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# POLITICAL INSTITUTIONS AND DISTRIBUTIVE POLITICS IN JAPAN: GETTING ALONG WITH THE OPPOSITION

Yusaku Horiuchi



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Politics in Japan:  
Getting Along with the Opposition**

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# POLITICAL INSTITUTIONS AND DISTRIBUTIVE POLITICS IN JAPAN: GETTING ALONG WITH THE OPPOSITION

This paper analyses distributive policy-making in Japan using a natural experimental situation from August 1993 to March 1995. During this period, the partisan make-up of the ruling coalition in the Lower House dramatically changed without dissolution of the House. By comparing FY1994 and FY1995 budgets compiled by two different coalition governments, we can control for incumbent-specific strengths to influence pork-barreling and can focus on how each district's representation in the ruling coalition affects the geographical allocation of public expenditures. The result shows the *negative* effect of the ruling coalition's seat share on per capita transfers. We argue that this is a logically consistent consequence under incentive mechanisms produced by Japan's political institutions. The ruling coalition had an incentive to buy the support or acquiescence of opposition members in order to assure smooth operation in the legislative process.

## Introduction

This paper analyses distributive policy-making in Japan using a natural experimental situation from August 1993 (the beginning of FY1994 budget review) to March 1995 (the Diet approval of FY1995 budget). During this period, the FY1994 and FY1995 budgets were compiled and given Diet approval under two different governments—the FY1994 budget by the coalition *excluding* the largest political party in Japan, the Liberal Democratic Party (LDP), while the FY1995 budget by the coalitions *including* the LDP.<sup>1</sup> Because this major change in the partisan make-up of the ruling coalition occurred without dissolution of the Lower House, those who were taking legislative seats in each district did not change.<sup>2</sup> (See Table 1 for an illustrative example.) As a result, by comparing the two budgets compiled during this period, we can control for those incumbent-specific strengths (that is, skills, resources and connections) that influence pork-barreling, which is an important but often immeasurable determinant in Japan and elsewhere, and focus on how each district's representation in the ruling coalition affects the geographical allocation of public expenditures. The results show an intriguing pattern: the *negative* effect of the ruling coalition's seat share on per capita transfers.

**Table 1** An example – Okinawa district

Name of incumbent	Party	In the non-LDP coalition when FY1994 budget was compiled/passed?	In the LDP coalition when FY1995 budget was compiled/passed?
J. Nishime	LDP		✓
S. Nakamura	NLP	✓	
K. Uehara	JSP	✓	✓
S. Furugen	JCP		
M. Miyasato	LDP		✓

*Note:* An example from the Okinawa district with five seats: LDP = Liberal Democratic Party, NLP = New Life Party, JSP = Japan Socialist Party, JCP = Japan Communist Party.

As we argue in the section on an alternative model, this is a logically consistent consequence under incentive mechanisms produced by Japan's political institutions. Specifically, under Japan's electoral system used during the period of investigation (the single non-transferable vote system, or SNTV),<sup>3</sup> the ruling coalition had an incentive to buy the support or acquiescence of opposition members in order to assure the smooth operation of the legislative process. Scholars of Japan's legislative politics (for example, Mochizuki 1982) have argued for the existence of such politics of collusion in Japan, known as *Kokutai Seiji*—politics conducted through back-room dealing among each party's (informal) Diet Affairs Committee (*Kokkai Taisaku Inikai*, or *Kokutai*). This paper presents empirical evidence for a distributive consequence of *Kokutai Seiji* in Japan.

To avoid confusion, we should note in advance that our empirical findings do not necessarily mean that opposition-party members actually received more benefits than ruling-party members under the SNTV system. As we argue in this paper, how much each legislator can share distributive benefits is a function of two factors—his/her personal attributes and whether his/her party is in the ruling coalition. Our empirical findings show the marginal effect of the latter factor on intergovernmental transfers, *when holding the former factor constant*. If ruling-party members have more advantageous personal attributes (such as strong connections to interest groups and bureaucrats) that help them extract benefits from the government in large amounts, then, in contrast, opposition-party members should receive similar benefits in comparatively small amounts.



It is, however, not our purpose here to discuss who gets more. Rather, by focusing on Japan's natural experimental situation, we aim to shed light on how much representation in the ruling coalition matters in distributive policy outcomes. It may be commonly argued that political parties in power take an initiative in policy making and monopolise distributive benefits. Political scientists, however, have argued that various forms of collusion or cooperation exist within a legislature by using various concepts, such as *universalism* (for example, Weingast 1979), *consociationalism* (for example, Lijphart 1968), *solidarity* (for example, Key 1949), and *logrolling* (for example, Buchanan and Tullock 1962). Do ruling parties indeed have an incentive to collude with the opposition? If they do, under what conditions do they collude and for what reasons? Japan's drastic change in its government coalition without a general election, which happened in the early 1990s, gives a rare opportunity to examine these questions. It was indeed a rare event, because the make-up of each district's representation in the ruling coalition usually changes only after a general election. In such a situation, the personal attributes of incumbents, who may be different from those taking seats before the election, may also change simultaneously, and thus, it becomes difficult to identify whether any change in the amount of intergovernmental transfers is due to change in representation or change in incumbents' personal attributes.

In what follows, the second section discusses the validity of existing models of distributive politics under institutional settings in Japan. An alternative model that accounts for distributive politics in Japan is presented in the third section. The fourth section introduces data and methods to test the hypotheses derived in the third section. The fifth section shows the results of statistical analysis, and the sixth section concludes.

## **Existing models**

Over the past decades, many scholars have studied distributive politics and examined various hypotheses, which can be roughly categorised into two models. In this section, we first briefly introduce them, and then discuss their validity under Japan's institutional settings.

### ***Two models of distributive politics***

The first model is what we call a *discretionary allocation model*. It assumes that a ruling party (or a ruling party coalition) is a unitary actor that has the authority and capability to use distributive policies to maximise its objectives, such as maximising 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 its objectives and constraints, and two competing hypotheses have been examined. Some argue that the ruling party allocates disproportionately larger amounts

of grants to districts/groups with many ‘swing voters’ (for example, Bickers and Stein 1996; Dahlberg and Johansson 2002; Dixit and Londregan 1996, 1998; Lindbeck and Weibull 1987; Stein and Bickers 1994). Others argue that the party allocates disproportionately larger amounts to districts/groups with their ‘core supporters’ (for example, Cox and McCubbins 1986, 1993; Levitt and Snyder 1995)

While this model focuses on the initiative of the ruling party, the second model, which we call a *free competition model*, focuses on the motivations, resources and skills of individual politicians. It assumes that distributive policy outcomes are shaped by competition and coordination among individual politicians. Like the discretionary allocation model, two competing hypotheses have been derived. Some argue that the benefits of distributive policies are not concentrated among those legislators in a minimum winning coalition. Rather, ‘[e]very member, regardless of party or seniority, has a right to his share of benefits’ (Mayhew 1974, 88; also see Shepsle and Weingast 1981; Weingast 1979). They argue that, given uncertainty about the composition of future winning coalitions, legislators are motivated to form such an informal and unanimous agreement (Weingast 1979). This ‘congressional norm’ (Weingast 1979) is known as *universalism*. Others, however, consider the importance of agenda setting and argue that powerful legislators (for example, committee chairs, members of particular committees, senior members, and legislators representing small districts) have an advantage in securing benefits for their districts (for example, Carsey and Rundquist 1999b; Munson 1993; Lee 1998; Lee and Oppenheimer 1999; Rundquist, Lee and Rhee 1996; Weingast and Marshall 1988). The latter hypothesis typically assumes the importance of non-partisan attributes of individual politicians in bringing benefits back to their constituencies.<sup>4</sup>

### *Valid in Japan?*

We argue that neither model can sufficiently explain distributive politics under Japan’s institutional settings. First, under Japan’s SNTV electoral system with multimember districts, it was quite difficult for the ruling party, *as a unitary actor*, to make a collectively optimal decision—the basic assumption of the discretionary allocation model. This is because any political party seeking the majority of seats in the Lower House had to field, on average, two or more candidates in the same district, and these candidates from the same party had to compete with one another within each district. As a consequence, there was intense intra-party competition in each district; particularly between factions within the LDP (for example, Cox and Rosenbluth 1993; Kohno 1997, Chap 6).

This difficulty can be illustrated with an example. Suppose that the ruling party plans to provide political support either for Project A or Project B, both of which are public

construction projects within the same district. If a project is favoured equally by all voters in the district, its implementation should have no effect on electoral outcomes. Realistically, however, any geographically concentrated project and expenditure is favored by some voters within a district but not others. The discretionary allocation model implicitly assumes that it should be fairly easy for party leaders to choose what to shoot for *within each district*. That is, party leaders should choose a project that can attract the largest number of votes for the party in each targeted district. This simple argument is valid only when there is a single incumbent (or future challenger) from the ruling party (that is, under the single member district system), or when there is no intra-party conflict within a district (for example, under the closed-list proportional representation system). In these instances, what is beneficial for the ruling party is also beneficial for the targeted district's individual politician/s from that party. Under Japan's SNTV system with three to five seats in each district, however, it was difficult for party leaders to choose which project to support within each district. Any discretionary project selection initiated by party leaders could only introduce unproductive intra-party conflicts without increasing votes and seats. It was perhaps difficult also for party leaders, typically leaders of various factions, to agree to which particular projects should be selected in each of the nearly 130 districts.

Considering this dilemma, which Japan's ruling party (more specifically, the LDP) faced under the former electoral system, and as McCubbins and Rosenbluth (1995) argue, the best strategy for the party is 'to distribute to its incumbent candidates effective property rights over aspects of policy making (through Cabinet posts and the Policy Affairs Research Council committee assignments), thus giving each candidate the opportunity to build his own reputation with voters on policy making' (McCubbins and Rosenbluth 1995, 36). In other words, the ruling party allowed competition among individual legislators—the basic assumption of the free-competition model.

This does not necessarily mean, however, that leaders of a ruling party (or party coalition) completely kept their hands off budgetary matters. McCubbins and Rosenbluth argue that the degree of power concentration in the hands of party leaders over budget-making was relatively low under Japan's former electoral system, but it is difficult to assume that party leaders taking up important posts within a party or within a government only sought their own individual benefits and did not consider any collective benefits for their party. We argue that although they did not use the budget allocation to maximise their party's votes or seats in future elections, they used it to buy the support or acquiescence of opposition members in order to assure smooth operation of the legislative process. The importance of such consensus-based Diet management has been discussed in the literature of Japanese politics. We elaborate this point in the Section on an Alternative Model below.

Now, consider the validity of the free competition model. The discussion above suggests that this model seems to be more valid under the SNTV electoral system. Nevertheless, we argue that one of the major hypotheses derived from the model—universalism—is not applicable in Japan, or at least not in its simplest form. This is because Japan’s government system is parliamentary and only the Cabinet can submit a budget proposal to the House of Representatives. Therefore, individual members of the ruling coalition, particularly those in the House of Representatives, can exercise their influence in budget-making more effectively than those of the opposition. For this institutional reason, scholars of Japanese politics have commonly argued that individual members of the ruling coalition have had an advantage in bringing public resources back to their constituencies (for example, Doi and Seriya 1997; Fukui and Fukai 1996; Scheiner 2005; Thies 1998).

It is, however, unreasonable to assume that politicians can sufficiently secure distributive benefits for their supporters simply by joining the ruling coalition. More importantly, the members of the ruling coalition should develop their individual-level expertise and reputation to compete against not only members of other parties but also members from the same party. Such competition based on individual-specific attributes developed a system of ‘personalised’ politics in Japan—politicians mobilise votes based on their personal strength in pork-barreling and voters make a voting decision based on personalism (for example, Richardson 1974).

### **An alternative model**

Considering these Japan-specific particularities, we propose an alternative ‘eclectic’ model of distributive politics—the primary mechanism of budget manipulation via competition among individual politicians, and the secondary mechanism via discretionary allocation by leaders of the ruling coalition. Conceptually,

$$A_i = C_i + D_i \tag{1}$$

where  $A_i$ ,  $C_i$  and  $D_i$  are the politically-motivated allocation of resources (for example, per capita intergovernmental transfers) to district  $i$ , the allocation by competition, and the allocation by discretion.<sup>5</sup>

#### ***Allocation by competition***

Consider first the allocation by competition. Given intense intra-party factionalism and personalised politics, individual politicians’ competition based on personal strength (that is, personal contacts, experience, resources, skills, etc.) should be the primary determinant of

distributive politics in Japan under the SNTV system. Therefore, districts with more ‘powerful’ politicians receive disproportionately larger amounts of transfers than other districts. Some of these personal attributes are contingent upon the status of one’s political party; that is, whether one’s party is in the ruling coalition or in the opposition. Others are not contingent upon it. Under an assumption that the district-level strength is the sum of the strength of individual incumbents, the primary mechanism  $C_i$  can be formally expressed as:

$$C_i = \sum_j \{ \beta_1 Z_{ij}(X_{ij}) + \beta_2 W_{ij} \} \quad (2)$$

where  $X_{ij} = 1$  if an incumbent  $j$  in district  $i$  is in the ruling coalition, and  $X_{ij} = 0$  otherwise.  $Z_{ij}(X_{ij})$  is a set of attributes contingent upon the party’s status, and  $W_{ij}$  are those not contingent upon it.  $\beta_1, \beta_2 > 0$  are effect parameters expected to be positive.

More specifically, individual-specific attributes not contingent upon the party’s status ( $W_{ij}$ ) include each incumbent’s personal (that is, non-partisan) connections with bureaucrats to make ‘proper’ projects being proposed by local governments and accepted by the central government, as well as personal connections with locally-based interest groups to mobilise resources for lobbying. An individual incumbent’s own experience in budget-making and knowledge about it may also matter greatly. Thus, former local politicians, former executives in local administration, and former high-ranking officials of some key ministries (particularly, the Ministry of Finance) should extract more resources from the public account. Connections with government officials based on old-boy and old-girl networks, on hometown, or on other friend-and-family ties may also work to bring larger amounts of money back to their constituencies. Individual politicians’ skills and resources (that is, money) to bribe government officials may be equally important. All these personal attributes are important in competing against other incumbents from the same district.

The conditional attributes include whether an incumbent is a member of the Cabinet (that is, the executive branch of the government), whether he/she is one of the political leaders in the ruling coalition (within the legislative branch of the government), and how much he/she can influence the budgetary process as a member of the ruling coalition. All of these attributes are nil if an incumbent is in the opposition camp. Formally,  $Z_{ij}(X_{ij}) = 0$  if  $X_{ij} = 0$ .

Under the LDP-dominant regime, LDP members developed their policy expertise to differentiate among themselves within the same district (McCubbins and Rosenbluth 1995). In addition to formal committee assignments in the Diet, they were also assigned to the Policy Affairs Research Council (PARC) committees, which allowed them to learn particular policy areas and to develop connections with particular ministries and relevant industrial sectors. If an LDP politician could be reelected three to four times, and repeat their terms in a particular

PARC committee, he/she was called a ‘*zoku*’ (policy tribe) politician—a specialist in a particular policy area (for example, Inoguchi and Iwai 1987; Muramatsu and Krauss 1984)—and greatly increased their chances of influencing the policy-making process.

Could such ‘*zoku*’ LDP politicians exercise influence even when the LDP was driven into opposition after the 1993 election? Some argue that the LDP did not have access to bureaucracy during a short period when it was not in power (for example, Fukui and Fukai 1996). We agree with this argument to some extent, but it is unreasonable to assume that *all* LDP politicians were restrained from exercising power to bring benefits back to their constituencies. Rather, we argue that those LDP politicians who attempted to use personal-based connections with bureaucrats could still extract public resources in 1994. In other words, their LDP label did not work while they were not in power, but their non-partisan personal connections still worked in helping them receive distributive benefits.

The argument above implies that those connections unconditional on the party’s status are, in fact, more important than the conditional ones. Formally,  $\beta_2 > \beta_1 > 0$  in Equation 2. If  $W_{ij}$  is properly controlled, the effect of  $Z_{ij}(X_{ij})$  can be small and/or insignificant. However, a problem lies in that, although an individual politician’s personal-based strength, which is unconditional on the composition of a winning coalition, is perhaps the most important variable affecting politically driven budget allocation, it is also difficult to observe and measure. Fortunately, we can avoid this potential problem of omitted variable bias and measurement error by comparing the FY1994 and FY1995 budgets, because both were compiled by the same set of incumbents in Japanese politics. We fully explain this advantage in the Section on Methods below.

### *Allocation by discretion*

Next, consider the allocation by discretion. As we discussed earlier, it does not make much sense to assume that under Japan’s institutional arrangements, the ruling party and its leaders manipulate a budget at their discretion to attract *voters* in the electoral process. They may do so, however, to attract *opposition members* in the legislative process.

In his influential and widely-cited study based on an empirical analysis of Diet processes, Mochizuki (1982) argues the importance of *Kokutai Seiji* in the Japanese policy-making process – politics conducted through back-room dealing among each party’s informal Diet Affairs Committee (*Kokkai Taisaku Inukai, or Kokutai*)—and the principal of unanimity (*zenkai icchi*) in decision-making.<sup>6</sup> With abundant statistical data and anecdotes, Mochizuki, as well as Krauss (1984), Sato and Matsuzaki (1986), and Richardson (1997), demonstrate how LDP leaders negotiate with their opposition counterparts in order to reach unanimity in

the legislative process, which is ‘perhaps the single most important feature of the Diet and gives minority parties a potential veto over legislation’ (Richardson 1997:129).<sup>7</sup>

More concretely, the leaders of both the LDP and opposition parties are said to have their frequent meetings at ‘*ryotei*’ (Japanese-style restaurants) and decide which bills to consider, when they schedule for debate, and how much time they devote for debate. In such meetings, LDP leaders ask the opposition for cooperation on the LDP’s favored bills in exchange for the passage of bills favored by the opposition. ‘An example is the acceptance by the opposition in 1979 of the LDP budget bill in exchange for withdrawal of nine objectionable bills pertaining to other matters’ (Richardson 1997:137). Although these existing studies tend to focus on back-room dealing over bills favored by various camps, we expect that such informal meetings give opposition parties the chance to make their preferences known regarding the budget and allow them to negotiate with the LDP over which items to add or remove.

The underlying logic in such politics of collusion between the ruling and opposition camps is ‘blame avoidance’ (Balla et al. 2002; Weaver 1986) and ‘greasing the wheels’ (Evans 2004). If the final budget only includes projects and programs favored by the ruling party and their members, members of the opposition are ‘likely to respond by lambasting the majority for unfairness, wastefulness, and playing politics with the public purse’ (Balla et al. 2002:518). Sato and Matsuzaki (1986, Chapter 6) argue that under the one-party dominant regime since 1955, the LDP, seeking long-term political stability, conceded to the opposition not necessarily to make policies favored by the opposition and cultivate new LDP supporters in the next election but to achieve the smooth operation of their administration. The opposition also attempted to withdraw policy benefits through informal and less confrontational channels, as they knew that the LDP’s bills could always pass if the LDP forced a vote. ‘[A]s long as the LDP allowed Diet deliberations to proceed according to a schedule agreed on by all parties in advance of the Diet session, the opposition parties normally did not employ disruptive tactics’ (Richardson 1997:134). If the LDP steamrolled the passing of important and controversial bills, however, the opposition took a number of tactics for delaying the legislative process, including ‘cow walking’<sup>8</sup>

There is another institutional reason to believe that the principal of unanimity for blame avoidance was likely in Japan under the SNTV system. In Japan’s SNTV multimember districts, the opposition also had an incumbent (or incumbents) in each district. Since they had to compete with the ruling party in future elections, they had an incentive to find as many blame-worthy actions attributable to ruling party members and, if any were found, then appeal to constituents in their districts for the inappropriateness of the ruling party members’. (By contrast, under the single member district system, each incumbent has no other incumbent

who they can blame.) Individual incumbents from the ruling party, however, could not easily coordinate their efforts to bargain with opposition members, because ruling-party members in a given district also had to compete with each other and, therefore, had an incentive to betray fellows from the same party. To avoid such a chaotic, mutually blaming situation at the level of districts, it was possible that the Diet searched for inter-party accommodation and developed the principal of unanimity, under which leaders of the ruling party could deal with the opposition collectively.

There is empirical evidence to support the validity of the arguments above. If the theory of blame avoidance is valid in Japan, we expect that the blame-avoidance incentive is strong when the ruling coalition has a bare majority in the Diet. Indeed, Krauss's (1984) study suggests that Japan's all-party policy coalitions for conflict management in the Diet were prevalent particularly in the 1970s when the LDP's seat share in the Diet became a bare majority. During this period of '*kakuchū jidai*' (the period when the seat shares of the ruling and opposition camps were nearly equal), the LDP had to compromise with the opposition more frequently in order to pass their favored legislation. As a result, the percentage of LDP bills supported by opposition parties was relatively high during this period (Sato and Matsuzaki 1986, Chapter 7) and 'there was a dramatic decline in both the intensity and frequency of confrontation between government and opposition' (Krauss 1984:244).

Now, let me formalise this mechanism of budget distortion. Although there are a number of possible specifications, here we assume the simplest one:

$$D_i = \sum \{(1 - X_{ij})\alpha\} \quad (3)$$

where  $\alpha$  is an effect parameter, and  $X_{ij} = 1$  if an incumbent  $j$  in district  $i$  is in the ruling coalition. If the ruling coalition indeed had an incentive to include budget items favored by the opposition, we expect  $\alpha > 0$  implying that the ruling coalition allocates disproportionately larger amounts in favour of the opposition. It is important to note that we expect  $\alpha > 0$  after controlling the effects of individual politicians' personal strength on distributive politics; namely,  $C_i$  in Equation 1. As we argued in the introductory section, our expectation of  $\alpha > 0$  does not necessarily mean that the opposition members receive more benefits, in total.

## Methods

This section introduces a regression model and variables to test the hypothesis discussed in the previous section. Descriptive statistics of all variables are shown in Tables 2 and 3.



**Table 2** Descriptive statistics

Variable		Mean	S.D.	Min	Max
Total transfers per capita (in log)	FY1994	-2.634	0.830	-4.985	1.867
	FY1995	-2.608	0.827	-4.945	1.788
	$\Delta$	0.028	0.127	-1.961	1.349
$\Sigma$ Ruling-coalition members $\div$ District magnitude	FY1994	0.536	0.204	0.000	1.000
	FY1995	0.490	0.222	0.000	1.000
	$\Delta$	-0.046	0.356	-1.000	1.000
$\Sigma$ Cabinet members $\div$ District magnitude	FY1994	0.040	0.087	0.000	0.333
	FY1995	0.035	0.090	0.000	0.400
	$\Delta$	-0.005	0.123	-0.333	0.400
$\Sigma$ Ruling-coalition leaders $\div$ district magnitude	FY1994	0.031	0.079	0.000	0.333
	FY1995	0.073	0.126	0.000	0.667
	"	0.042	0.156	-0.333	0.667
$\Sigma$ Budget committee attendances <sup>a</sup> $\div$ district magnitude	FY1994	1.324	2.324	0.000	13.333
	FY1995	1.883	3.417	0.000	19.000
	$\Delta$	0.559	4.122	-13.333	16.500
Number of seats per capita (in log)	FY1994	-12.443	0.311	-12.926	-10.015
	FY1995	-12.447	0.314	-12.931	-10.079
	"	-0.003	0.005	-0.064	0.011
Municipality fiscal strength index	FY1994	0.749	0.298	0.040	2.230
	FY1995	0.752	0.295	0.040	2.110
	$\Delta$	0.002	0.017	-0.180	0.720

*Note:* a Count only for the members of the ruling coalition. The statistics are weighted by the municipality population. The number of observations (municipalities) is 3,342. Municipalities affected by the Kôbe earthquake in 1994 are excluded.

### *Regression model*

The dependent variable is the per capita amount of intergovernmental fiscal transfers from the central government to municipal governments (in log).<sup>9</sup> The existing studies (Ansolabehere, Gerber and Snyder 2002; Horiuchi and Lee 2008; Horiuchi and Saito 2003) suggest that the overall political effects, including effects of negotiation and collusion among representatives, cannot be estimated with program-specific or type-specific transfers. We agree with these arguments and use per capita total transfers (the sum of general and specific subsidies) in FY1994 and FY1995, and the difference between them, as dependent variables of regression analysis. The number of observations is 3,342.<sup>10</sup> Note that municipalities stricken by the Kôbe earthquake on January 17, 1995 (that is, 10 cities including the City of Kôbe and 10 towns,

**Table 3** Descriptive statistics (continued)

Variable		Mean	S.D.	Min	Max
Municipality population (in log)	FY1994	11.486	1.323	5.257	13.588
	FY1995	11.491	1.322	5.313	13.585
	Δ	0.003	0.010	-0.078	0.112
Municipality population density (in log)	FY1994	7.175	1.573	0.309	9.856
	FY1995	7.179	1.570	0.356	9.846
	Δ	-	-	-	-
Taxable income per capita (in log)	FY1994	0.368	0.272	-1.110	1.371
	FY1995	0.386	0.257	-1.116	1.362
	Δ	0.017	0.028	-0.402	0.434
Age Under 14 ÷ Municipality population	FY1994	0.165	0.021	0.069	0.272
	FY1995	0.161	0.021	0.065	0.270
	Δ	-0.004	0.006	-0.028	0.064
Age Over 65 ÷ Municipality population	FY1994	0.142	0.043	0.056	0.447
	FY1995	0.147	0.044	0.050	0.458
	Δ	0.005	0.003	-0.042	0.041
Agricultural sector workers ratio	FY1994	0.063	0.083	0.000	0.802
	FY1995	0.061	0.081	0.000	0.794
	Δ	-0.002	0.003	-0.038	0.024
Service sector workers ratio	FY1994	0.617	0.117	0.187	0.887
	FY1995	0.622	0.116	0.197	0.892
	Δ	0.005	0.003	-0.028	0.078
DID population ratio	FY1994	0.640	0.359	0.000	1.298
	FY1995	0.645	0.360	0.000	1.302
	Δ	0.005	0.033	-0.380	0.356

Note: See Note in Table 2.

for which the Disaster Relief Act was invoked) were dropped, because the central government provided special subsidies to these municipalities.

More specifically, total transfers include the following three components: the formulaically allocated portion of grant-in-aid (*chihō kōfuzei futsū kōfukin*), the grant-in-aid that is allocated discretionarily (*chihō kōfuzei tokubetsu kōfukin*), and a project-based subsidy, the national treasury disbursement (*kokko shishutsukin*). In Japan, the intergovernmental transfers from the central government to more than 3,000 municipal governments are aimed at financing municipality-specific projects and programs while the central government directly finances large-scale cross-municipality public infrastructure. As these municipality-specific projects and programs include a wide range of public goods and services and are closely related to voters' everyday life, they often become the targets of political manipulation. As a result of

suboptimal consideration for economic efficiency, intergovernmental transfers are regarded as one of the most important sources of Japan’s public debt, largest among all OECD countries (Jinno and Ikegami 2003). Accordingly, it is substantially important to focus on this variable for our analysis.

Now, the models presented in the previous section suggest that political variables determining per capita transfers include the following:

$$\begin{aligned}
 A_i &= C_i + D_i \\
 &= \phi_0 + \phi_1 \sum_j X_{ij} + \phi_2 \sum_j Z_{ij}(X_{ij}) + \phi_3 \sum_j W_{ij}
 \end{aligned}
 \tag{4}$$

where  $\phi_0 = \sum_j \alpha_j$ ,  $\phi_1 = \beta_1 > 0$ ,  $\phi_2 = \beta_1 > 0$  and  $\phi_3 = \beta_2 > 0$ . By standardising these right-hand-side variables with the number of seats in each district  $i$  (‘district magnitude’,  $M_i$ ) and adding a set of municipality-specific but time-invariant fixed effects ( $\mu_i$ ), a set of time-specific but municipality-invariant fixed effects ( $\nu_i$ ), other municipality-specific and time-variant control variables ( $D_{it}$ ), and a random disturbance term in district  $i$  at year  $t$ , ( $\varepsilon_{it}$ )<sup>11</sup> a full regression model for the per capita amount of intergovernmental transfers to district  $i$  in year  $t$  ( $Y_{it}$ ) is expressed as the following:

$$\begin{aligned}
 Y_{it} &= \phi_0 + \phi_1 \frac{\sum_j^{M_i} X_{ijt}}{M_i} + \phi_2 \frac{\sum_j^{M_i} Z_{ijt}(X_{ijt})}{M_i} + \phi_3 \frac{\sum_j^{M_i} W_{ijt}}{M_i} \\
 &+ \phi_4 D_{it} + \mu_i + \nu_i + \varepsilon_{it}
 \end{aligned}
 \tag{5}$$

As discussed earlier, the problem is that a critically important political variable, individual-specific non-partisan strength in pork-barreling (that is  $\sum_j^{M_i} W_{ijt}$ ), is only partially observable and difficult to measure. The failure to control it will lead to serious omitted variable bias. Using a natural experimental situation from 1994–1995, however, this variable can be controlled by taking the difference between the per capita transfers in FY1995 and FY1994. This is because, as explained earlier, the set of incumbents in each district did not change in these two fiscal years. Thus, the first-difference regression model becomes the following:

$$\Delta Y_i = \phi'_0 + \phi_1 \Delta \frac{\sum_j^{M_i} X_{ij}}{M_i} + \phi_2 \Delta \frac{\sum_j^{M_i} Z_{ij}(X_{ij})}{M_i} + \phi_4 \Delta D_i + \varepsilon'_i
 \tag{6}$$

where  $\phi'_0 = \Delta \nu$  and  $\varepsilon'_i = \Delta \varepsilon_i$ .

There are some other advantages of taking the first difference. First, because the difference is only one year, many municipality-specific time-variant variables—demographic and social variables—should remain almost unchanged. Thus,  $\Delta D_i$  should not have much variation. Second, the municipality-specific but time-invariant fixed effect ( $\mu_i$ ) is also dropped from the analysis. This fixed effect cannot be ignored in Japan, as intergovernmental transfers are affected by the presence of power plants, national defense bases, oil stockpiling facilities, and so on. Whether a municipality is a prefectural capital and/or a city designated by ordinance (*seirei shitei toshi*) is also an important time-invariant variable. Finally, but most importantly, this first-difference regression model, while holding many variables constant, still allows wide variation in the key causal variable—whether or not an incumbent is in a ruling coalition ( $X_{ijt}$ )—because of the drastic political change from the non-LDP coalition government to the LDP coalition government. From the beginning of a budget cycle in the preceding summer to the Diet passage of the budget in spring, members of the LDP were formally excluded from budget-making processes in FY1994 but included in FY1995. The members of the Japan Socialist Party and Sakigake were included in both years, but JCP members were excluded in both. Other small parties were included in FY1994 but not in FY1995. (See Table 1 for an illustration of this natural experimental situation.)

### *Independent variables*

The key independent variable is the number of incumbents, who belonged to the ruling coalition during each budget cycle, divided by the district magnitude. It is measured based on whether a representative  $j$  in district  $i$  voted for the leader of the ruling coalition in the election for the prime minister at time  $t$  ( $X_{ijt}$ ).<sup>12</sup> More specifically,  $X_{ij,1994} = 1$  if a representative voted for Morihiro Hosokawa (the leader of the non-LDP coalition) on August 5, 1993, and  $X_{ij,1994} = 0$  otherwise.<sup>13</sup>  $X_{ij,1995} = 1$  if a representative voted for Tomiichi Murayama (the leader of the LDP coalition) on June 29, 1994, and  $X_{ij,1995} = 0$  otherwise.<sup>14</sup> Since choosing a coalition leader is the most important action in forming a government, this measurement should be theoretically valid.

As discussed earlier, personal strength contingent upon the status of one's party includes the following: whether an incumbent is a member of the Cabinet, whether he/she is a leader in the ruling coalition, and how much he/she can influence budgetary process as a member of the ruling coalition. All these variables are aggregated at the district level and divided by the district magnitude. The first variable can be measured without any controversy,

and the second dummy variable is coded 1 if an incumbent is a member of the conferences for coalition leaders (but not a Cabinet minister) and 0 otherwise.<sup>15</sup> The third variable is measured by the total number of attendance by ruling-party members<sup>16</sup> at the Budget Committee (*Yosan Inikai*) during a Diet session that approved each year's budget. Choosing this particular standing committee is valid for three reasons. First, this committee discusses the budget, a dependent variable of this study. Second, among many Diet committees, the total number of representatives who attend is by far the largest. This suggests that representatives have a strong interest in, and give priority to, this committee. Finally, the committee discusses not only budget proposals but also all kinds of issues relevant to politics, and all Cabinet ministers, as well as other party leaders, attend. Therefore, the number of attendance at this committee's meetings by ruling-coalition members seems to be a valid indicator of individual-level strength over policy-making (contingent upon the status of one's party).

The model also includes municipality-specific (time-variant) variables,  $D_{it}$ .<sup>17</sup> The number of seats divided by the district population (in log), which measures the effect of malapportionment, is the key variable used in Horiuchi and Saito (2003). Using municipality-level data, Horiuchi and Saito (2003) shows its significantly positive effect. We also include all the other relevant variables Horiuchi and Saito (2003) included. They are the municipality fiscal strength index, the municipality population (in log), the municipality population density (in log),<sup>18</sup> the taxable income per capita (in log), the ratios of the population aged below 14 and of population over 65, the ratio of the number of persons employed in the agricultural sector against the total number of employed persons, a similar variable for the service sector, and the ratio of the population in densely inhabited districts (DID) against the total population.

## Results

Table 4 shows the results of three regression analyses. Each regression is based on the weighted least square (WLS) method, where the municipality population is used as an analytic weight. The WLS regression is more appropriate than the ordinary least square (OLS) regression, because the dependent variable measures the average over the number of people in a municipality, which varies substantially (from under 200 to near 800,000). Another methodological note is that the clustered robust standard errors are estimated, because the observations are expected to be dependent across municipalities within each of 128 districts, but not necessarily across districts.

**Table 4** Weighted least square estimates

Independent variable	FY1994	FY1995	$\Delta$
$\Sigma$ Ruling-coalition members $\div M$	-0.052 (0.085)	-0.212** (0.098)	-0.030*** (0.011)
$\Sigma$ Cabinet members $\div M$	0.350* (0.182)	0.092 (0.120)	-0.020 (0.035)
$\Sigma$ Ruling-coalition leaders $\div M$	0.122 (0.202)	0.166 (0.123)	0.041 (0.036)
$\Sigma$ Budget committee attendances <sup>a</sup> $\div M$	0.002 (0.009)	0.001 (0.005)	0.002 (0.001)
Number of seats per capita (in log)	0.168** (0.076)	0.168** (0.076)	2.741*** (0.863)
Municipality fiscal strength index	-2.015*** (0.113)	-2.059*** (0.112)	-1.373*** (0.407)
Municipality population (in log)	-0.059** (0.024)	-0.081*** (0.021)	-0.223 (0.355)
Municipality population density (in log)	-0.018 (0.023)	-0.006 (0.020)	
Taxable income per capita (in log)	-0.438*** (0.149)	-0.283** (0.131)	-0.458*** (0.146)
Age under 14 $\div$ Municipality population	-0.455 (1.335)	1.262 (0.983)	1.032* (0.563)
Age over 65 $\div$ Municipality population	3.140*** (0.924)	4.042*** (0.687)	1.120* (0.623)
Agricultural sector workers ratio	0.052 (0.254)	0.192 (0.230)	-0.793 (1.041)
Service sector workers ratio	0.774*** (0.226)	0.879*** (0.216)	3.834*** (1.392)
DID population ratio	0.385*** (0.105)	0.400*** (0.085)	-0.422*** (0.123)
Constant	0.847 (1.187)	0.590 (1.118)	0.022** (0.011)
Number of observations	3,342	3,342	3,342
R-squared	0.866	0.868	0.089
Root MSE	0.305	0.301	0.122

*Note:* a Count only for the members of the ruling coalition. *M* stands for the district magnitude. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.10$  (two-sided).  
The dependent variable is the per capita amount of total transfers (in log). The numbers in parentheses are robust standard errors with 128 clusters (that is, districts).

The first two models use FY1994 and FY1995 data, respectively. The R-squared statistics show that about 87 per cent of variance in the dependent variable is explained by a set of included variables in each cross-section analysis. Despite this high goodness-of-fit, we believe that these regressions produce biased estimates, because variables measuring the incumbent-specific (but non-partisan) personal strength in pork-bartering are dropped from the analysis. Other location-specific time-invariant factors are also not controlled. They are

used, with caution, to examine whether the coefficients of the key independent variables are different in the two fiscal years. The last column shows the results of a first-difference regression, which shows, as expected, a lower R-square (0.089) but is expected to be less biased.

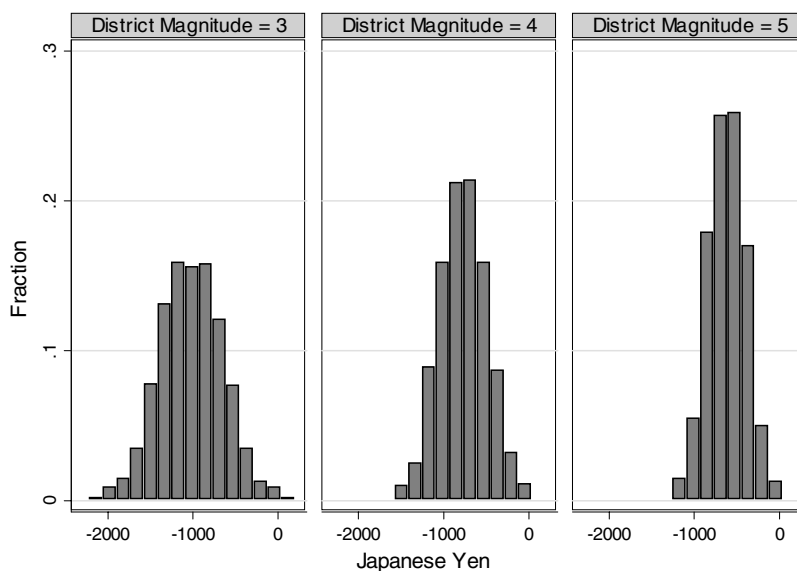
The most important finding is that the number of ruling-coalition members (divided by the district magnitude) has a negative (-0.030) and highly significant effect in the first-difference regression. By taking the first difference, the effects of nonpartisan competition for public resources by individual legislators are properly controlled. This finding supports our argument that the ruling coalition allocates, *ceteris paribus*, disproportionately larger amounts of transfers to districts with more opposition-party members.

One may claim that this negative effect is due to the fact that the LDP was in the opposition camp when the FY1994 budget was compiled. Such an interpretation seems invalid for two reasons. First, previous studies (Horiuchi and Saito 2003; and Meyer and Naka 1998) show similar negative and significant effects of the LDP seat share. The finding here is consistent with them and thus not necessarily surprising. Second, the coefficient of the ruling-coalition seat share is negative in both FY1994 and FY1995. In fact, the effect is much larger and significant at the 5 per cent level in FY1995. These estimates may suggest that incentives to collude with the opposition were stronger under the LDP coalition than under the non-LDP coalition. The non-LDP Hosokawa coalition might have attempted to take a different allocation strategy from that of the previous LDP dominant regime. Further inquiry and interpretation are required in future research.

Table 4 also shows that districts with powerful members of the ruling coalition (that is, districts with Cabinet ministers, party leaders, and those who attended the Budget Committee frequently) tend to receive the larger amount of per capita transfers, but these effects are statistically insignificant. This insignificant result is not necessarily unexpected. In the section on an alternative model, considering institutional settings in Japan and incentive mechanisms, we argued that personal attributes contingent upon the status of an incumbent's party (that is, whether in a ruling coalition) are expected to be less important than non-contingent attributes (for example, personal connections, resources and experiences). The only exception to this is the effect of having a Cabinet minister in a district under the non-LDP government. The effect is large and significant at the 10 per cent level. Most of the Cabinet ministers under the Hosokawa administration were first-timers, and they might have had a strong inclination toward abusing power.

The number of seats per capita, a measure of malapportionment of seats in Japan's Lower House, is positive and significant in all regression estimates. The effect is particularly large and significant in the less-biased first-difference regression. This supports Horiuchi and

Figure 1 Predicted change in per capita transfers (in yen)



*Note:* The prediction is based on an additional increase in the number of ruling-coalition members. All the other first-differenced independent variables are held constant at zero. See Appendix for technical details.

Saito's (2003) earlier finding. Other control variables also show similar results to those in their study, but we will not make a full interpretation here.

Before concluding, let us evaluate the substantive effect of the key causal variable by simulation analysis. (See Appendix for the detailed procedure of simulation.) Figure 1 shows that, on average, having an additional ruling-coalition member in a district decreases per capita transfers by about ¥1,000 if the district magnitude is three, about ¥700–800 if four, and about ¥500–600 if five. It also shows that the larger the district magnitude, the smaller the variance of estimated effects.

It is usually difficult to evaluate the substantial magnitude of these marginal effects, but the following comparison is possible. During the tax review in November and December 2005, the cigarette tax was a major issue, and after deliberative discussions and negotiations, the government decided to increase the tax by one yen per cigarette from FY2006. Since the average smoker consumes about 3,000 cigarettes per annum in Japan, this change will increase the tax burden by ¥3,000 (if the level of consumption remains constant). As this tax increase was indeed an important issue at stake, the estimated effect of ¥500–1,000 for an



additional opposition member can be evaluated as substantial but perhaps not large enough to influence the likelihood of the ruling coalition losing power.

## Conclusion

By using a natural experimental situation in Japan, this paper attempted to show how representation in the ruling coalition matters in distributive-policy making. By considering incentive mechanisms under Japan's parliamentary government system and the single non-transferable vote (SNTV) electoral rule, which was used until the 1993 election, we argued that on the one hand, individual politicians engage in competition for public expenditures based on individual strength, but on the other hand, the ruling coalition allocates, *ceteris paribus*, larger amounts in favor of the opposition to secure smooth operation of the administration. Such politics of collusion is widely known as *Kokutai Seiji* in the literature of Japanese politics, and this paper gives empirical support for this.

This finding has some broader implications. First, institutions do indeed matter in shaping the processes and outcomes of distributive politics. Most of the existing studies of distributive politics use data from the United States (for example, Bickers and Stein 1996; Evans 1994, 2004; Lee 2000; Levitt and Snyder 1995; Rich 1989; Stein and Bickers 1994) or cross-national data (for example, Persson and Tabellini 2000). But we need more in-depth intra-country studies from a variety of understudied countries to improve our understanding of *who gets what, why and how*. Depending on institutional settings, a ruling coalition—even when it has a sufficient number of seats to pass all legislation—may use distributive spending in favor of the opposition, at least to some degree. We intend to further investigate the role of the opposition, and their strategic interactions with the ruling coalition, in the policy-making process under various institutional settings.

The second implication is more specific to Japanese politics. This paper, which argues that the opposition shared distributive benefits with the ruling party, gives a different interpretation to one of the fundamental questions in studies of postwar Japanese politics—why have Japan's opposition parties failed to become a viable alternative to the LDP? A conventional answer is that they could not (although they wanted to) because they were almost completely left out from enjoying distributive politics. However, an alternative interpretation is possible: they had only a weak motivation to become such an alternative, because they comfortably shared distributive benefits with the ruling party. Further investigation of the opposition's role is expected to improve our understanding of the contemporary history of Japanese politics.

We acknowledge that this paper has some limitations and leaves unanswered questions. First, it focuses on only one particular period in the contemporary history of Japanese politics.

From the 1993 Lower House election (under the old electoral system) to the 1996 Lower House election (under the new electoral system), Japanese politics drastically changed in a number of respects. Many new parties emerged, merged with one another, and were eliminated. Thus, one may argue that the negative correlation between the ruling coalition's seat share and the per capita subsidies comes from this period specificity. To confirm the validity of our arguments in this paper, we need more studies examining this period's peculiarities using in-depth qualitative data.

How did the electoral reforms change the processes and outcomes of distributive politics in Japan? This is another important unanswered question. Horiuchi and Saito (2003) show that although the impact of the LDP seat share on per capita transfers was negative from 1991 to 1996, it was positive in 1997 and 1998. This indicates that the electoral reform may have changed the natures of distributive politics, but how it changed remains a question as yet unanswered.

## Appendix

In this simulation, we use the estimates from the first-difference regression analysis, and compute a set of predicted values of the dependent variable when the number of ruling-coalition members does not change and when it increases by one (that is,  $\Delta \sum X_{ij} / M_i = 1/3$  for  $M_i = 3$ ,  $\Delta \sum X_{ij} / M_i = 1/4$ , for  $M_i = 4$ ,  $\Delta \sum X_{ij} / M_i = 1/5$  for  $M_i = 5$ ). All the other first-difference independent variables are held constant at zero (that is, no change). The predicted value of  $\ln(Y_{i,1995}) - \ln(Y_{i,1994})$  is then transformed to the ratio of transfers in two years ( $Y_{i,1995} / Y_{i,1994}$ ) by taking an exponential. The observed weighted average of total transfers in FY1994 was ¥101,367 in FY1994, whereas the predicted average in FY1995, when there is no change in independent variables (except the positive and significant effect of the constant term), is ¥103,642 (that is, a 2.2 per cent increase from the base year). Given these, the predicted effect of having an additional member of the ruling-coalition is calculated. By simulating 1,000 predicted values, the distribution of the estimated effects can be graphically presented (Figure 1). For this simulation, we used software called Clarify, developed by Tomz, Wittenberg and King (2001). For technical and theoretical details, see King, Tomz and Wittenberg (2000).

## Notes

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This paper was awarded the Australia-Japan Research Centre's Crawford Award for 2006.
- 1 Following the Lower House election in July 1993, all political parties except the LDP and the Japan Communist Party formed a coalition government. This non-LDP government and another subsequent non-LDP government (also see Footnote 12), however, failed to maintain political balance and handed Cabinet control back to the LDP in June 1994.
- 2 To be more precise, nine out of 511 Lower House members resigned or died between the 1993 Lower House election and the end of the 132nd Diet session, in which the FY1995 budget was given the Diet's approval. Note that when the FY1994 and FY1995 budgets were compiled, neither Upper House nor nationwide subnational elections were held. Therefore, almost all popularly elected representatives in national and local governments remain the same during the period of investigation.
- 3 Lower House elections under the new electoral system (that is, a combination of the single-member district system and the proportional representation system) have been held four times in 1996, 2000, 2003 and 2005. We leave an empirical examination of distributive politics under the new electoral system for future research.
- 4 Carsey and Rundquist (1999a) argue that benefits from committee representation are contingent on partisan affiliation. Also see Cox and McCubbins (1993) for party influence in the committee system.

- 5 In our empirical analysis, we control many variables for  $C_i$  by taking the first difference and focus on the effect of a variable for  $D_i$ . Accordingly, it is not our intention to compare which of the two mechanisms is more important in explaining distributive policy outcomes.
- 6 There is a counterpart of this committee—the Steering Committee (*Giin Unei Inukai*), one of the standing committees in the Diet—but the agenda-setting power was said to lie in *Kokutai* and closed-door meetings by *Kokutai* members (also see for example, Kuroda 2005 and Richardson 1997, Chap 6).
- 7 Some recent studies question whether the principle of unanimity exists and, if it exists, whether it works in Japan’s legislative process (for example, Fukumoto 2000; Kawato 2002; Masuyama 2003). It is also important to note that the principal of unanimity does not necessarily mean ‘universalism’—the equal share of policy benefits by all legislators.
- 8 Cow-walking (*gyūho*), a tactic of filibustering in the Diet, is used by the opposition to delay and prevent a vote on the passage of a controversial bill by walking very slowly to lodge their votes.
- 9 We use data reported in the account settlement (*Chihōsa Zaisei Chōsa Kenkyū Kai*, various issues), which reflects both the main and supplementary budgets of each fiscal year. The municipality population at the end of the previous fiscal year is from *Kokudo Chiri Kyōkai* (various issues).
- 10 Each of Japan’s multi-member districts under the SNTV system included multiple municipalities, but only a few municipalities belonged to multiple districts. In the 1993 election, there were only three cases where Lower House district borders split a single municipality into two districts: Kōriyama-shi, Chiba-shi, and Okayama-shi. For these municipalities, we divided each into two and estimated the values of municipality-specific variables based on the number of electors in each district within each municipality as a weight. The number of electors in each municipality and in each district as of the 1993 Lower House election is based on Mizusaki (n.d.).
- 11 Time-invariant means that variables do not change within the period of investigation.
- 12 We do not use party membership, because there were some minor party defections during the two budget cycles. Therefore, depending on date used to count the number of representatives in the ruling coalition, this variable varies within each budget cycle. Note that major party defections from the LDP took place before the 1993 election.
- 13 After resignation of the Hosokawa Cabinet en masse on April 25, 1994, the FY1994 budget bill was passed by the short-lived non-LDP coalition led by Tsutomu Hata. This should not matter in our analysis, because the FY1994 budget was largely compiled by the Hosokawa government and the Hata government did not significantly revise it before approval.
- 14 There were two rounds in the election for prime minister in 1994. We use the results of the second (that is, final) round. The data source for all representative-specific attributes used in this paper is Kabashima Ikuo Seminar (n.d.).
- 15 These new conferences introduced under the Hosokawa administration include the Summit Congress of Government (*Seifu Yotō Kaigi*), the Council of Representatives of the Coalition Parties (*Yotō Daihyōsha Kaigi*), and the Meetings of Chief Secretaries for Policy Affairs (*Seisaku Kanji-kai*) and for Political Affairs (*Seimu Kanji-kai*). The Murayama government introduced similar conferences—the Congress of Government Leaders (*Yotō Sekininsha Kaigi*), the Councils of Coalition Parties for Policy Coordination (*Yotō Seisaku Chōsei Kaigi*) and for Diet Affairs (*Yotō Kokkai Taisaku Kaigi*), and the Executive Council of Coalition Parties (*Yotō Innai Sōmu-kai*). For policy-making under coalition governments in the 1990s, see Shinoda (1998).

- 16 The data exclude the number of attendances by Cabinet ministers and parliamentary vice ministers, *Seimu Jikan*).
- 17 See Horiuchi and Saito (2003) for data sources.
- 18 The population density is dropped in the first-difference regression due to perfect collinearity.

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