The Effect of Position on Reelection and Promotion of Legislators

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and

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Reelection goal of politicians has been treated as an axiom in legislative studies (Fenno 1973). We also know, however, that not all politicians do actually seek reelection; some retire (Frantzich 1978; Hibbing 1982; Hibbing 1991). Previous legislative studies claim that one of the reasons they choose not to run is their poor electoral prospect (Cox and Katz 2002; Jacobson and Kernell 1983) or ambition for higher offices (Black 1972; Brace 1984; Copeland 1989; Kiewiet and Zeng 1993; Rohde 1979). According to the “strategic politician theory,” when incumbents expect they will lose, they do not challenge in order to avoid cost of electoral campaign. But here is a puzzle; why do some incumbent candidates run and lose even if they expect they will win? Are they so irrational that they run even if they know they will be defeated? Or are they so ill-informed that they miscalculate chance of their victory and think that they will prevail even though there is not enough probability that they do? We will argue, no.

This paper solves this puzzle by answering the following two questions. One is what explains reelection for representatives in the first place. Above all, we pay attention to the effects of various positions in the government, the parliament and a party, which
previous works have not considered well. The other is why they choose not to run for reelection. As the strategic politician theory has shown, if reelection is a main goal of legislators, determinants of their electoral victory would discourage their decision to retire. Retirement can not, however, be explained by electoral prospect only. Incumbent’s assessment of benefit and (opportunity) cost of seat as well as election itself would also strongly affect whether they run for a reelection bid (Kiewiet and Zeng 1993). Thus, we argue that it is still rational for incumbents who correctly anticipate not so many votes to run as long as they face high fringe benefit or low opportunity cost (c.f. Banks and Kiewiet 1989).

We test our argument using data of the Liberal Democratic Party members in the House of Representatives in Japan from 1980 to 1990. A merit of Japanese data is absence of governing parties’ alternation, which enables us to control difference among parties and focus on retirement-reelection nexus. We also utilize the Heckman selection regression which has not been applied to the selection bias problem of incumbent’s electoral outcome.

The organization of the present paper is as follows. In the next section, our theory of electoral outcome and retirement decision is explained. In the following section, we describe our data of Japanese House members and report the results of the Heckman
selection regression. Finally, we conclude.

THEORY

Electoral Outcomes

Three kinds of factors would affect electoral fortunes. First, preferable national partisan tides would increase that party’s legislator’s votes. That is, if the political party candidates belong to would be expected to increase their vote share, they would also expect vote surge and higher chance of winning. (Cox and McCubbins 1993; Jacobson and Kernell 1983).

Secondly, the personal electoral resource of the candidate would add to votes. Since LDP politicians fight against not only other parties’ candidates but also other fellow LDP candidates under single non-transferable vote (SNTV) electoral system, they need many personal votes in addition to party votes in order to get elected (Ramseyer and Rosenbluth 1993). An obvious factor is electoral base or support. The better the previous electoral outcomes are, the more likely incumbents are to return. Seniority is another resource, which indicates personal reputation and should ameliorate electoral return. The less qualified legislators are, the less likely they are to survive electoral judgment by voters.
It follows that senior legislators who have won more elections are more likely to be of high quality. Moreover, as senior members have more resources and quality, they scare off challengers more credibly. To these usual personal resources, we add new one: positions in the government, in the legislature, and in a party. Since those who hold these offices can perform casework for their constituents and bring pork barrel projects to their districts, they improve their reelection prospects.

Thirdly, quality of challenger would decrease incumbent’s vote. If lawmakers face more qualified candidates, they would expect fewer votes. The often-employed measure of challenger’s quality is experience of elective offices such as local government legislator (Cox and Katz 2002; Jacobson and Kernell 1983). In a SNTV system, other fellow LDP candidates in the same electoral district are also such strong contenders.

Retirement

Next, we consider the decisions whether legislators (re)run for election or retire. We assume that politicians are reelection seekers. Moreover, since cost for election is huge, it is reasonable to assume that candidates are rational and informed. They spend lots of time and money and get quite good information about their electoral fortune beforehand. Thus, we
assume the simple model of politician’s utility calculation as follows (Samuels 2003; Stewart 2001).

\[ U_i = P_i(B_{ip} - C_{ip}) + B_{iq} - C_{iq} + E_i, \]

where \( U_i \) is the utility of running for public office \( i \), \( P_i \) is the subjective probability of winning at the election, \( B_i \) and \( C_i \) indicate benefit and cost respectively, and \( E_i \) is an error term. The difference between indexes \( p \) and \( q \) is the direct return of running (\( q \)) or the indirect return of running (\( p \)). When \( U_i > 0 \), incumbents run for reelection. According to this model, the factors which increase the probability to run are better electoral prospect, larger benefit and smaller cost.

While \( B_{iq} \) is induced just with the action of running, \( B_{ip} \) is the expected value of the public office \( i \), which is induced only through winning the election. We usually assume politician’s goal is public office and running for election is the instrument of pursuing this goal. However, for some politicians and political parties, running for election itself should be regarded as their goal. Appealing their own policy platform or criticizing incumbent government during campaign period is the most important objective for them. Benefits of
running, whether they are indirect or direct benefit, include psychological satisfaction as well as material returns. To consider Bip term, we follow the orthodox rational choice assumption on legislator’s goals: reelection, promotion (higher position in the legislature), and ideal public policies (Fenno 1973).\textsuperscript{3} And reelection goal has primary importance, because the latter two goals are mostly dependent on the first goal. Windows of opportunity for promotion and ideal public policies will be open only after a lawmaker gets elected. Considering these relationship, the value of reelection (public office) (Bip) would vary in accordance with the expected value of promotion and the possible influence over public policies which politicians are expected to have when they return to their office.

Cost for running for the office also can be distinguished into direct (Ciq) and indirect one (Cip). While campaign cost could be direct one, opportunity cost for public office such as another job possibility could be indirect one, which will be deducted only after he or she gets elected. For Cip term, we could incorporate ambitious politician’s model. We know some politicians do not want to return to their office, because they prefer higher office (Black 1972; Kiewiet and Zeng 1993; Rohde 1979). When they find the

\textsuperscript{3} Hibbing (1982) argues that loss of “fun” facilitates retirement. Theriault (1998) shows that disappointment for promotion incurs departure from Congress.
chance to seek higher office, they would retire their previous office, which can be an exceptional case from reelection seeker assumption. We see such challenge to higher office as a kind of opportunity cost for current office. Such cost would be latent, but it would always occupy ambitious politician’s mind, even when he or she stick to the current office. Another example of indirect cost is future pension reduction or abolishment of campaign fund transfer to personal account (Grosecloose and Krehbiel 1994; Hall and Houweling 1995).

Finally, $P_i$ is the subjective probability of winning at the election. Since personal electoral resource, quality of challengers, and national partisan tide are expected to affect the actual outcome of the elections as mentioned above, they will also matter for the probability to run for reelection. Hopeless candidates may correctly expect their electoral defeat and choose not to run.

**ANALYSIS**

Model

We are interested in both whether incumbents run for reelection bids and how many votes
they have. Some scholars may perform probit analysis for the former and OLS regression for the latter separately. But if error terms in both equations are correlated, estimates will be biased. This should be the case, because we can not measure all relevant factors described above. Electoral defeat (or victory) can come about only after decision of rerunning was made. To take this into consideration, the Heckman selection model is used. Though this kind of selection bias problem is known in electoral studies (Cox and Katz 2002; Gelman and King 1990), the unit of analysis in preceding works was not an incumbent but a party and the Heckman selection model has not been used.

Data

The unit of analysis is legislator-term. In order to study the effects of government positions, we analyze LDP members only because no other parties take power in the studied period, namely, terms which start in 1980, 1983 and 1986.\footnote{For the period before 1980, the data is not available now. After the 1990 term, the LDP lost election in 1993, came back to power and have kept it since 1994 only with help of coalition parties. Thus, political mechanism may change after the period the present paper examines.} Those who leave the House (mostly
die) before the end of term (n=29) are dropped off from the sample, because they have no chance to run and win a reelection bid and because some factors explain death but not retirement and vice versa. Since we can reasonably suppose that their death is statistically independent of their electoral prospect and retirement, this omission should not bring about bias about estimation.\(^5\) Thus, the number of observations is 801, of which 50 lawmakers do not run for reelection.

Dependent Variables

Dependent variables are Vote and Run. Vote is the ratio of votes (V) to the Droop quota the legislator has in the election at the end of the term, namely, the total number of votes (T) divided by the number of seats from the district (M) plus one: Vote = \(V/(T/(M+1))\). During the studied period, members of the Japanese House of Representative were elected under the SNTV electoral system, where one man has one vote but one district has three through five seats and votes unnecessary for victory can not be transferred to other candidates.

\(^5\) Fukumoto (2005) considers the death hazard as well as retirement and electoral defeat by using competing risks model of survival analysis.
Various numbers of seats of districts make comparison of vote share across districts difficult, while the Droop quota means the minimum vote share to guarantee victory. Due to this interpretation, the Droop quota ratio is useful measurement to compare vote shares in districts of different magnitude size (Cox and Rosenbluth 1995).\textsuperscript{6} \textit{Run} is a dummy of one if lawmakers run for reelection and zero if they retire.

Independent Variables

\textsuperscript{6} We examine other measurements such as the ratio of votes to votes the runner-up has (Kato 1998) and the ratio of votes to the legal deposit confiscation criterion, namely, the total number of votes divided by the number of seats from the district times four (T/4M) (MK index Matsubara and Kabashima 1984; See also Tatebayashi and McKean 2002). The ratio to runner-up has the mass of zeros for incumbents who end up as runner-up. It is very sensitive to electoral strength of runner-ups as well as that of incumbents and, therefore, is very unstable. Only a few independent variables can explain it. The regression of the MK index is similar to that of the Droop quota ratio, while the latter is clearer than the former. Thus, we report the latter in the text.
First of all, we include no variable to represent national partisan tide, because all of our samples are LDP members. In other words, we control for the impact of national partisan tide with these data samples.\(^7\)

Secondly, for measuring personal electoral resource, we introduce \(\text{Lag(Vote)}\), the ratio of votes to the Droop quota the legislator has in the election in the beginning of the term, and four position dummies such as Minister, Vice Minister, Parliamentary Chair (chair of committee in the House), and Party Chair (chair of division of PARC).\(^8\) We

\(^7\) Data sources on position variables are annual publications of LDP PARC membership roasters (\textit{Jiyu minshuto seimu chosakai meibo}), Handbook of Politics (\textit{Seiji handobukku}), and Handbook of Diet (\textit{Kokkai binran}) and that on the other variables is Kawato and Kawato (1997) (for other variables)

\(^8\) We examine whether legislators hold these posts as their first job just after an election. Thus, we miss the cases where they experience these positions in the middle of the term. But note that this measurement omission makes their effects on votes difficult to see. Therefore, if even this incomplete data reveals positions’ effect, complete data should confirm them. In that sense, the results based on our data is robust.
measure Seniority by the number of terms legislators have served. This is also considered as the indicator of the expected value of reelection, $B$ terms in the selection model. Since LDP has established seniority rule for allocating posts to their members, legislators would expect cumulative returns with their electoral terms.

Thirdly, as proxy of quality of challengers, we employ Time from Local Election representing years from the latest prefecture assembly election to the analyzed national election for the House of Representatives. Since electoral term for local assembly members are fixed in Japan (four year term), this variable indicates the inverse value of the residual terms for local assembly members, who are the potential and the most qualified challengers at national election. So we expect that the longer Time from Local Election is, the more likely local assembly members should be to challenge for the national election. Considering this variable, we should emphasize that Japanese electoral law requires public officials including politicians must resign before they run for another public office. The cost calculation for challenging to national election for local assembly members as well as

\[ \text{9} \text{ Unlike the case of the U.S. Congress, legislators do not have to (and, usually, they do not) serve the same committee consecutively. See Epstein (1997).} \]
bureaucrats should be very severe in Japan. LDP# is the number of other LDP candidates in the district, which also indicates strong competitors.

Variables which measure $B$ terms and $C$ terms are used only for probit component of Run. It is also the exclusion restriction for the Heckman selection model, which is included in the regression of Run but not in that of Vote and warrants identifiability of the model. As for $Cp$ term, we regress Run on Attorney (a dummy which indicates that a legislator is qualified as attorney). While U.S. House members may be ambitious for governor or senator, however, Japanese representatives rarely move to another office. Thus, we do not consider vacancy of higher offices. Age in the beginning of the term is used as $Cq$ term.

Unobserved or unobservable factors including benefits ($Bp$ and $Bq$ in the above notation) are included in error terms for both regressions.

Results

Table 1 reports results of our Heckman selection regression.\textsuperscript{10} For regression of Vote, 

\textsuperscript{10} As for statistical software, we use STATA for maximum likelihood estimation and R for simulation. Since the same legislators may appear in the data a few times, robust standard
coefficients of all independent variables but Parliamentary Chair are different from zero in the expected direction at 5% significance level (Parliamentary Chair is also significant at 6% level). Especially, Minister and Party Chair increases as much Vote as 0.274 (=0.124/0.453) and 0.161 (=0.073/0.453) Lag(Vote). The fact that, among the positions studied, only Parliamentary Chair fails to increase votes seems to reflect that this post is not regarded as powerful but just as a token.

[Table 1 about here]

For probit regression of Run, surprisingly, only Lag(Vote), Age and the intercept have coefficients different from zero in the expected direction at the 5% significance level. Posts and Seniority do not matter for decision to enter the race.

Figure 1 shows the simulated relationship between entry probability (expected value of Run) and expected Vote when Lag(Vote) move from its empirical minimum (0.52) to errors are reported, which assume homoskedasticity within legislators but not among them.

Time from Local Election is significantly positive, which is in the opposite direction from our expectation. As Time from Local Election becomes larger, the next local election is approaching and local politicians cooperate with their associated national legislators better in order to mobilize their own supporters. We guess that this mechanism may improve incumbents’ votes.
maximum (2.49), all the other continuous variables are set at their mean (except Seniority, which is regarded as one), dummies are set at zero and coefficients are fixed at their maximum likelihood estimates. We see that those who have poor electoral prospect retire. This is exactly what the strategic politician theory predicts.

[Figure 1 about here]

An unintuitive finding is that the correlation parameter (rho) between errors in both regressions is negative (-0.58). Wald test rejects the null hypothesis that both errors are independent. This is illustrated by Figure 2. We assign the same value to covariates and coefficients as in Figure 1 except Lag(Vote), which takes its mean value (1.04). Then, error terms in both regressions are randomly generated 1,000 times. Based on them, we calculate entry probability and expected Vote. This figure demonstrates that those who have poor electoral prospect are more likely to run instead of retire. How can we explain this?

[Figure 2 about here]

This is the time we solve the puzzle which we present in the introduction. If politicians correctly anticipate vote share and run, why some fail? Figure 3 depicts that expected Vote is almost the same between winners and losers. Difference lies in error terms which no observed variable explains. According to Figure 4, losers suffer negative errors,
while winners encounter positive errors and negative ones 50-50.

[Figures 3 and 4 about here]

Error terms represent unobserved variables. The above results imply that some unobserved variables increase the entry probability but decrease Vote. We suspect that campaign costs (small $C_q$) and idealistic motivation (large $B_q$) are such factors. The less money candidates consume, the more easily they run because of cost reduction ($U$ is more likely to be positive) but the more difficult it is for them to win because of less effective campaign. Unfortunately, data about money spending during the studied period is unavailable. On the other hand, the more idealistic enough or the more extreme enough they are to expect direct returns from just running for election by appealing their own policy platform or criticizing incumbent government, the more eager they are to run ($U$ is more likely to be positive) but their extremeness deteriorates their Vote. This is not measured, either, but sneaks into error term. Note that, if benefits are large enough (or cost is low enough) to compensate not so good electoral prospect, that is, $U>0$, it is still rational to run. Thus, negative correlation between both error terms implies that losers are as much rational and informed as winners.
Some electoral studies assume that reelection itself is the absolute goal for incumbents. By contrast, the strategic politician theory emphasizes that, even if legislators seek reelection goal enthusiastically, they should also consider probability to win. We ask why some incumbent candidates run and lose even if they expect they will win. Our answer is that even incumbents who correctly anticipate not so many votes may well run as long as they face high fringe benefit or low opportunity cost of running. Thus, losers are as rational and informed as winners. We emphasize that retirement decision can not be explained by electoral logic only.

Since retirement decision and electoral outcome are deeply related, they should be examined simultaneously. Retirees, however, do not see electoral outcome. Thus, we employ Heckman regression, where regression parameters of binary outcome of running and those of actual vote in the election are estimated simultaneously, considering correlation of both error terms.

We confirmed our argument by using the data of the LDP politicians in Japan. We found that electorally vulnerable politicians were more likely to retire. More interesting
finding, however, is the negative correlation between error terms of sample selection regression and main regression. This result implies that some unspecified factors enhance the probability to run for the election but decreases vote amount at the election. We claim that low campaign costs and idealistic motivation might be the candidates of such factors. This is what reelection centered model of politician or strategic politician theory could not have told.

Recent studies on comparative legislatures have shown that legislators do not always want to return to their positions and sometimes pursue some other goals. Our study also follows this line of research. We believe our findings would help provide the framework for further study of comparative legislatures by conditioning the simple reelection minded politicians and presenting more nuanced understanding of legislative career and their behavior.
References


Matsubara, Nozomu, and Ikuo Kabashima. 1984. The Tanaka Faction Won but the Liberal


Table 1. Heckman Selection Model

<table>
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<tr>
<th>Dependent Variables</th>
<th>Vote Run</th>
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<th>Independent Variables</th>
<th>Coef</th>
<th>SE</th>
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** p<0.01
* p<0.05
- not applicable
Fig. 1. Only Lag(Vote) Varies, No Errors

Latent Droop Quota Ratio
Probability to Run

Latent Droop Quota Ratio
Probability to Run
Fig. 2. All Covariates Fixed, Only Errors Varies
Fig. 3. Expectations of Droop Quota Ratio

**Probability Density**

- **Winner**
- **Loser**

**Expectations of Droop Quota Ratio**
Fig. 4. Residuals of Droop Quota Ratio

![Residuals of Droop Quota Ratio](image)