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Is Silence Golden?

Evidence from Re-Election of Japan's Prefectural Assembly  
Members

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(Abstract)

This paper is an inquiry into the re-election of Japan's prefectural assembly members and investigates if their visibility in the plenary session deliberations is a determinant of the outcome of their re-election campaign. This visibility is measured by the volume of their speech during the immediately preceding term, which is tabulated from the local assembly transcripts. The use of the prefectural assembly transcripts is the methodological innovation of this paper, and allows an examination into the importance of law-makers' participation in the policy-making. The empirical analysis of re-election of incumbent legislators suggests that speech volume is a factor contributing to the electoral success for the assembly members with multiple terms.

Keywords: local assembly; election; transcript; Japan; prefecture

JEL codes: D72; D78; H89

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## **I. Introduction**

Public officials in representative democracies typically have a fixed term in office – usually a certain number of years – to exercise the power given to them by the electorate. They must run for re-election at the end of the term if they wish to remain in the position. Thus, one of the vital concerns for the elected officials during their term is the prospect of their re-election after the term expires.

This paper is an attempt to investigate the extent to which incumbents can increase the re-election prospects by their own conduct. The specific action that this research focuses on is their participation in the public policy-making. For legislators this contribution may take many forms, which include identification of issues facing the electorate, formulation of policies, and involvement in the legislative session deliberations.

This paper examines officials' involvement in the legislative session deliberations, as this is visible for the voters who would decide if an incumbent deserves the next term. It is also a variable that can be measured as the volume of each member's speech in legislative colloquies recorded in the transcripts. Incorporating this variable would allow an empirical study of the relationship between incumbents' deliberation participation and result of their re-election efforts. Data for the inquiry comes from elections for Japan's prefecture assembly members.

The rest of the paper is organized as follows. The next section reviews literature that has examined the topic of re-election of the public officials. The third section provides background information of Japan's prefecture assembly and elections for their members and describes data to be used for the empirical analysis. The results of the quantitative analyses on determinants of election outcome are presented in the fourth section, which is followed by the concluding remarks.

## **2. Incumbents and Re-election**

There is a large body of literature that has investigated elections and behavior of public officials. Stratmann (2013) confirms that the extra budget allocation to a legislator's home constituency leads to a higher vote share on election day. Rivas (2016) finds that, in a two-period framework, a politician starts his terms in office by taking

the private decision and defers taking the socially motivated decision for the second period before he is up for re-election. Peralta and dos Santos (2020, forthcoming) investigates the incumbent mayors' decision of whether to seek reelection using a panel of 278 Portuguese municipalities. Drazen and Eslava (2010) constructs a model in which incumbents try to influence voters by changing the composition of government spending, rather than overall spending or revenues. Rational voters may support an incumbent who targets them with spending before the election even though such spending may be due to opportunistic manipulation. This model is supported by data on local public finances for all Colombian municipalities.

Incorporating the presence of layers of governments, Granlund (2011) examines political accountability in the context of the two-tier government countries and finds that voters have incentives to increase the beneficial public expenditures they require for reelecting incumbents, since this reduces the resources diverted to political rents. Hickey (2015) also examines the role of inter-government transfer in voters' evaluation of candidates. Without transfers the sole issue at the ballot box is the competence of the candidates. With transfers, however, voters not only evaluate politicians on the basis of their competence, but also on the expected transfer received when a particular politician is in office.

With a focus on electoral rules, Albanese, Cioffi and Tommasino (2019) finds that the electoral rule is a determinant of incumbents' on-the-job behavior with data from Italian Senators. Chamon, *et al.* (2019) uses a discontinuity in Brazilian electoral rules to show that runoff elections are associated with more candidates and sharper political competition than majoritarian elections. Lim (2013) examines two selection systems (appointment and election) for state trial court judges of the State of Kansas, and shows that elected judges have much larger variability in their decisions than do appointed judges. The appointment system yields homogenous policy outcomes through selection based on preferences. In contrast, elected judges have diverse preferences and strong reelection concerns. Noting that there are countries where democratic systems are fragile, Kammas and Sarantides (2016) observes that incumbent politicians allocate resources to a broader group of agents as a device for consolidating democratic regimes under an instable political climate, i.e., when it is not certain that next elections are held according to the institutional rules, with data from a sample of 65 developed and developing countries.

This paper is an attempt to contribute to this field of research by providing greater insights into the relationship between incumbents' behavior and their re-election. A hypothesis on politicians' participation in policy deliberations and their re-election is tested with data from elections for Japan's prefectural assembly members. The next section describes data used for this study.

### **3. Elections for Japan's Prefecture Assembly Members**

Japan has 47 prefectures, each of which has its own local assembly with the legislative power. The assembly members are elected by popular vote for the four-year term and there is no legally binding term limit. Many prefectures conduct elections in April. This is because the first elections were held nationwide in April 1947 in order to prepare local assemblies before the Constitution of Japan was enacted in May of the same year. There is a law that requires that prefectures hold their assembly member elections on the same day, and 41 prefectures organized the assembly elections to vote on April 12, 2015.<sup>1</sup> This study uses information from this election for the empirical analysis.

The number of assembly seats to be decided in that election was 2,284 from 960 constituencies in 41 prefectures. There were 3,272 candidates for these positions, and Table 1 demonstrates their breakdown. More than half (59.9%) are incumbent legislators who would like to be re-elected, which is followed by newcomers (36.7%) who try to join the prefecture assembly for the first time. Not all of them received votes on the election day, however. There were constituencies in which candidates' number did not exceed the seat allocation, which led to automatic selection of all the candidates. This no-vote was observed for 501 seats in 321 constituencies, which correspond to a third of the total electoral districts. The remaining 1,783 seats were contested by 2,771 candidates that include 1,493 incumbents.

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<sup>1</sup> The earthquake of 2011 that devastated the north-eastern parts of Japan in March led to postponement of the year's local elections in affected regions to May, which decreased the number of prefectures that vote on the same day in April to 41.

Table 1. Breakdown of 3,272 Candidates for Assembly Seats in 41 Prefectures

Candidate Category		Vote	No-Vote
Incumbent Assembly Members	1,960	1,493	467
Newcomers	1,202	1,172	30
Former Assembly Members	110	106	4
Total	3,272	2,771	501

The following analyses will identify if the active participation in the deliberations of the plenary session helps the incumbent members to secure re-election. This is particularly important, as plenary sessions are usually open to the public (i.e., voters) and visibility on the legislative floor may be translated into positive evaluation of officials in the eye of voters. If voters hold incumbent politicians to account in the public policy-making, their records in the local assembly could be a determinant of voting behavior.

The inquiry is an attempt to investigate the determinants of the outcome of elections for the 1,493 incumbents. The variable of primary concern represents their contribution in the policy debate. This is measured as the volume of their speech (character count) in the plenary sessions during the immediately preceding term (April 2011-March 2015), which is tabulated from the local assembly transcripts.<sup>2</sup> This use of the prefectural assembly transcripts is the methodological innovation of the paper.<sup>3</sup> To

<sup>2</sup> The size of speech/remarks/statements is represented by the “character count”. This is different from the “word count” in the English text analysis. The Japanese language writing does not require a space between individual words, which makes the “word count” of Japanese transcripts extremely hard to prepare. In addition, the presence of postpositional particles in the Japanese language renders divisions of transcripts into words arbitrary.

<sup>3</sup> This count data is part of the information created in a project to establish the Japanese political corpus. The corpus is available at [ <http://local-politics.jp/> ], which is designed to provide various information contained in the prefectural assembly transcripts and is also equipped with a search function by key words. For example, it allows an investigation of specific policy issues that are discussed in individual prefectures to the extent that they are reflected in the assembly deliberations. For more information, please see Kimura, *et al.* (2016).

the author's knowledge, there has been no literature that incorporates this factor in the empirical analysis of election results for incumbent politicians.

The analysis takes the form of logistic regression that explains the dummy variable (Re-Elect) which takes one for the incumbents who were successful in their re-election efforts and zero otherwise. The principal explanatory variable is incumbents' character count that enters the regression after being normalized relative to the prefecture average count in the sample (Count-Norm). This transformation is necessary as character counts vary significantly across prefectures. It is also based on the assumption that voters evaluate incumbents/candidates relative to other legislators in the same assembly. It is hypothesized that the character count is a determinant of the election outcome with positive coefficients.

Other explanatory variables reflect competitiveness of the constituencies (CCI: Constituency Competitiveness Index) for each candidate and characteristics of assembly members. The former is obtained by dividing the number of candidates in individual constituencies by their seat numbers. This variable exceeds one as the sample incumbents face competitive ballot on the election day. It is expected that probability of being re-elected decreases as competition becomes keener for incumbents. To identify possible separate effects in the constituencies that are more competitive than average, a dummy enters the analysis as CCI-High.

Assembly member variables include age (Age) and term (Term) of individual candidates. The effect of age can be discussed in both ways. While being young may project the image of dynamism and changes, maturity and experience reflected on age could also appeal to voters. On the other hand, multiple terms should serve as a signal of experience and competence as legislators. Hence a greater value of Term is expected to lead to higher probability of re-election. A first term dummy (First-Term) is also prepared to isolate the effect potentially arising from being the junior legislators. Description and summary statistics of dependent and explanatory variables are presented in Table 2 and Table 3.

Table 2. Description of Variables

Variable Name	Description
[dependent variable]	
Re-Elected	Dummy (=1) for the incumbents who won re-election and zero otherwise
[explanatory variable]	
Count-Norm	Incumbents' character count in the plenary sessions during the immediately preceding term (April 2011-March 2015), divided by the prefecture average in the sample
Constituency Competitiveness Index (CCI)	Obtained by dividing the number of candidates in individual constituencies by their seat numbers
CCI-High	Dummy (=1) for candidates in constituencies with CCI greater than the average (of 1.550)
Age	Age of the incumbents, derived by [2015-birth year -1]. Note: This derivation does not take birth months of individual members into account. Hence this variable underrepresents age of members whose birthday falls before the election day.
Term	Number of terms of incumbent assembly members at the time of the re-election campaign
First-Term	Dummy (=1) for the incumbents in the first term

Table 3. Summary Statistics

	Mean	S.D.	Min.	Max.
Re-Elected	0.851	0.356	0	1
Count-Norm	1	0.565	0	5.949
CCI	1.550	0.402	1.062	5
CCI-High	0.333	0.471	0	1
Age	56.250	10.700	28	84
Term	2.871	1.989	1	12
First-Term	0.319	0.466	0	1

Summary statistics show that 85.1% of the sample incumbents (1,271 members) succeeded in securing re-election. The minimum value of zero for Count-Norm indicates that there are incumbents (34 of them) that did not address the plenary sessions at all during the past four years. There are on the average 1.550 candidates for each assembly seat, and the most competitive constituency has 5 candidates for one position. A third of the sample (497 incumbents) stood for re-election in constituencies that are more competitive in terms of CCI value exceeding the average value of 1.550. The average age is 56.25 years within the range of 28 and 84. The average term is 2.871. Although they are not many, there are members with two-digit terms, i.e., two incumbents seeking the 13th term, five trying to win the 12th term and six aiming at the 11th. The mean of 0.319 for First-Term indicates that in the sample are 477 first-term incumbents that try to win re-election for the first time.

#### 4. Regression Results and Interpretations

The regression results are shown in Table 4, where estimated coefficients represent log of the odds ratio. In parentheses below the coefficients are z-statistics, while marginal effects of respective variables are produced in square brackets. The specification II enters the interactive term of First-Term and Count-Norm among the explanatory variables to identify the effects of character count separately for the assembly members in their first term. The specification III examines, by including CCI-High\*Count-Norm, if the character count has different consequences in constituencies that are more competitive than the average.

Table 4. Results of Logistic Regressions

Re-Elected	I	II	III
Count-Norm	0.250 (1.60) [0.030]	0.298* (1.87) [0.036]	0.384** (2.14) [0.046]
First-Term*Count-Norm		-0.326* (1.94) [-0.039]	
CCI-High*Count-Norm			-0.290 (1.61) [-0.035]
CCI	-1.024*** (6.23) [-0.123]	-1.040*** (6.29) [-0.125]	-0.809*** (3.86) [-0.097]
Age	-0.026*** (3.07) [-0.003]	-0.028*** (3.22) [-0.003]	-0.026*** (3.09) [-0.003]
Term	0.199*** (3.86) [0.024]	0.149*** (2.63) [0.018]	0.202*** (3.91) [0.024]
Pseudo R <sup>2</sup>	5.15%	5.44%	5.35%
Chi-Squared	64.61	68.30	67.18
(P-value	0.00	0.00	0.00)

Note: z-statistics are in parentheses. \*\*\*, \*\* and \* denote statistical significance at the 1, 5 and 10 percent level. In square brackets are marginal effects.

The estimated coefficients for the character count variable are positive in all specifications, which indicates that greater speaking volume (hence greater visibility) in the assembly sessions contributes to greater probability of re-election. While it is not statistically significant when estimated as the single Count-Norm variable in specification I, inclusion of interactive terms in specifications II and III turns them significant. According to results from Specification II, between first-term and multi-term incumbents, greater character counts would lead to successful re-election outcome for the latter. It benefits them to participate in the policy deliberations to remain as the assembly members. For example, if a multi-term incumbent with the assembly's average character count doubles the speaking volume, the re-election probability increases by 3.6%. For the first-term members, however, the opposite holds as the value of negative coefficient (-0.326) estimated for First-Term\*Count-Norm exceeds the positive coefficient (0.298) for the Count-Norm. For the junior members of the prefecture assemblies, it hurts to join the policy debate on the legislative floor. This result is somewhat puzzling, since it is their very duty to engage in policy-making. A possible interpretation is that, as the junior members are vulnerable in their re-election campaign due to the limited support base among local voters, it would be wise to make efforts in the area of cultivating contact and name recognition among the electorate. Greater character count for them could reflect inadequate allocation of their time and efforts in the grass roots campaign activities.

Specification III estimates suggest an interesting relationship between the effects of character count and competitiveness in the constituencies. The positive and significant coefficient (0.384) for Count-Norm implies that incumbents are more likely to be re-elected if they participate in the plenary debate. Its impact in competitive constituencies isolated by the interactive term (CCI-High\*Count-Norm) is negative, although the estimated coefficient is not statistically significant. This is counter-intuitive if one expects that, in competitive environments, the past political performance in terms of participation in legislative activities would become more important. An explanation could be found in the presence of candidates who try to become the assembly members for the first time in those electoral districts. For the 1,202 newcomers, the average CCI is 1.789. This is substantially higher than the CCI average of 1.419 for the 1,960 total incumbent candidates (including those that were selected without actual voting), as the difference between means is statistically different at the 1% significance level. Their campaign may be designed to move the attention of voters away from legislative experience in which they cannot challenge

incumbents, which could be the reason why extra character count does not help in competitive constituencies.

Other variables have the estimated coefficients with expected signs that are statistically significant. The negative coefficients of constituency competitiveness confirm that it is more difficult to win re-election in a crowded field of candidates. It helps incumbents to be young, as the negative coefficients of the age variable indicate. Finally, it is also advantageous to have a longer tenure. The local voters appreciate their political experience. A review of marginal effects of explanatory variables in specifications II and III reveals two intriguing comparison. First, the impact of one additional term on re-election probability (1.8-2.4%) is about half the corresponding effects of the effect of doubling of character count from the prefecture average (of 3.6-4.6%). Second, an extra term improves probability of re-election even after the negative effects from an age increase are considered. Suppose that an incumbent was successfully re-elected after the second term and is now campaigning for the third term. The re-election probability has increased due to an extra term. Although this term effect is partly offset by the negative consequences due to aging during the four-year tenure, the total fall short of the positive impacts from the added term.

This importance of the legislative expertise reflected in term variable may be related to findings in Specification II and III, i.e., (i) statistically significant negative effects of character counts for the first-term legislators and (ii) negative (though non-significant) effects in competitive constituencies. If someone aspiring to become an assembly member should select the constituency to stand as a candidate, challenging the junior legislators would be more attractive than engaging the experienced veteran members. Thus, it is more likely for the first-term incumbents to find themselves campaigning for their first re-election in competitive environments. To examine the competitive environments for the first-term legislators, Table 5 represents a tabulation of the legislators seeking re-election by the number of term (First-Term and Multi-Term) and their constituency competitiveness. The top panel [A] examines these variables' relationship for 1,493 incumbents who received votes on the election day, and shows that the percentage of the first-term incumbents in the competitive districts (i.e., CCI above average) is 37.74%, which is higher than the corresponding percentage of 31.20% for the multi-term incumbents. The hypothesis that there is relationship between term and constituency competitiveness is tested with the chi-square test of independence, and the null hypothesis is rejected at the 5% level with the chi-square

statistic of 6.24. In addition, the bottom panel [B] demonstrates a two-way association between the number of term and whether voting took place on the election day. Constituency voters go to the polls only when the number of candidates exceed the seat allocation of the constituency (Vote). The percentage of the first-term incumbent who received votes was 79.77%, which is higher than 74.60% for the multi-term legislators. The chi-square test of independence rejects the null hypothesis that there is no relationship at the 5% significance level. These results suggest that first-term assembly members are more likely to face stiff competition in their constituencies.

Table 5. Number of Term and Constituency Competitiveness

[A] Breakdown of the incumbents who faced voting: 1,493

	First-Term Incumbents	Multi-Term Incumbents	Total
CCI below average	297 (62.26%)	699 (68.80%)	996 (66.71%)
CCI above average	180 (37.74%)	317 (31.20%)	497 (33.29%)
Total	477	1,016	1,493

Chi-statistic: 6.24

[B] Breakdown of the incumbents seeking re-election: 1,960

	First-Term	Multi-Term	Total
No-Vote	121 (20.23%)	346 (25.40%)	467 (23.83%)
Vote	477 (79.77%)	1,016 (74.60%)	1,493 (76.17%)
Total	598	1,362	1,960

Chi-statistic: 6.12

## 5. Concluding Remarks

This paper has tested the hypothesis that politicians' participation in the policy-making increases their chance of re-election by measuring participation as the volume of their speech in the policy deliberations. One of the findings is that the hypothesis holds for multi-term local legislators. Speech is silver for them and the impact from debate participation is substantial. A caveat in this observation is that, for the first-term legislators, engagement in policy discussion reduces their re-election prospects. Silence is golden for junior politicians. This is unfortunate to the extent that politicians' first duty is to be involved in the public policy-making. Negative consequences from this legitimate activity could bias junior members' incentives and prevent them from accumulating policy-making expertise during the early stage of their political career.

This observation may stem from challenges by those who try to join prefecture assembly for the first time. The possibility of newcomers' entry into public office is one important aspect of the democratic system, which separates it from autocracy. Their presence gives incumbent officials good incentives to serve their local voters well as that will increase the chance of their re-election. Nonetheless, it is an important finding that the electoral competition they promote could have consequences on the behavior of junior politicians that may not directly enhance their public policy expertise.

Since this inquiry has used data from a single set of local elections in Japan, it is desirable to conduct similar studies with different sets of election data. Analyses in the same framework could produce different results, depending on the election rules of individual democracies. Hopefully this would contribute to a better understanding of the democratic process.

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