notion that regionalism essentially stemmed from geographically unequal economic growth between Jeonla provinces and Gyeongsang provinces. In reality, from the early 1960s to late 1990s, all the presidents came from Gyeongsang provinces, which allegedly became as the major beneficiaries of various economic policies under their rule. At the same time, Jeonla people’s frustration with their region’s relatively retarded economic development was translated into political opposition against the Gyeongsang regime (Kim 1987).<sup>2</sup> Second, as political regionalism rapidly replaced the pre-existing cleavage between democratization and anti-democratization camps and emerged as the foremost social cleavage in Korean politics, another group of scholars argue that presidential candidates saw geographically concentrated mobilization strategies as an expedient way to boost the chance for their election (Choi 1993; Sohn 1993; Moon 1992). For example, both Roh Tae Woo (1988–1992) and Kim Young Sam (1993–1997), natives of Gyeongsang

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<sup>1</sup>In the 1992 and 1997 elections, the top two candidates out of seven candidates received a total of 75% and 78% of votes, respectively. Therefore, a relative vote share of 60% in a particular region can be undoubtedly regarded as a high vote concentration.

<sup>2</sup>Hwang (1996, 119) argues that regionalism between these two regions should be differentiated. According to him, Gyeongsang people pursued “hegemonic regionalism” in that they attempted to prolong the Gyeongsang regime as long as possible, enjoying the various benefits from the regime. In contrast, Jeonla provinces, of which population size was smaller than that of Gyeongsang provinces, merely responded with “defensive regionalism,” because they passively escalated regionalism in accordance with Gyeongsang regionalism as a means to reduce economic and political discrimination under the Gyeongsang regime.

provinces, are said to have consistently implemented economic policies favoring their political hometown.

Under this circumstance, some scholars suggested that the only way to stop this vicious cycle of deteriorating regionalism and regionally uneven economic development was political leadership change (e.g., Hwang 1996). They thought that Kim Dae Jung, the long-time opposition leader, did not have any rational reason to re-verberate to regionalism because the number (not percentage) of loyal voters from his Jeonla region was not large enough to bring him a victory. In December 1997, the political landscape in Korea did, indeed, change dramatically when Kim Dae Jung won the presidential election, but this political change did not lead to weakening the long-established regional antagonism. Rather, even under the Kim Dae Jung government, public perceptions were growing that Jeonla provinces this time emerged as the major beneficiaries under the new regime in terms of redistributive policies as well as elite recruitment into government and business (Choi 1999).

In sum, Korean people, and scholars of Korean politics alike, believe that Korean incumbent presidents are under a great deal of political pressure to execute regionally biased economic policies favoring their hometown and that both Kim Young Sam and Kim Dae Jung were not exception to this. To the best of our knowledge, however, no scholar has empirically tested the validity of these shared beliefs using budgetary and electoral data.

A primal objective of this article is to empirically investigate this alleged relationship between regionalism and redistribution in South Korea. Through this investigation, we also intend to make a contribution to the comparative literature of distributive politics. For decades, a number of political scientists and economists have examined how politics distorts outcomes of distributive policy—governmental expenditures for geographically concentrated public projects or programs, such as “rivers and harbors” (Ferejohn 1974), roads, land and resource programs, and educational services. Based on formal models and empirical data from the United States, Europe, Russia, Australia and Japan,<sup>3</sup> they have found that distributive policy is shaped by not only equity and efficiency consideration but also various political and institutional factors. These previous studies tend to examine how a winning party or party coalition in a legislature allocates public funds and/or how individual legislators compete in bringing funds and projects back to their constituencies.<sup>4</sup> The Korean case allows us to examine how another important political actor—president—strategically manipulates the budget allocation for his political objectives. The head of administration, if elected by popular vote, may have differ-

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<sup>3</sup>For formal theoretical models, see Cox and McCubbins (1986), Dixit and Londregan (1995, 1996, 1998), Fiorina (1981), Grossman (1994), Lindbeck and Weibull (1987), Niou and Ordeshook (1985), Shepsle and Weingast (1981), Weingast (1979), and Weingast, Shepsle and Johnsen (1981). For empirically studies, see Balla, Lawrence, Maltzman and Sigelman (2002), Bungey, Grossman and Kenyon (1991), Carsey and Rundquist (1999*a*, 1999*b*), Case (2001), Choi, Turner and Volden (2002), Cingranelli (1981), Dahlberg and Johansson (2002), Duffin (1999), Grossman (1994), Hird (1991), Horiuchi and Saito (2003), Johansson (2003), Lee (1998*a*, 2000), Levitt and Snyder (1995), Meyer and Naka (1998, 1999), McGillivray (1997), Rich (1989), Rundquist, Lee and Rhee (1996), Stein and Bickers (1994), Treisman (1996), Worthington and Dollery (1998), and Wright (1974).

<sup>4</sup>Exceptions are Fitts and Inman (1992), McCarty (2000) and Mebane and Wawro (2002), which examine presidential influences on fiscal policy.

ent incentives from leaders and backbenchers in the legislative branch of government. Hence, we highlight that examining the Korean case gives us new insights into relationships between distributive politics and political institutions (e.g., Persson and Tabellini 2000, 2003, 2004a, 2004b).

Our argument and finding using this theoretically and country-specifically important case of Korea can be summarized as follows. First, based on a formal model, we argue that *an incumbent president allocates a larger amount not only in his own turf but also in his rival's and a smaller amount in regions where votes are divided more evenly between candidates*. An emphasis should be added that this quadratic relationship between vote and money is not only inconsistent with the common belief among Korean people but also, as we discuss later, counter-intuitive for comparativists and Americanists studying legislative influences on distributive policy. Second, using municipality-level political, economic, and demographic data, we show that this non-linear effect is highly significant during the Kim Young Sam regime but not significant during the Kim Dae Jung regime. This result suggests that there exist some systematic differences between two administrations with regard to budget-making processes. This is also against the commonly shared notion.

In what follows, Section 2 reviews existing models of distributive politics, discuss their limitations in explaining the Korean case, and develop an alternative formal model. We explain data and variables used in our regression analysis in Section 3. After showing and discussing our findings in Section 4, the last section concludes with a discussion of broader implications.

## 2 Models

Welfare economists traditionally argued that a government decides distributive policy on the basis of *equity* and *efficiency* considerations (e.g., Break 1980; Ladd 1990; Oates 1972). They argue that a welfare-maximizing government allocates grants across subnational governments to correct for externalities or to support subnational governments that are especially in need. This explanation was, however, empirically questioned by Arrington (1969, 1970) who found that loans and expenditures for the period 1933–1939 in the United States were directed in favor of states with *higher* income. Since Arrington's earlier findings, many economists and political scientists have shown that politics does, indeed, matter in shaping the allocation of public resources. In this section, we first briefly review existing models and discuss their limitations in explaining the allocation strategy for a president in the context of Korean politics. Then, we develop an alternative formal model.

### 2.1 Existing Models

Existing models of distributive politics can be roughly categorized into the following two models. The first model, which we call a “discrete-allocation” model, is presented by economists and political scientists, including Dixit and Londregan (1995, 1996, 1998), Lindbeck and Weibull (1987), Stein and Bickers (1994), and more recently Dahlberg and Johansson (2002). It assumes that a winning party or

party coalition in a legislature acts as a unitary actor and has authority and capability to manipulate distributive policy in order to maximize the number of seats or the probability of keeping the majority of seats in a legislature. The party's allocation strategy may be different depending on their objectives and there exist two competing hypotheses. Some argue that the ruling party allocates a disproportionately larger amount of grants to districts with many "swing" voters, or "marginal" districts (e.g., Dixit and Londregan 1995, 1996, 1998; Lindbeck and Weibull 1987; Stein and Bickers 1994). Others argue that the party allocates a disproportionately larger amount of grants to districts with their own supporters, or "safe" districts (e.g., Cox and McCubbins 1986, 1993; Lee 2000; Levitt and Snyder 1995).

The second model, which we call a "free-competition" model, focuses on decisions not of political parties but of individual politicians. It implicitly or explicitly assumes that policy outcomes are shaped by free competition among individual politicians, or their rent-seeking competition. There are many hypotheses derived from this model, but they can be roughly categorized into the following two competing hypotheses. The first one is the "universalism" hypothesis, which was proposed and supported by many famous American political scientists, such as Fenno (1966, 1973), Ferejohn (1974), Mayhew (1974), and Weingast (1979). They claim, "Every member, regardless of party or seniority, has a right to his share of benefits" (Mayhew 1974, 88). Weingast (1979) even states that this is a "congressional norm." Others scholars, however, presented empirical findings not necessarily supporting this universalism hypothesis. They argue that some particular legislators, such as particular committee members, committee chairs, senior politicians, and legislators representing small districts, have an advantage in securing benefits for their districts (e.g., Carsey and Rundquist 1999*b*; Munson 1993; Lee 1998*b*; Lee and Oppenheimer 1999; Rundquist, Lee and Rhee 1996; Weingast and Marshall 1988).

These two broadly categorized models of distributive politics have *logical* limitations in explaining a Korean president's strategic decision to allocate public resources. Most importantly, in the context of Korean presidential elections, in which there is no district, a presidential candidate only needs to maximize the *total* number of votes aggregated at the national level in order to win a single seat—the presidency. There are "regions" and "precincts" for the purpose of counting votes but, unlike districts, not for the purpose of mechanically transforming votes into the seat. Hence, there is, by definition, neither "marginal" nor "safe" districts under the Korean presidential system. To put it differently, a decision problem that any incumbent president must solve is analogous to how an individual politician *within his own district* (e.g., a mayor within a municipality, a governor within a state, a representative within a single-seat district, etc.) allocates campaign resources or other public resources for electoral purposes.

Another related logical limitation in the existing models is that they assume the existence of many political actors; namely, legislators. A ruling party leader may seek to maximize the number of politicians from his camp, whereas individual politicians may seek to maximize their chance of winning a seat. Needless to say, this assumption is necessary in modeling legislative influences on budget-making, but not in modeling the president's political influence. If a president is elected

under an electoral college system, the president must consider competition at each district/state and may manipulate public resources to obtain a sufficient number of electors (Strömberg 2003). In this case, some of the existing models that examine party leaders' decision problems may be partly valid. To explain the president's decisions in South Korea, however, we need to present an alternative model, in which a single decision maker maximizes his own utility without considering any sub-unit competition.

## 2.2 An Alternative Model

Based on rational-choice framework, recent studies argue that Korean regionalism is essentially an outcome of dynamic interactions between presidents and voters (Cho 1997; Kang 2000). They also contend that regionalism and economic outcomes (i.e., redistributive policies) are intricately intertwined with each other (Cho 1997; Kim 1997; Lee 1998*b*). Following these studies, we formally present how regionalism affects the president's decision to allocate intergovernmental transfers.

Let us assume a simple two-region model with the two regions having the same constituency size. The amount of intergovernmental fiscal transfers for public projects and services to Region  $i$  is  $Y_i$  where  $Y_1 + Y_2 = 1$ . An incumbent president decides how to allocate the budget in these two regions for electoral objectives. The utility of allocating  $Y_i$  to Region  $i$  is  $U_i$ , which can be regarded as an expected vote share in Region  $i$  in the upcoming election. Since an incumbent president cannot seek reelection in South Korea, this expected vote share is considered one for his successor from the same party/region. A number of political scandals and imprisonment of ex-presidents and their sons, indeed, suggest that presidents have incentives to help their followers (both presidential candidates and parliamentarians from their own party) win the election.<sup>5</sup> This assumption is consistent with findings from some existing studies. For examples, Besley and Case (2003) and Persson and Tabellini (2003) argue that governors in the U.S. states tend to tax and spend more during their last terms. Unchecked governors, as well as unchecked presidents, are more likely to abuse their power for self-interests.

The president maximizes  $U = U_1 + U_2$  subject to the budget constraint. As discussed above, if a president is elected under an electoral college system, the president's total utility should be a weighted sum where the weight is a function of each state/district's strategic importance. For example, the weight may be higher in more competitive (i.e., "marginal") states/districts. In the case of Korean presidential elections, however, we only need to assume an unweighted sum because any presidential candidate in South Korea seeks to obtain the largest votes aggregated at the national level.

Accordingly, we specify the following simple utility function for the president:

$$\begin{aligned} U &= U_1 + U_2 \\ &= \sum_{i=1}^2 \{ \ln \alpha_i + \beta_i \ln Y_i + (1 - \beta_i) \ln(1 - Y_i) \} \end{aligned} \quad (1)$$

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<sup>5</sup>Roh Tae Woo and Chun Doo Hwan went to jail. The sons of Kim Young Sam and Kim Dae Jung were also put into jail.



The marginal effect of allocating additional dollar to Region  $i$  is  $\beta_i > 0$ , whereas the marginal effect of taking additional dollar away from Region  $i$  is  $1 - \beta_i < 0$ . Under this specification, an increase in  $Y_i$  both increases and decreases the president's utility through two parameters: it increases  $U$  through parameters  $\beta_i$  and  $1 - \beta_j$  but decreases  $U$  through parameters  $1 - \beta_i$  and  $\beta_j$  where  $i \neq j$ . The different parameters in two regions bring about the difference in the amount allocated to the regions. If  $\beta_1 = \beta_2$ , the president allocates the same amount to these regions.

What is particularly important in our specification is the *negative* marginal effect,  $(1 - \beta_i) < 0$ . Adding this effect in the model implies that voters punish the incumbent if he directs resources to other regions. Thus, voters are assumed to be concerned not about the *absolute* level but the *relative* level of benefits they receive. This assumption sounds valid, as Korean voters are said to take into account their region's economic condition in relative terms. That is, when their region's economic performance is worse compared to that of the entire country, they tend to vote less for the incumbent president. This tendency seems to be more pronounced in Jeolla and Gyeongsang provinces than any other regions in Korea (Kollman, Lee and Park 2003).

The incumbent president solves the maximization problem. The first-order condition can be deduced as follow.<sup>6</sup>

$$Y_i^* = \frac{\beta_1 - \beta_2 + 1}{2} \quad (2)$$

Now we impose another assumption that  $\beta_i$  is a decreasing function of the current level of support for the incumbent president,  $X_i$ .

$$\beta_i = 1 + \frac{1}{X_i} \quad (3)$$

where  $0 < X_i < 1$ . If voters in Region  $i$  strongly support the president, the president's marginal benefit of allocating additional dollar to Region  $i$  is relatively small. This is simply because the level of support is upper-bounded. But the president's marginal cost of directing additional dollar away from such a highly supportive region gets larger, if he strips money from loyal supporters.

By substituting (3) to (2) and taking a derivative of  $Y^*$  with respect to  $X_i$ , we can deduce the following:

$$\frac{dY_i^*}{dX_i} > 0 \Leftrightarrow X_i^2 > 1 - X_i^2 \quad (4)$$

$$\frac{dY_i^*}{dX_i} < 0 \Leftrightarrow X_i^2 < 1 - X_i^2 \quad (5)$$

They suggest that the correlation between the optimal amount allocated to Region  $i$  and the current level of support for the incumbent president can be positive or negative. On the one hand, the *higher* the level of support for the president than a cut-point level (in our model,  $X_i^c = 0.5$ ), the *higher* the amount of intergovernmental

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<sup>6</sup>In order for this equilibrium to be interior, the following condition should be also satisfied:  $-1 < \beta_2 - \beta_1 < 1$ . As long as this condition is met, the second-order condition is also satisfied.

transfers a rational incumbent president allocates. On the other hand, the *lower* the level of support than the cut-point level, the *higher* the amount allocated.

It is worth emphasizing that this hypothesis is different from the conventional view in the literature of Korean politics, which states that only regions with loyal supporters receive a disproportionately larger amount of public resources. It is also worth noting that the above theoretical prediction has never been deduced when modeling legislative influences on distributive policy. Rather, some exiting studies present an opposite view: a disproportionately larger amount is allocated to districts where candidates divide votes relatively evenly. We argue that this difference is derived from a critical assumption in our model that there is no district and a single decision-maker makes a decision without considering any sub-unit competition.

To test the validity of our model, we set the following regression equation:

$$\ln Y_i = \beta_0 - \beta_1 X_i + \beta_2 X_i^2 + \beta_3 Z_i + \epsilon_i \quad (6)$$

$Y_i$  is the total transfers per capita from the central government to municipality  $i$  in a given fiscal year.  $X_i$  is the vote share of a winning candidate, in municipality  $i$ , in the most recent presidential election.  $Z_i$  and  $\epsilon_i$  are a set of control variables and a disturbance term, respectively. Our formal model suggests that the effect of support for the incumbent president (measured by the vote share in the most recent election) on the total transfers is negative ( $-\beta_1 < 0$ ), but the effect of its quadratic term is positive ( $\beta_2 > 0$ ). We first run a cross-sectional OLS regression for each budget compiled by Kim Young Sam and Kim Dae Jung, and examine whether there is any parametric difference between fiscal years and between the two administrations. Then, we run a panel regression for a set of budgets prepared by each president.

### 3 Data and Variables

During the period of investigation, South Korea experienced a number of municipal mergers and divisions. In order to have a stable frame of reference, which allows us to examine inter-temporal differences in distributive policies, we used a fixed set of municipality codes and aggregated data for each code.<sup>7</sup> As a result, the total number of observations is 216 for each fiscal year.

The dependent variable is the total transfers per capita (in log).<sup>8</sup> Following the existing studies (Ansolabehere, Gerber and Snyder 2002, 769; Horiuchi and Saito 2003, 674-5), we use total transfers rather than program-specific or type-specific

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<sup>7</sup>A post-merger municipality code or a pre-division municipality code is used for all municipalities that experienced re-organizations. A special case is City of Ulsan, which experienced both mergers and divisions. All municipalities included in City of Ulsan before or after municipal re-organizations are assigned a single code.

<sup>8</sup>All local financial data used in this article are from *Annual Report of Local Finance* (1992-2002), the official documents published by the Ministry of Government Administration and Home Affairs, Korea. Population statistics are from *Population and Housing Census Report* (1990, 1995 and 2000) published by Korean National Statistical Office. For each fiscal year, we used observed most recent Census data, instead of linearly interpolated or extrapolated one.

(i.e., either formulaic or non-formulaic) transfers. More specifically, they include *Gukko Bojogeum* (National Subsidy), *Jibang Gyobuse* (Local Allocation Tax) and *Jibang Yangyeogeum* (Local Transfer Tax). It is worth emphasizing that the data we employ are draft budgets, rather than account settlements. Such data are highly useful in detecting political bias in budget-making, because they are free from supplementary budgets, which are typically compiled during a fiscal year according to various political and apolitical changes.

The key independent variable is the vote share and its squared term of the winner in the most recent presidential election.<sup>9</sup> The relevant presidential elections were held in December 1992 and December 1997 and Kim Young Sam and Kim Dae Jung were elected, respectively. Kim Young Sam was expected to exercise influence on budget-making in from 1994 to 1998 budgets, whereas Kim Dae Jung from 1999 to 2003 budgets.<sup>10</sup>

Besides the winning president's vote share, there are other factors that may affect the geographical allocation of subsidies. To cope with omitted variable biases and to capture other formulaic and non-formulaic determinants of total transfers, we include a set of control variables. The variables included in our analysis are fiscal independency index, population density (in log), the ratio of population over 65, the agriculture workers per capita (in log), the manufacturing workers per capita (in log), and a dummy variable for Seoul.<sup>11</sup> Since the effects of these control variables are not our main focus, in a later section, we do not make any substantive interpretation of them.

We here need to explain why we omit variables measuring legislative competition and influence. This is because, as Park (2003) argues with empirical data, there exists firmly established executive dominance over the legislature in the budget-making process. Although democratization was expected to bring a fundamental change to executive-legislative relationship, the National Assembly has thus far failed to increase its influence vis-à-vis the executive during the budgetary process for various reasons. First, intense inter-party conflicts, which often created political paralysis in legislative processes during Kim Young Sam and Kim Dae Jung periods, seriously harmed its ability to check the executive. The opposition party frequently uses budget review as political bargaining chip in dealing with the ruling party by postponing the passage until the last moment designated by the law. With this backdrop, the legislative members are not given sufficient amount of time and resources to make thorough budgetary reviews.

Second, the imposition of strong party discipline also hinders both ruling and opposition parties from undergoing effective budgetary reviews. Individual legisla-

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<sup>9</sup>Election data are available at Election Information System, National Election Commission, <http://home.nec.go.kr:7070/sinfo/sinfo.htm>.

<sup>10</sup>The 2003 budget data were unavailable as of writing this draft.

<sup>11</sup>As Korea's local finance system is quite similar to the one in Japan, in choosing these variables, we referred to Horiuchi and Saito's (2003) comprehensive list of variables used in analyzing the determinants of total transfers in Japan. Some variables used in Horiuchi and Saito are dropped in our analysis due to data limitation or logical irrelevance. See Footnote 3 for data sources. We also used *100 Indicators on Municipalities 2000* [Si, gun, gu baekdae jipyo 2000] published by Korean National Statistical Office for industry data.

tive members' party loyalty is not geared toward party ideology or platform but toward particular political leaders, because their political career such as party nomination for the next election is largely determined by these leaders or their personal organizations (Kim 2000). Thus, legislative members have fewer incentives to cultivate policy expertise related to budgetary matters. As a consequence, the National Assembly usually makes just slight modifications of the executive's original budget proposal, as evidenced in the cases of Kim Young Sam and Kim Dae Jung administrations in which the net changes made by the legislature never exceeded 1 percent of the proposed budget (Park 2003).

## 4 Results

Tables 1 and 2 show the results of cross-sectional regressions using data during the Kim Young Sam administration (i.e., FY1994 to FY1998) and the Kim Dae Jung administration (i.e., FY1999 to FY2002). The R-square statistics range from 0.931 to 0.968, which suggest that our regression equation fits data extraordinarily well. In all regressions, the winning president's vote share has a *negative* effect on total transfers, whereas its squared term has a *positive* effect. The signs of these coefficients are consistent with drawn from our formal model.

We should, however, note that the magnitudes of the coefficients are relatively stable *within* each period but markedly different *between* the periods. During the Kim Young Sam period, the coefficients for the vote share range from -1.693 to -1.262, while they range from -0.409 to -0.030 during the Kim Dae Jung period. The coefficients for the quadratic term range from 1.416 to 1.805 during the former, while they range from 0.218 to 0.579 during the latter. More importantly, these two key independent variables are significant only during the Kim Young Sam period.

We also ran regressions using panel data, and found similar results.<sup>12</sup> The results are shown in Table 3. The R-square statistics are very high, 0.974 for 1995-1998 data and 0.950 for 1999-2002 data. The coefficients of the winner's vote share are negative and the coefficients of its quadratic term are positive in both periods. But the magnitudes of their effects are larger under the Kim Young Sam administration, and these coefficients are significant only during Kim Young Sam period.

To visually interpret the effects of the winner's vote share on total transfers, we did post-estimation analysis. The results are shown in Figure 1. The vertical axis of each panel is the predicted value of the dependent variable. A dot and a vertical line indicate the mean and 95% confidence interval of prediction for a given value of the winner's vote share. The prediction is based on the coefficient estimates of panel regressions and the means of all variables except the winner's vote share and its quadratic term.<sup>13</sup> Both panels show the quadratic relationship between the per capita transfers and the winner's vote share, but the line connected by dots are more curvilinear during the Kim Young Sam period. This figure, in

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<sup>12</sup>In panel regressions, we added a lagged dependent variable to control time-series effects and a set of year dummies to control year-specific effects (See Beck and Katz 1995, 2004).

<sup>13</sup>We used software called Clarify developed by Tomz, Wittenberg and King (2001). For technical and theoretical details, see King, Tomz and Wittenberg (2000).

accordance with regression results, show that Kim Young Sam, as predicted by our formal model, distributed a disproportionately larger amount of transfers to regions with strong *and* weak support. However, this relationship is not confirmed after the government change in 1997.

Then, the remaining question is why the effect of the winner's vote share on total transfers is different between the two periods. There are some plausible explanations. First, Kim Young Sam and Kim Dae Jung were politicians of different kinds. Kim Dae Jung did not fully understand how to manipulate budget for his political purposes, or did not want to intensify regionally-biased budget allocation that had aggravated regional antagonism and unbalanced economic growth. Second, they were politicians of the same kind, but as the long-time opposition leader, Kim Dae Jung might have faced political and institutional inertia. These obstacles made it difficult for him to reverse budget making practices that had existed for a long time under Kyeongsang-native presidents. Third, there were some macro-level structural factors that forced the two presidents to take different spending strategies. The possible candidate for such macro-level factor is the 1997 Asian financial crisis. After the crisis, the Korean government was forced to drastically increase budget related to welfare and social safety net. Under the tight budget constraints, Kim Dae Jung government had less room for employing redistributive policies favoring certain regions.

Examining what caused the difference in estimates is highly important to understand dynamics of Korean politics. It is equally important for us to find how to improve our theoretical model. But we leave a further inquiry for our next research. For the purpose of this paper, what is important is our finding that the "two Kims" did not allocate total transfers in a similar manner. This is contrary to the conventional wisdom.

## 5 Conclusion

Let us summarize our findings. In South Korea, it has been widely believed that an incumbent president allocates a disproportionately larger amount of intergovernmental transfers to regions with more loyal supporters. It has been also believed that despite a government change in 1997, this positive and linear relationship between support for an incumbent president and allocated public funds did not change. We showed that neither is valid. Based on a formal model, we argued that an incumbent president allocates a larger amount not only in his own turf but also in his rival's and a smaller amount in regions where votes are divided more evenly between candidates. This quadratic relationship between vote and money is highly significant under the Kim Young Sam administration (1993–1997) but not significant during the Kim Dae Jung administration (1998–2003).

There are several implications that arise from this study. First, numerous studies on economic policy-making in Korea have argued that, during the high growth period, the Korean government's politically neutral intervention in the economy was the key to its continued economic development. This contention was based on the assumption that the bureaucracy was effectively insulated from societal and

political pressure (Johnson 1987; Amsden 1989). In line with this, most studies have attempted to find a specific institutional arrangement that spearheaded economic development in Korea (Evans 1995; Fields 1997; Weiss 2000). However, by placing exclusive emphasis on industrial and macroeconomic policy, they largely neglected to explore redistributive policies that are inherently more political.<sup>14</sup>

Our study provides an important correction to this conventional wisdom by demonstrating that Korean presidents, at least Kim Young Sam, interfered with economic policy-making for their own political benefits. More broadly, this study suggests that in order to reach a more accurate understanding of economic policy-making in Korea, it is necessary to incorporate larger political environments such as regional cleavages, the nature of political coalition, and executive-legislative relations into the analysis.

Second, another implication of this study is related to the issue of democratic consolidation. Since its democratic transition, Korea has suffered from “crisis of success” in the consolidating stage (Kim 2000). And rampant regionalism has been identified as one of the most serious factors that procrastinated the development of democracy in Korea. This study offers a more nuanced interpretation of Korean regionalism. That is, as electoral pressure rises in the post-democratization era, political leaders (including presidents) have more incentives to utilize regionalism for their political objectives. Although more in-depth research is necessary on this topic, given that electoral competition has intensified since the 1990s, regionalism in Korea is not likely to decline at least in the short term. This may lead to the continued political bias of redistributive policy. Moreover, the legislative branch’s inability to counter-balance Korean presidents over budgetary matters may prolong the political bias of budget allocation in Korea. And this ultimately poses a challenging task to the consolidation of democracy in Korea.

Finally, as we have already argued, our study has a broader theoretical implication that institutions do matter in shaping economic policy. Previous studies on distributive politics focused on influences of individual legislators and/or political parties. Our study using Korea as a case shows that the patterns of distributive politics are likely to be different depending on the types of political system used in a country (i.e., parliamentary or presidential) and depending on which political actors have institutional power in deciding the budget allocation. A recent series of cross-national studies by Persson and Tabellini (2000, 2003, 2004*a*, 2004*b*) show the importance of political institutions on policy-making. It will be more desirable if these cross-national studies are combined with country-specific studies with rich interpretations. Moreover, further investigation of not only *whether* but also *how* politics distorts distributive policy under a set of political institutions is highly suggestive for citizens and politicians who seek better governance and economic performance of their country.

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<sup>14</sup>Of course, recently, a few studies began to shed light to the primacy of politics, focusing on the nature of political leadership and ideological foundation of economic policies (Moon 1999; Kang 2002). But they failed to systematically examine the presidential effects on redistributive policy in Korea.

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Independent Variables	1994	1995	1996	1997	1998
Kim Young Sam's Vote Share	-1.262 (0.681)	-1.451 (0.660)	-1.561 (0.657)	-1.693 (0.620)	-1.300 (0.621)
Kim Young Sam's Vote Share (sq.)	1.177 (0.786)	1.523 (0.772)	1.661 (0.770)	1.805 (0.719)	1.416 (0.717)
Fiscal Independency Index	0.007 (0.004)	-0.005 (0.004)	-0.007 (0.004)	-0.002 (0.003)	-0.006 (0.003)
Population Density (in log)	-0.669 (0.055)	-0.652 (0.053)	-0.675 (0.057)	-0.699 (0.059)	-0.598 (0.056)
65+ Population Ratio (in log)	0.661 (0.203)	0.581 (0.180)	0.545 (0.181)	0.532 (0.178)	0.575 (0.183)
Agriculture Workers Per Capita (in log)	-0.007 (0.024)	0.015 (0.027)	-0.012 (0.034)	-0.025 (0.035)	0.025 (0.027)
Manufacturing Workers Per Capita (in log)	-0.072 (0.053)	-0.026 (0.051)	-0.012 (0.051)	-0.065 (0.041)	-0.041 (0.044)
Seoul Dummy	-2.403 (0.159)	-0.944 (0.153)	-1.098 (0.188)	-1.274 (0.188)	-2.248 (0.140)
Constant	3.684 (0.476)	4.133 (0.334)	4.494 (0.351)	4.388 (0.312)	4.167 (0.347)
F(8,207)	1,194	1,118	761	741	1,163
R-squared	0.942	0.931	0.932	0.937	0.950
Root MSE	0.517	0.531	0.528	0.507	0.501

*Note:* The dependent variable is the total transfer per capita (in log). The numbers in parentheses are robust standard errors. The number of observations is 216.

Table 1: Cross-Sectional Regression, 1994-1998

Independent Variables	1999	2000	2001	2002
Kim Dae Jung's Vote Share	-0.409 (0.506)	-0.030 (0.527)	-0.232 (0.527)	-0.134 (0.592)
Kim Dae Jung's Vote Share (sq.)	0.579 (0.490)	0.218 (0.502)	0.380 (0.500)	0.294 (0.560)
Fiscal Independency Index	-0.009 (0.003)	-0.007 (0.003)	-0.012 (0.003)	-0.014 (0.004)
Population Density (in log)	-0.504 (0.045)	-0.478 (0.043)	-0.462 (0.048)	-0.475 (0.048)
65+ Population Ratio (in log)	0.474 (0.146)	0.528 (0.132)	0.310 (0.201)	0.248 (0.183)
Agriculture Workers Per Capita (in log)	0.008 (0.023)	0.029 (0.027)	0.044 (0.049)	0.041 (0.034)
Manufacturing Workers Per Capita (in log)	-0.027 (0.038)	-0.065 (0.041)	-0.074 (0.042)	-0.084 (0.046)
Seoul Dummy	-3.027 (0.114)	-3.684 (0.130)	-3.838 (0.274)	-0.954 (0.201)
Constant	3.300 (0.319)	3.135 (0.297)	2.907 (0.457)	3.001 (0.425)
F(8,207)	1,682	1,981	964	420
R-squared	0.965	0.968	0.962	0.924
Root MSE	0.406	0.415	0.455	0.469

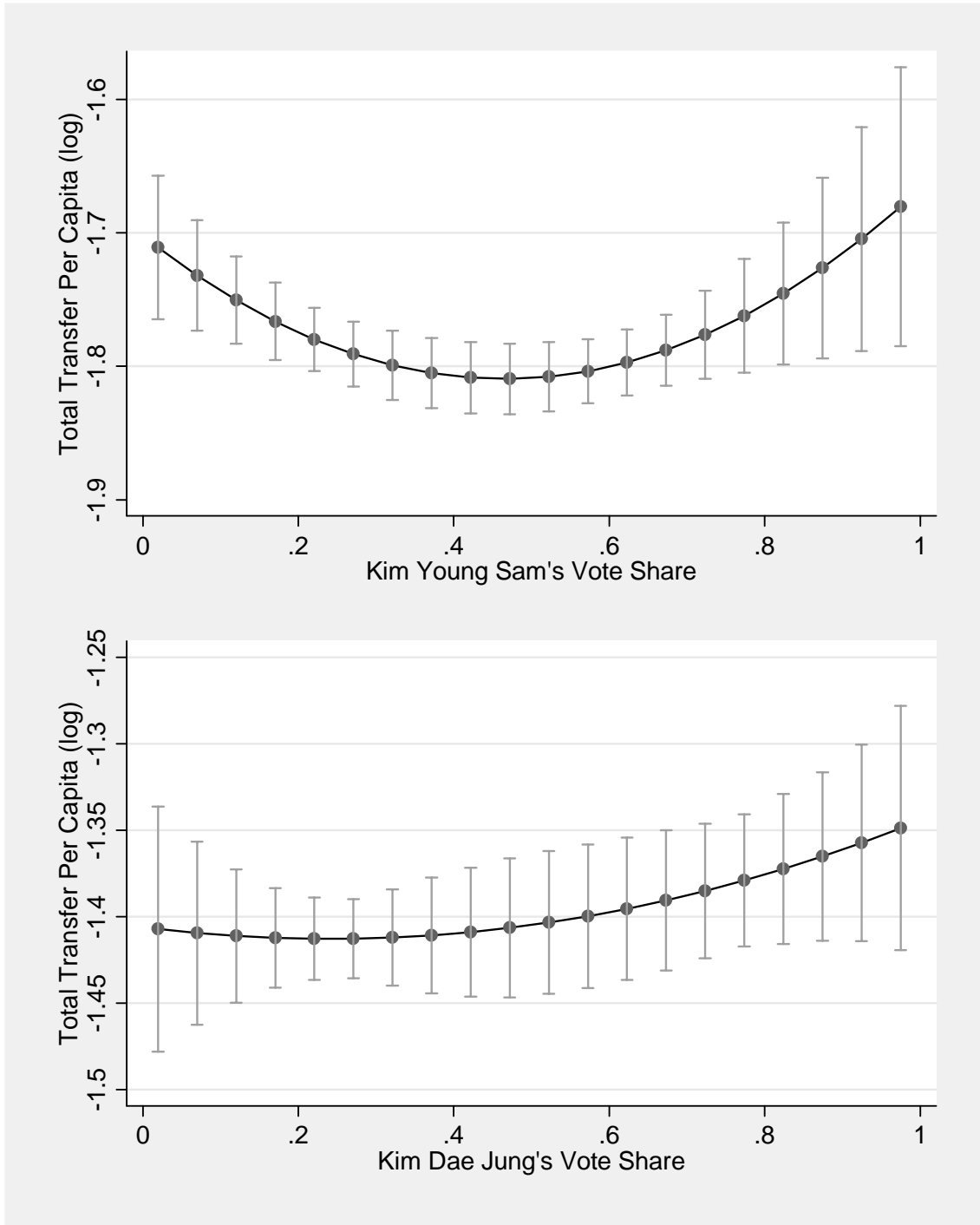
*Note:* The dependent variable is the total transfer per capita (in log). The numbers in parentheses are clustered robust standard errors. The number of observations is 216.

Table 2: Cross-Sectional Regression, 1999-2002

Independent Variables	1995-1998	1999-2002
Total Transfer Per Capita (in log, lagged)	0.754 (0.039)	0.600 (0.050)
Winner's Vote Share	-0.462 (0.159)	-0.057 (0.205)
Winner's Vote Share (squared)	0.497 (0.184)	0.118 (0.195)
Fiscal Independency Index	-0.003 (0.001)	-0.006 (0.001)
Population Density (in log)	-0.160 (0.030)	-0.162 (0.032)
65+ Population Ratio (in log)	0.184 (0.055)	0.127 (0.065)
Agriculture Workers Per Capita (in log)	-0.006 (0.008)	0.017 (0.011)
Manufacturing Workers Per Capita (in log)	-0.007 (0.012)	-0.035 (0.015)
Seoul Dummy	-0.336 (0.057)	-0.954 (0.165)
1996, 1999	-0.048 (0.036)	-0.497 (0.071)
1997, 2000	-0.017 (0.044)	-0.393 (0.082)
1998, 2001	-0.234 (0.046)	-0.321 (0.076)
Constant	1.444 (0.180)	1.408 (0.251)
F(12,215)	9,206	7,830
R-squared	0.974	0.950
Root MSE	0.333	0.478

*Note:* The dependent variable is the total transfer per capita (in log). The numbers in parentheses are robust standard errors. The number of observations is 864.

Table 3: Panel Regression



Note: Each dot and vertical line indicate the mean and 95% confidence interval of prediction.

Figure 1: Predicted Marginal Effects of Vote Share on Total Transfers