# Economic Accountability and Strategic Calibration in Japan's Liberal Democratic Party

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## **Abstract**

I propose a new explanation for the dominance of the Liberal Democratic Party (LDP) in Japan using the notion of strategic calibration. Existing theories of LDP hegemony emphasize a favorable electoral system and strong economic performance, but neither of these factors is sufficient to explain the party's recent success. Using public opinion data from 1960 to 2004, I show that the LDP employed a strategy to prevent unpopular prime ministers from tainting the party's image. Time series analyses show that inflation and unemployment have modest effects on cabinet support ratings, but they have no effects on LDP ratings. LDP leaders are sensitive to the relative support levels of the prime minister's cabinet and the party because the former affects the latter, though not the reverse. Duration models demonstrate that when cabinet ratings fall below party ratings, cabinets are more likely to be reshuffled and prime ministers are more likely to be replaced to avoid having the cabinet's negative image "rub off" on the LDP. Although electoral rules, culture, and other factors surely play a role in sustaining the LDP, I reveal for the first time that the party manages it cabinet personnel strategically to maintain suitable party support in the electorate.

In late 2000, Japanese Prime Minister Yoshiro Mori faced an uncertain future. His cabinet's public approval ratings had fallen to some of the lowest of any prime minister in postwar history. The national economy was still showing weakness and Mori was prone to gaffes that further hurt his image. In eight months his support ratings sagged from 33% to 17%, thus falling below even support levels for his Liberal Democratic Party (LDP). Mori's rapid decline also brought the party's ratings down seven points. In December he reshuffled the cabinet for a second time in hopes of salvaging his public image and remaining head of the party. Even after the reshuffle, LDP Diet members continued to worry about Mori dragging down the party as the LDP had lost its outright majority in the lower house under his tenure. His decision in February 2001 to continue with a round of golf rather than to respond to the ramming of a Japanese fishing ship proved to be the last straw. Under pressure from his own party and opposition parties, Mori agreed to step down and hold elections ahead of schedule. The cabinet resigned en masse in April and Junichiro Koizumi was chosen prime minister. The "Koizumi boom" saw the cabinet's ratings rise by 60 points overnight, one of the biggest increases ever. His popularity also helped the party. Within six months the LDP's support had risen more than 10 points as the result of its association with Koizumi. The cabinet remained unshuffled for 17 months, one of the longest postwar periods without a change. Mori's reshuffles and his eventual ouster were attempts to prevent an unpopular leader from taking the party down with him. The stability of the Koizumi cabinet, in contrast, was embraced in the hopes that the prime minister's popularity would rub off on the party.

Although the Mori and Koizumi eras are unique in their own ways, I argue that the strategies used these cases are indicative of broader strategies aimed at keeping the LDP in power. Without an appreciation of these dynamics, the party's dominance during the "system of 1955" has remained misunderstood. The two most common explanations for LDP success focus on the credit the party earned for presiding over economic growth and the benefit it received from a biased electoral system. Yet despite changes to the electoral system and decline of the national economy over the past decade, the LDP today holds a firm majority in the House of Representatives. The apparent lack of accountability raises serious normative issues and makes Japan something of an outlier among industrial democracies. A typical analysis concludes that "what makes Japan's democracy different...is the nonanecdotal and persistent problem of an elected leadership that behaves obviously nondemocratically and a citizenry that abides such behavior passively" (Bowen 2003, 61). Given only what been argued in the scholarly literature, LDP current success is all the more surprising.

My solution to this puzzle is the nation of "strategic calibration" by party elites. I argue that the LDP has managed its personnel to benefit from a popular prime minister and dissociate itself from the cabinet when the prime minister falls into public disfavor. LDP leaders absolve the party of responsibility for bad times by removing unpopular prime ministers and cabinet secretaries. Importantly, these actions are taken before the unpopular prime minister has the opportunity to bring the party down with him. Using public opinion data from 1960 to 2004, I show that, while public support for the LDP and cabinet are in a long-term equilibrium relationship, cabinet ratings affect party ratings but not the other way around. This is convenient since the party can replace its leaders but leaders can not replace their party. When the relative support of the cabinet compared to the party is too low, leadership changes are made. The outgoing leaders are blamed and the party is largely able to maintain its public image.

The rest of the paper unfolds as follows. First, I note how the reform era of 1993 and 1994 changed party politics in Japan and review two theories that attempt to explain LDP dominance in terms of the electoral system and a strong economy. While plausible before the reform era, both accounts have trouble explaining LDP success since then. I then explain why Japan ought to make an ideal case for showing effects of the economy on support for the government. Public opinion surveys from 1960 to 2004 show that support for the LDP fell sharply during the reform era, but that ratings of the prime minister's cabinet went even lower. I demonstrate that unemployment and inflation have modest effects on cabinet support but no effects on LDP support. LDP support is a function of cabinet support but not the other way around. Finally, I propose a theory of strategic calibration by which party leaders replace the prime minister or other cabinet officials when cabinet support ratings drop below party ratings. Neither variable predicts staff changes on its own; only the relative standing of party and cabinet support levels explains cabinet reshuffles and replacements of the prime minister. I conclude that the LDP has taken advantage of the asymmetries in both public opinion and structural relationships between the party and its leadership to filter out adverse public judgements.

## The Reform Era

No discussion of party politics in Japan is complete without acknowledgement of the changes that have taken place in the last dozen years. I shall refer to the critical period between the summers of 1993 and 1994 as the "reform era." The reform era saw important changes in the electoral system and marked the end of the Japanese economic miracle and politics as usual.

The LDP lost it upper house majority in July 1989 following scandal, tax increases, and a faltering national economy. By June 1993, the LDP government itself was in trouble. The Diet passed a no confidence motion against Prime Minister Miyazawa's government and many LDP members left the party. The general election held in July saw the LDP lose its majority for the first time in 38 years. A cumbersome seven-party coalition formed a new government under Morihiro Hosokawa, followed by the short-lived Tsutomu Hata government that excluded the LDP. The LDP soon returned to the cabinet in June 1994 as part of a coalition under Tomiichi Murayama, thus ending the party's absence from the government. Within two years it returned to power and has since needed only small coalition partners to maintain its parliamentary majority.

Scholars disagree about how lasting the changes of 1993 and 1994 will be. Hrebenar (2000, 4) concludes that "There have been two party systems in the post-World War II Japanese national politics: the First Party System of 1955 and the Second Party System of 1993." Pempel (1998) declares it nothing less than a "regime shift." Curtis (1999) notes that the shakeups preserved continuity as much as they instituted change and McKean and Scheiner (2000) demonstrate how little the new electoral system alters party strategies. I will show that both views are correct to some degree. The LDP remains in power with a firm majority in the lower house, but the party's support ratings fell permanently in the reform era. The first non-LDP government in 40 years made Japanese more open to the possibility of a multiparty democracy, yet basic relationships between social conditions and public opinion remained unaltered.

Two explanations have been offered for the LDP's dominance. While each contains some truth, neither of them can account for the party's preeminence after the reform era. My point is that the bases of LDP support have changed. Rigged electoral rules might have advantaged the LDP as did governing during a long period of economic prosperity. But both of these crutches were removed during the reform era. I now explain how the electoral system and economy might have sustained the system of 1955 but not the system of 1993.

# **The Electoral System**

The first factor thought to underwrite LDP success is the electoral system. Under this view, election rules are responsible for artificially manufacturing many of the LDP's victories (Hrebenar 2000). Specifically, the Liberal Democrats were provided with two crutches. Unequal district populations favored rural LDP strongholds. More importantly, the single nontransferable vote (SNTV) encouraged factionalism, parochialism, and voters' personal ties to LDP incumbents (Carey and Shugart 1995; Curtis 1999; Reed 1994). The system awarded the LDP more seats than their vote shares alone would imply (Cox and Niou 1994).

Not only did SNTV help the LDP; it also splintered the opposition. The electoral system helped fragment opponents on the left, thus prohibiting a single progressive alternative to the LDP (Kohno 2001). These smaller parties failed to run candidates in enough districts where they could have won seats, thus handing victories to the LDP (Reed and Kabashima 2001). Furthermore, the success of the LDP created something of a self-fulfilling prophesy as new candidates joined it ranks after winning office on their own.

The multimember system was abandoned in favor of mixed member system in 1994. Every lower house election since 1996 has used this system. The *heiretsu-sei*, or side-by-side system, is one of a family of mixed electoral systems adopted around the world in the 1990s (Shugart and Wattenberg 2003). The mixed member system selects some legislators by proportional representation and others via single member districts. This was design was expected to weaken the LDP. Following Duverger's logic, the single-member districts would, over time, consolidate the opposition into a single block (Reed 1990).

It has been argued that the new electoral system favors the LDP just as much as the old one did (McKean and Scheiner 2000). My approach circumvents this quite reasonable possibility. While malapportionment and SNTV might have manufactured LDP electoral majorities, the same cannot be said of public opinion. Filtering public sentiment through a biased system would have given the LDP undo advantage only in elections. Public opinion, in contrast, ought to show less support the LDP than election results alone would imply. In short, while the electoral system might have distorted public preferences in favor of the LDP, opinion polls did not.

# The Economy

A second theory of LDP success rests on the strong performance of the postwar economy. The electoral system theory posits that Japanese voters essentially duped, held captive by unfair

<sup>&</sup>lt;sup>1</sup> Christiansen (2005) argues that malapportionment was never much of a problem and is even less so in the post reform era.

election rules their preferences to be realized. The economic theory, in contrast, assumes that voters were willing LDP supporters who rewarded the party for economic prosperity.

As the governing party the LDP got credit for the Japanese economic miracle. Voters tolerated corruption during the LDP's reign in exchange for this economic success. Although frequent scandals might have lowered trust in government (Pharr 2000), it was never enough to knock the LDP from power permanently. With low unemployment, a booming stock market, little inflation (outside the worldwide energy crises of the 1970s), and a burgeoning trade surplus, a dose of political graft was not enough reason to knock the governing party from power. Such a relationship between voters and politicians is consistent with the "material inducement theory," which posits that citizens trade their support for a corrupt party as long as that party provides benefits such as competent stewardship of the economy (Fackler and Lin 1995).

While this account might nicely explain the system of 1955, the quid pro quo should have fallen apart by the 1990s. The economic bubble popped, sending the stock market downward, unemployment upward, and the national banking system into turmoil. Every positive indicator stopped its progress and in many cases turned negative. The annual unemployment rate never reached as high as three percent until the mid-1990s but then reached five percent – twice the pre-1990 rate – by 2001. Aside from the inflationary spike of the mid-1970s, inflation held at low levels until breaking loose a few years ago. The stock market grew at an exponential rate from 1960 until 1990, at which point it reversed course. Today the Nikkei average remains at half of its 1990 value. The economy grew annual at a rate of over nine percent from 1956 to 1973, then a slower four percent rate until 1990, and barely at all in the 1990s (Bowen 2003). So while an exchange theory might explain corruption and LDP dominance in the pre-reform era, it does not provide a reasonable account of Japanese politics since then.

If political science scholarship is to be believed, the link between support for the incumbent government and the economy is almost universal in postindustrial societies (Clarke and Stewart 2000; Erikson, MacKuen, and Stimson 2002; Lewis-Beck 1988; Lewis-Beck and Stegmaier 2000; Norpoth 1985). While the electoral system theory highlights the inability of voters to remove the LDP in bad times, these roadblocks should not affect public opinion. The economic falloff of the 1990s ought to be reflected in less support for the government and the LDP.

Unfortunately, the economy's influence on political support has not proven robust in Japan. Only a few studies have been published and they yielded contradictory results. Reed and Brunk (1984) found some evidence for economic voting in Japan, but the effects only hold for the post-oil shock era, which has a sample size of just six elections. Inoguchi (1981, 1990) finds some economic influence but with limited samples and sparse models. Fukumoto's (2004a) more comprehensive analysis uncovers no impact of economic perceptions on cabinet support. Anderson and Ishii (1997) analyze economic voting in Japan from 1958 to 1992 and find that neither unemployment nor inflation help predict election outcomes. They conclude that "domestic economic conditions do not have a systematic impact on the electoral performance of either the LDP or JSP" and that researchers "need to revise our expectations that domestic economic conditions necessarily affect governments and parties" (630). In short, despite the strength of economic factors elsewhere, there is only mixed evidence that the LDP benefited from a strong economy during the system of 1955 or was harmed by its freefall in the 1990s.

The Japanese setting is particularly attractive for studying economic effects on party politics. The factors that usually complicate studies in other nations are largely absent. The LDP provides a convenient common denominator over a long period of time. Alhough the party is known for reinventing itself, its central place in politics provides a consistent metric of evaluation. This provides "clarity" to the electorate about who is responsible (Anderson 1995; Powell and Whitten 1993). In addition, we need not account for the fact that leftish parties might be held more accountable for unemployment and rightish parties for inflation (Hibbs 1977; Powell and Whitten 1993) since the LDP (outside of 1993-4) holds these factors constant. By the comparative standards, the Japanese system ought to allow for maximal responsiveness of public opinion to macroeconomic conditions.

## **Public Opinion Data**

I analyze survey data compiled by the Jiji Press service. Early each month a representative sample of Japanese was interviewed in person and asked which party they currently support and whether they support the current prime minister's cabinet.<sup>3</sup> The methodology and question wording have remained unchanged through this entire period.<sup>4</sup> The Jiji data thus provide an invaluable resource for analysis of postwar electoral politics in Japan (see Miyake, Nishizawa, and Kōno 2001). I study the period from June 1960 to December 2004, for a total of 534 monthly observations.<sup>5</sup>

Figure 1 shows support for the prime minister's cabinet over this period. This series has three defining features. First, support for the cabinet is generally low, averaging just 36%. Even in a single-party system, such low support rates make governing a challenge. Second, there is tremendous volatility in the time series. Support ranges widely from the single digits to nearly 80%. Third, and related to the first two points, new prime ministers have tremendous positive influence on cabinet support ratings. The most dramatic upswings n the series are associated with replacement of an unpopular prime minister. Perhaps most obvious is the appointment of Koizumi to replace Mori in 2001. But approval also spiked when Kakuei Tanaka ousted Eisuke Sato in July 1972 and on other occasions.

<sup>&</sup>lt;sup>2</sup> Whitten and Palmer (1993) give Japan a score of 1.0 on a six-point scale running from 0 (clearest responsibility) to 5 (least clear responsibility). Their three indicators of ambiguity of responsibility – strong bicameralism, minority governments, and coalition governments – are almost nonexistent in Japan.

<sup>&</sup>lt;sup>3</sup> Following convention, I view support for the prime minister and support for the cabinet as the same. "Polls of this sort in Japan ask whether respondents support the prime minister's cabinet, rather than the prime minister himself, but as these are the standard measures of prime ministerial popularity in Japan, we use them here" (Krauss and Nyblade 2005, 365). In the remainder I use the terms cabinet support, government support, and prime minister support interchangeably.

<sup>&</sup>lt;sup>4</sup> This contrasts with presidential approval polls in the U.S., which are conducted irregularly and must be aggregated in an ad hoc fashion to create a quarterly or monthly series (Erikson, MacKuen, and Stimson 2002).

<sup>&</sup>lt;sup>5</sup> Due to missing values for a few months, the effective number of cases is slightly lower in the models below.

<sup>&</sup>lt;sup>6</sup> The variability also appears to grow over time, especially after the reform era (Fukumoto 2004a; Kraus and Nyblade 2005).

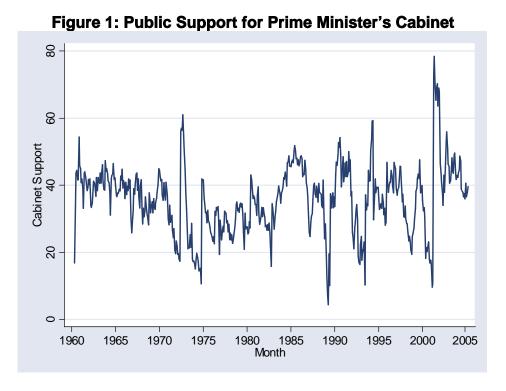
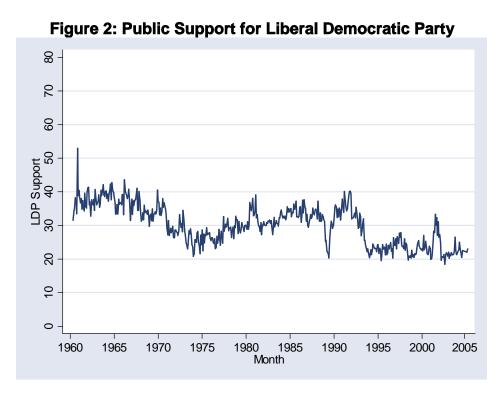
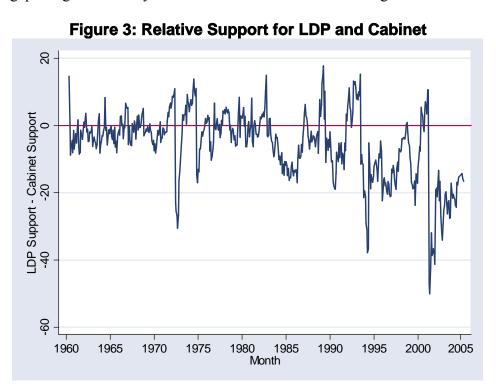


Figure 2 displays support for the LDP. The contrast with cabinet support is remarkable. LDP support rates are a bit lower on average and do not vacillate much, even during times of great tumult in the party system. Aside from the secular decline exhibited during the scandals of the 1970s, the only marked shift occurs during the reform era, when the party's support dropped a full ten points.



While LDP politicians surely strive to maximize support for both the party and its leaders, I will argue that they are keenly interested in the *relative* standing of these two indicators. I compute a composite measure called "relative support," which is the difference between LDP support and cabinet support. Figure 3 displays relative support over the last 45 years. Values below zero indicate more support for the current leadership than for the LDP; positive values indicate that the party is more popular than its leader. Aside from the unusual stamina of the Nakasone governments in the 1980s, the two series were roughly equal until the early 1990s. Since that time, the LDP has consistently underperformed relative to the cabinet. Until the end of the reform era, the mean levels of cabinet and LDP support were 35% and 32%. After 1994 the values stood at 39% and 23%, thus widening the gap from a mere three points to 15. Importantly, this separation does not result from the greater popularity of recent prime ministers. Rather, the gap has grown mostly because of the LDP's decline during the reform era.



As an aside, I note that the permanent shift away from the LDP in 1993-4 does not benefit any other party in particular. Of the other possibilities, only "no party" support grew as a result of the LDP's losses. Party independence rose steadily during postwar era, but it ratcheted up permanently in 1990s. The socialists, in contrast, reached their peak well before the reform era. Whether the Democratic Party of Japan (DPJ) provides a real challenge to the LDP in the future remains an open question as its support levels are currently below those of the LDP.

The lessons learned from these figures are several. Prime ministerial support is more volatile, and recently also higher, than support for the LDP. The prime minister time series swings up

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<sup>&</sup>lt;sup>7</sup> For this plot and subsequent analyses, I have reversed cabinet support during the coalition era between August 1993 and June 1994. During these 11 months the measure is non-support, making it consistent with the other years when the LDP was part of the government.

and down over time much like the jet stream on a weather map, crossing back and forth across the more stable LDP line. I operationalize the difference between the two percentages at a point in time as relative support and will contend that LDP politicians respond to this measure in particular because of the particular ways in which LDP support and prime minister support levels interact. The following section provides the empirical foundation for this argument.

#### **Time Series Models**

Having dissected party and cabinet support ratings visually above, I now provide a more rigorous characterization of their properties and relationships. The goal in doing so it so to develop multivariate time series models to identify the factors affecting them. Before moving to these models, the preliminary statistical question to address is whether the LDP and cabinet support series are stationary. Table 1 reports augmented Dickey-Fuller tests for unit roots on the differenced series. As Figures 1 and 2 might have suggested, the series show no evidence of being integrated. Whether trends or constants are included or not, the test values far exceed the magnitude required for statistical significance.

**Table 1: Unit Root Tests for Cabinet and LDP Support** 

|                   | No Constant Constan |         | Constant and |
|-------------------|---------------------|---------|--------------|
|                   | or Trend            | Only    | Trend        |
|                   | (-1.95)             | (-2.86) | (-3.41)      |
| Δ Cabinet Support | -25.33              | -25.304 | -25.28       |
| Δ LDP Support     | -34.96              | -34.93  | -34.91       |

*Note*: 5% critical values for each test are in parentheses.

Phillips-Perron tests yielded similar results.

The next order of business is to understand the causal relationship between the two key indicators of support for the LDP and support for the cabinet. I employ the Granger causality test, a test that has been widely used in political time series analysis such as this one (Burden and Mughan 1999; MacKuen, Erikson, and Stimson 1992). The test assumes that series *X* causes series *Y* if lagged values of *X* provide information about *Y* even in the presence of lagged values of *Y*. This requires regressing series *Y* on lagged values of *X* and *Y*, then conducting statistical significance tests to determine whether *X* is causal (i.e., statistically significant).

Before proceeding to the test, the appropriate lag length must be determined. After differencing the series to induce stationarity, I estimated vector autoregressive (VAR) models of cabinet support and LDP support with five, 10, and 20 lags. That is, each series was regressed on past values of itself and the other series, first with five lags, then with 10, and finally with 20. In all three cases Akaike's information criterion (AIC) was minimized at three lags.

The Granger causality results appear in Table 1. They reveal that cabinet support precedes LDP support and not the other way around. Testing whether the lagged values of X are jointly significant, we reject the null hypothesis that cabinet support does not cause LDP support (p = .03) but fail to reject the null hypothesis that LDP support does not cause cabinet support (p = .03)

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<sup>&</sup>lt;sup>8</sup> The same results hold if tests are conducted on levels rather than differences of the series.

.35). These results are nearly identical if the analysis limited to just the pre-reform or post-reform eras, or if levels rather than differences are tested.

**Table 2: Granger Causality Wald Tests** 

|             |           | Dependent Variable |                 |
|-------------|-----------|--------------------|-----------------|
|             |           | $\Delta$ LDP       | Δ Cabinet       |
|             |           | Support            | Support         |
|             | ΔLDP      |                    | $\chi^2 = .874$ |
| Independent | Support   |                    | p = .350        |
| Variable    | Δ Cabinet | $\chi^2 = 4.823$   |                 |
|             | Support   | p = .028           |                 |

Note: Results based on three lags with 528 cases.

Here is the first substantive finding to emerge from the statistical analysis. We find strong evidence that support for the party is shaped by support for the cabinet, yet cabinet support is unaffected by the LDP's popular support. This finding of a fundamental *asymmetry* between the two series is more than a statistical curiosity. It supports the conventional – but heretofore untested – wisdom that party popularity in Japan is a function of the prime minister's support (Krauss and Nyblade 2005). This unidirectional influence will become critical below as I develop an explanation for how the LDP has insulated itself from public blame.

## **Economics and Cabinet Support**

Having shown that cabinet support is unaffected by LDP support, I estimate a regression model to identify the other factors that are responsible for the government's approval rating. I estimate an ordinary least squares regression model with a lagged dependent variable on the right-hand side, functionally equivalent to the distributed lag model employed by MacKuen, Erikson, and Stimson (1992). The key explanatory variables are three economic indicators. I start with what Lewis-Beck and Paldam (2000) call "the big two:" inflation and unemployment. To these I add the monthly closing value of the Nikkei 225 stock average. Because so much of the literature on Japan concludes that unemployment and inflation have not affected party support, adding another measure further guards against falsely accepting the null hypothesis of no economic accountability. <sup>10</sup>

To these key economic indicators I add three structural variables as controls. I include the number of months the current prime minister has been in office. This duration variable captures the idea that incumbents historically lose support the longer they are in office (Mueller 1973; Paldam and Skott 1995; Stimson 1976). I also include dummy variables for the coalition era of 1993-4 since it represents a departure from normal Japanese politics without an LDP cabinet and

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<sup>&</sup>lt;sup>9</sup> Recent review essays indicate that this approach dominates the study of presidential approval time series (Lewis-Beck and Stegmeier 2000; Newman 2002). More sophisticated models using differences rather than levels and an error correction mechanism generated similar results, so I retain the simpler specification.

<sup>&</sup>lt;sup>10</sup> Gross domestic product (GDP) is omitted since it is only reported quarterly. Research also suggests that measures of the international economy such as exchange rates and trade dependence could influence support for the government (Anderson and Ishii 1997; Burden and Mughan 2003; Hellwig 2001). These deserve further exploration in future research.

for the entire post reform era in the event that LDP presidents face stronger challenges to their support after electoral reform. Finally, I include a dummy for each prime minister to capture idiosyncratic effects due to governing style or personal popularity. This is a convention in studies of leader support in other nations (e.g., Erikson, MacKuen, and Stimson 2002).

Table 3 shows that the "big two" economic indicators do indeed affect cabinet support ratings, although the effects are admittedly small. Contrary to most scholarly wisdom, I find that a three-point rise in inflation lowers the prime minister's rating by about a point. Unemployment, long a non-issue in Japan, actually matters more. A one point increase in the unemployment rate lowers approval ratings by 2.4 points. These effects are smaller than those found in other nations, but they do show that the prime minister's standing rises in good economic times and falls in bad ones. Public opinion toward the executive is at least mildly responsive to national economic conditions

**Table 3: Regression Model of Cabinet Support** 

|                          | Cabinet  |
|--------------------------|----------|
| Independent Variable     | Support  |
| CPI                      | 314**    |
|                          | (.100)   |
| Unemployment             | -2.411*  |
|                          | (1.490)  |
| Nikkei 225               | .010     |
|                          | (.098)   |
| Coalition Era            | 29.728** |
|                          | (6.210)  |
| Post Reform Era          | 21.168** |
|                          | (8.253)  |
| Duration                 | 080**    |
|                          | (.016)   |
| Cabinet Support $_{t-1}$ | .646**   |
|                          | (.029)   |
| Adjusted $R^2$           | .980     |
| Number of Cases          | 534      |
| Mean Square Error        | 5.239    |
| Durbin-Watson            | 1.901    |

*Note:* Cell entries are ordinary least squares coefficients with robust standard errors in parentheses. Dummy variables for individual prime ministers not shown. Constant suppressed. \*p < .05, \*\*p < .01, one-tailed test.

The remaining results are of less importance, so I shall give them only passing discussion. The coefficient of .65 on the lagged dependent variable shows substantial dependence in cabinet ratings over time. As the figures above showed, the cabinet's ratings jumped dramatically during

<sup>&</sup>lt;sup>11</sup> I exclude Hata and Hosokawa since they served during the coalition era, which is indicated by its own dummy variable. To avoid excluding any of the dummies as a references category, I simply omit the constant term.

the coalition era and in the post reform era. Consistent with findings in other nations, the duration variable suggests that prime ministers lose a small amount of support each month.

This important message to take from this analysis is that economics do shape support for the Japanese prime minister. Although economic effects in elections might have been dampened by biases in the electoral system, inflation and unemployment do play a role in the unfiltered realm of public opinion. To the extent that prime ministers care about increasing their support, this will induce a sort of accountability for national economic performance.

But this is where direct sensitivity to macroeconomic conditions ends. The economy may affect cabinet support ratings, but we have already shown that evaluations of the LDP do not. LDP support can only be affected by economic indicators *indirectly* through cabinet support ratings. But by then their weak effects will have been watered down to near nonexistence. More importantly, LDP party officials may intervene strategic to take advantage of good times and avoid punishment for bad times, further muting economic effects. The following section shifts the analysis from cabinet support to LDP support to explore this possibility.

# **Economics and LDP Support**

I approach the multivariate analysis of LDP support using an error correction model (ECM). The ECM has become widely used in the analysis of public opinion because of its flexibility and intuitive nature (Clarke, Ho, and Stewart 2000; Clarke and Stewart 1995; Erikson, MacKuen, and Stimson 2002) Error correction models allow for easy estimation of a time series that is potentially non-stationary and in an equilibrium relationship with another series. The approach permits one to account for this property of the series by including a factor that "corrects" a series that has been pulled temporarily out of equilibrium from its partner.

The model assumes that a series that is temporarily shocked will eventually return to its equilibrium level. The speed with which this return happens is estimated by the model. The ECM approach also incorporates short-term factors that can push a series upward or downward temporarily. Based on the Granger causality test results, I set  $Y_t = \text{LDP}$  support and  $X_t = \text{cabinet}$  support. These appear in a standard ECM formulation,  $\Delta Y_t = \beta_0 + \beta_3 \Delta Xt + \gamma Z_{t-1}$  where  $\gamma Z_{t-1} = Y_{t-1} - X_{t-1}$ . What makes this model unique is  $Z_{t-1}$ , which Wood (2000) defines as an "attractor" and is equivalent to my measure of relative support. Its coefficient,  $\gamma$ , captures the effect of the error correction mechanism through the attractor. It should be negative and significant if the LDP and cabinet support series are in a long-run equilibrium. The  $\beta_3$  coefficient reveals the short-term relationship between the two series. Other short-term variables thought to influence LDP support can also be included on the right-hand side. The key explanatory variables are economic measures, though I retain all of the variables that appeared in the cabinet support model.

Table 4 reports the results of the ECM. Just as the Granger tests showed, cabinet support is a predictor of LDP support. The party benefits when the prime minister is popular but it is harmed when his support falls. In addition, the error correction mechanism is negative and statistically significant. A shock to the LDP support series is correctly somewhat by the long-term corrective

relationship between the two series. Controlling for other factors, the coalition and post reform eras showed no independent effects on party support.

Most importantly, all three economic factors fail to influence LDP approval.<sup>12</sup> This stands in contrast to the earlier finding that support for the prime minister's cabinet is responsive to inflation and unemployment. Economic effects have been filtered out by the time they reach the party.

**Table 4: Error Correction Model of LDP Support** 

|                      | ΔLDP   |
|----------------------|--------|
| Indonandant Variable |        |
| Independent Variable |        |
| ∆Cabinet Support     | .193** |
|                      | (.035) |
| $ECM_{t-1}$          | 033**  |
|                      | (.014) |
| CPI                  | 015    |
|                      | (.030) |
| Unemployment         | .005   |
|                      | (.183) |
| Nikkei 225           | 0001   |
|                      | (.014) |
| Coalition Era        | 541    |
|                      | (.622) |
| Post Reform Era      | .388   |
|                      | (.449) |
| Constant             | .134   |
|                      | (.498) |
| Adjusted $R^2$       | .165   |
| Number of Cases      | 531    |
| Mean Square Error    | 2.472  |
| Durbin-Watson        | 2.778  |

*Note:* Cell entries are ordinary least squares coefficients with robust standard errors in parentheses. \*p < .05, \*\*p < .01, one-tailed test.

To summarize thus far, the time series analyses have shown that the economy has modest but direct effects on cabinet support. Economic variables do not predict LDP support directly, but they have negligible influence on the party via the cabinet. Precisely why economic accountability does not cross the threshold from leader to party, despite the LDP's near-permanent role in the cabinet, has not yet been made clear. In the next section I consider explicitly how the party manages the relationship between cabinet and party support to avoid the party being dragged down by a prime minister dragged downward by a weak economy.

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<sup>&</sup>lt;sup>12</sup> Nor were any of the economic measures statistical significant in sensitivity tests that allowed for differences, lags, and combinations of the two.

## **Strategic Calibration**

In recent years the LDP has been held afloat by its connection to popular prime ministers. There has been a growing tendency over time for cabinet support to run ahead of LDP support, sometimes by large margins. As evidence, regressing the relative support difference plotted in Figure 3 on a time counter yields a negative and strongly significant coefficient of -.031 (t = -12.39). The gap has been especially evident in the post-reform era and has not been lost of political insiders. In fact, recent Japanese media have often noted when a prime minister was running ahead of his party in its coverage of poll results. I contend that the LDP also monitors relative support and works to ensure that at least some of the cabinet's popularity "rubs off" on the party.

To the degree that voters identify a government with a particular party, there is a natural relationship between party and leader support (Clarke, Ho, and Stewart 2000). A popular party leader can cause an enduring improvement in his party's standing, as Ronald Reagan did for the Republicans in the 1980s. LDP politicians care about the party's image because it affects election results and thus their careers. Factional candidates compete intensely for the party's nomination because they value association with the party (Cox and Rosenbluth 1996). By being part of the LDP, politicians are able to raise more money, signal their credibility to voters, deliver pork to constituents, and be part of the governing coalition (Ramseyer and Rosenbluth 1997).

We now know that the relationship between party and prime minister support is curiously asymmetric. First, the Granger causality tests showed empirically that LDP support responds to cabinet support but not the reverse. This finding was verified by the error correction model. Second, the party and its leader are structurally unequal. The former tends endures while the latter can be replaced. Although a party can in theory disband, LDP politicians have invested too much in the party and expect too many benefits to abandon it hastily. Low support levels for the party are especially dismaying because all members of the party must live with them.

In contrast, an unpopular cabinet can be replaced. This can happen by calling for a snap election under the guise that a new prime minister will be selected. Or the ruling party can simply sack its prime minister midterm, choosing a replacement without the uncertainty of a national election. A more conservative approach is to manage to the current government by reshuffling the cabinet. Kam and Indriðason (forthcoming) propose that government reshuffles are more likely when a prime minister's personal support lags behind the governments, a hypothesis that

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<sup>&</sup>lt;sup>13</sup> Regressing the gap on both an annual counter and a dummy for the post reform era generates negative and statistically significant coefficients for both variables.

<sup>&</sup>lt;sup>14</sup> The departure of many Diet members from the LDP in the early 1990s is something of an exception. Leaders such as Ichiro Ozawa have the potential to leave the party and take other members with them. Yet their efforts to establish credible alternatives to the LDP have met only limited success. And the fact remains that a LDP prime minister cannot unilaterally decide to become prime minister in another party. Yet the party always has the option of replacing him.

<sup>&</sup>lt;sup>15</sup> There are differences between these two actions. The prime minister has sole discretion over cabinet reshuffles. For many years reshuffles were done on an annual basis to allow for regular rotation of factional representation in the cabinet ministries. The automation of reshuffles during some periods should work against my theory. Removal of a prime minister is usually initiated LDP Diet members and sometimes other legislators.

closely parallels mine. <sup>16</sup> I label this management of asymmetric support ratings *strategic* calibration.

I examine strategic calibration by analyzing two acts: cabinet reshuffles and prime ministerial replacements. Both are ways that the LDP leadership might shift blame focused initially at the party to blame targeted at one or more individuals within the party. The key explanatory variable is *relative support* measured again as LDP support minus cabinet support. As this value grows – and the prime minister's cabinet becomes less popular than his party – replacements and reshuffles should be more likely. To ensure that it is this relative standing and not individual levels of party and cabinet support, I estimate alternative models where the two variables are entered separately. The models follow Beck, Katz, and Tucker (1998) by using a simple logit specification with dummies for each month of duration.<sup>17</sup>

Prime ministerial replacements are measured as dummy variables indicating when one leader is supplanted by another. The theory would not predict cases where a prime minister leaves for nonpolitical reasons such as Keizō Obuchi's coma-inducing stroke in 2000. Reshuffles are taken from the listing in Satō and Matsuzaki (1986), which I updated through 2004 from media reports. A change in the prime minister or cabinet reshuffle is coded as a one so that positive coefficients indicate greater likelihoods of changes. During the period I study there were 13 prime ministerial replacements and 62 cabinet reshufflings to explain.

The duration models in Tables 5 and 6 show that relative support influences both cabinet shuffles and prime ministerial replacements. When the cabinet ratings fall behind the LDP, staff changes become significantly more likely. Note that the individual measures for LDP and cabinet support are not predictive. (The only statistically significant case is the wrong sign, suggesting somehow that higher LDP ratings cause more PM replacements.) Economic measures do not correlate with either, though their influence has already been felt in the cabinet's support ratings (Table 3). Aside from the finding that cabinet reshuffles are more common just after upper house elections, none of the other control variables carry much weight. It is the relative support for the party and prime minister that motivates replacement of top party leaders.

<sup>&</sup>lt;sup>16</sup> They do not test this hypothesis. In fact, they find direct effects of government popularity on reshuffles while I do not. Relatedly, Dewan and Dowdling (2005) show that ministerial resignations have positive effects on government support ratings.

17 Some monthly dummies were dropped if they perfectly predicted the outcome in the initial estimations.

Table 5: Duration Model of Cabinet Reshuffles

| Relative | Entered   |
|----------|---|
| Support  | Separately  |
|          | 007   |
|          | (.058)  |
|          | 039   |
|          | (.024)  |
| .040*    |   |
| (.019)   |   |
| .006     | .016  |
| (.019)   | (.022)  |
| .022     | .022  |
| (.036)   | (.044)  |
| .054     | 107   |
| (.252)   | (.261)  |
| .446     | .450  |
| (.634)   | (.734)  |
| 1.705*   | 1.633*  |
| (.745)   | (.899)  |
| -2.318** | .109  |
| (.615)   | (1.772)   |
| 532      | 532   |
| -185.976 | -185  |
|          | Support 040* (.019) .006 (.019) .022 (.036) .054 (.252) .446 (.634) 1.705* (.745) -2.318** (.615) 532 |

*Note:* Cell entries are logit coefficients with robust standard errors in parentheses. Dummies for individual months not reported. \*p < .05, \*\*p < .01, one-tailed test.

**Table 6: Duration Model of Prime Minister Replacements** 

| Explanatory                    | Relative | Entered    |
|--------------------------------|----------|------------|
| Variable                       | Support  | Separately |
| LDP Support <sub>t-1</sub>     |          | 182        |
|                                |          | (.149)     |
| Cabinet Support <sub>t-1</sub> |          | 058        |
|                                |          | (.036)     |
| $LDP_{t-1} - Cabinet_{t-1}$    | .069*    |            |
| (Relative Support)             | (.038)   |            |
| Nikkei 225 <sub>t-1</sub>      | .051     | .016       |
|                                | (.038)   | (.052)     |
| CPI <sub>t-1</sub>             | .087     | 024        |
|                                | (.076)   | (.101)     |
| Unemployment t-1               | .404     | .004       |
|                                | (.509)   | (.513)     |
| Post Reform Era                | .271     | -1.117     |
|                                | (1.463)  | (1.633)    |
| Coalition Era                  | 2.936**  | 1.252      |
|                                | (1.075)  | (1.061)    |
| Constant                       | -6.200** | 2.824      |
|                                | (1.556)  | (5.120)    |
| Number of Cases                | 532      | 532        |
| Log Likelihood                 | -49.343  | -46.382    |

*Note:* Cell entries are logit coefficients with robust standard errors in parentheses. Dummies for individual months not reported. \*p < .05, \*\*p < .01, one-tailed test.

Figure 5 displays predicted probabilities from the two models. King, Tomz, and Wittenberg's (2000) Clarify software was used to simulate probabilities for given values of the relative support measure holding other variables at their means. The solid line shows the likelihood that a prime minister is replaced and the dashed line shows the probability of a cabinet reshuffle. Both are increasing from left to right as the gap between party and cabinet support rises. (Note that reshuffle probabilities are always higher because they happen more frequently, not because the effects are larger.) While the overall probabilities might seem low, note that these are calculated on a per month basis. The odds of a dramatic political event in any one month are not great, but they can add up quickly over a short period of time. When relative support is low (i.e., the cabinet is running ahead of the party), there is little chance that the cabinet will be touched and almost no chance that the prime minister will be replaced. But when relative support high (i.e., the party is more popular than the cabinet), there's a one in 20 chance that the prime minister will be sacked and a one in five chance that the cabinet will be reshuffled. These are nontrivial odds.

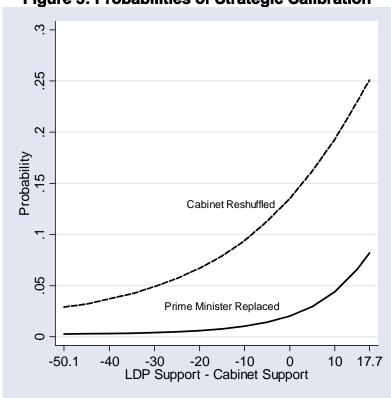


Figure 5: Probabilities of Strategic Calibration

Note: Probabilities simulated from models in Tables 5 and 6 using Clarify.

In summary, we find that while the LDP gladly accepts a popular prime minister, hoping that some of his support will "rub off" on the party, the party acts strategically to remove unpopular leaders to avoid contaminating the its image. The asymmetry between parties and their leaders manifests itself in two complementary ways. Theoretically the party can replace the prime minister, but the prime minister cannot swap the LDP for a more popular party. Likewise, we discovered empirically that cabinet ratings affect LDP support but not the other way around. As a result, the LDP uses strategic calibration to avoid making the party accountable when the

public is displeased with its leadership. This account is satisfying because it applies to the first system of 1955 – when the economy and electoral system also advantaged the LDP – as well as the second party system of 1993 – when existing theories have difficulty explaining LDP dominance.

### Conclusion

When Prime Minister Mori gave way to Koizumi in 2001, the cabinet's support ratings skyrocketed overnight. Although every leadership change is unique, the ways in which the LDP initiated that happy transition are consistent with a more general strategy of calibration. When frequent reshufflings of the cabinet failed to raise public support, Mori stepped down despite having been in office less than a year. Koizumi, in contrast, managed to serve a year and half in office before even juggling the cabinet for the first time. While he sometimes irritated fellow LDP politicians by challenging party norms, they tolerated the maverick prime minister in exchange for greater public support for the party that he delivered.

This strategy should not be confused with the simple tendency of a party to jettison unpopular leaders. I found no evidence the party or cabinet ratings affect staff changes directly. Because of the asymmetric relationship between the two, it is relative support that matters. At least this has been the pattern from 1960 to 2004. The emergence of a truly multiparty system might exhibit different dynamics and should be the subject of future research. In a new party environment it would be imperative to whether strategic calibration failed to prevent the ascendancy of the opposition or opposition success lead to the demise of a strategy that has worked so well when the LDP faced a splintered opposition.

This paper should not be read to say that prime ministers and cabinet ministers are replaced on when relative support drops. My models showed relative support to be key explanatory models, but entering party and cabinet support nearly reached conventional levels of statistical significance, and the models' explanatory power was not great. Changes in personal respond to many factors including factional conflict, interpersonal disputes, and party norms. An exhaustive account would need to consider many influences simultaneously through a combination of quantitative and qualitative research.

Japan is unusual among industrial democracies not because its citizens are unresponsive to changing economic times (although economic accountability is weak) but because of the dominant party's ability to take strategic advantage of situations. In the unfiltered context of mass public opinion, support for the cabinet is indeed dependent on unemployment and inflation plus other idiosyncratic factors. Yet discontent stops short of contaminating the party's image. Because the party can replace its leader, but the leader cannot change his party, the prime minister or his cabinet are replaced strategically to calibrate higher party ratings with lower cabinet ratings. It is this strategic calibration in the face of negative relative support that permits the LDP to maintain reasonable public approval despite scandals and poor economic performance. Although biases in the electoral system, missteps by opposition parties, and even culture all surely play a role in maintaining LDP hegemony, I have demonstrated that the party itself often intervenes before these factors even have an opportunity to act.

## References

- Anderson, Christopher J. 1995. Blaming the Government: Citizens and the Economy in Five European Democracies. Armonk, NY: M.E. Sharpe.
- Anderson, Christopher J., and Jun Ishii. 1997. "The Political Economy of Election Outcomes in Japan." *British Journal of Political Science* 27:619-59.
- Beck, Nathaniel, Jonathan N. Katz, and Richard Tucker. 1998. "Taking Time Seriously: Time-Series-Cross-Section Analysis with a Binary Dependent Variable." *American Journal of Political Science* 42:1260-88.
- Bowen, Roger W. 2003. *Japan's Dysfunctional Democracy: The Liberal Democratic Party and Structural Competition*. Armonk, NY: M.E. Sharpe.
- Burden, Barry C., and Anthony Mughan. 1999. "Public Opinion and Hillary Rodham Clinton." *Public Opinion Quarterly* 63:237-50.
- Burden, Barry C., and Anthony Mughan. 2003. "The International Economy and Presidential Approval." *Public Opinion Quarterly* 67:555-78.
- Carey, John M., and Matthew Soberg Shugart. 1995. "Incentives to Cultivate a Personal Vote: A Rank Ordering of Electoral Formulas." *Electoral Studies* 14:417-39.
- Christiansen, Ray. 2005. "Redistricting in Japan: Lessons for the United States." *Japanese Journal of Political Science* 5:259-85.
- Clarke, Harold D., Karl Ho, and Marianne C. Stewart. 2000. "Major's Lesser (Not Minor) Effects: Prime Ministerial Approval and Governing Party Support in Britain Since 1979." *Electoral Studies* 19:255-73.
- Clarke, Harold D., and Marianne C. Stewart. 1995. "Economic Evaluations, Prime Ministerial Approval, and Governing Party Support: Rival Models Reconsidered." *British Journal of Political Science* 25:145-70.
- Clarke, Harold D., William Mishler, and Paul Whiteley. 1990. "Recapturing the Falklands: Models of Conservative Popularity, 1979-83." *British Journal of Political Science* 20:63-81.
- Cox, Gary W, and Emerson Niou. 1994. "Seat Bonuses under the Single Nontransferable Vote System: Evidence from Japan and Taiwan." *Comparative Politics* 26:221-36.
- Cox, Gary W., and Frances Rosenbluth. 1996. "Factional Competition for the Party Endorsement: The Case of Japan's Liberal Democratic Party." *British Journal of Political Science* 26:259-97.
- Curtis, Gerald L. 1999. *The Logic of Japanese Politics*. New York, NY: Columbia University Press.
- Dewan, Torun, and Keith Dowdling. 2005. "The Corrective Effect of Ministerial Resignations on Government Popularity." *American Journal of Political Science* 49:46-56.
- Erikson, Robert S., Michael B. MacKuen, and James A. Stimson. 2002. *The Macro Polity*. New York, NY: Cambridge University Press.
- Facker, Tim, and Tse-Min Lin. 1995. "Political Corruption and Presidential Elections, 1929-1992." *Journal of Politics* 57:971-93.
- Freeman, John R. 1983. "Granger Causality and the Times Series Analysis of Political Relationships." *American Journal of Political* Science 27:327-58.
- Fukumoto, Kentaro. 2004a. "Why So Volatile an Approval Rate Is? Citizen's Contagion, Short Memory, and Preference." Unpublished manuscript. Harvard University.

- Fukumoto, Kentaro. 2004b. "How Many Laws Does the Legislature Make? Cross Country Comparison and Cointegrated Time Series of Japan." Paper presented at the annual meeting of the Midwest Political Science Association, Chicago.
- Hellwig, Timothy T. 2001. "Independence, Government Constraints, and Economic Voting." *Journal of Politics* 63:1141-62.
- Hibbs, Douglas A. 1977. "Political Parties and Macroeconomic Policy." *American Political Science Review* 71:1467-87.
- Hrebenar, Ronald J. 2000. Japan's New Party System. Boulder, CO: Westview Press.
- Inoguchi, Takashi. 1981. "Explaining and Predicting Japanese General Elections, 1960-1980." Journal of Japanese Studies 7:285-318.
- Inoguchi, Takashi. 1990. "The Political Economy of Conservative Resurgence under Recession: Public Policies and Political Support in Japan." In *Uncommon Democracies: The One-Party Dominant Regimes*, ed. T.J. Pempel. Ithaca, NY: Cornell University Press.
- Johnson, Stephen. 2000. *Opposition Politics in Japan: Strategies under a One-Party Dominant Regime*. New York, NY: Routledge.
- Kam, Christopher, and Indriði Indriðason. Forthcoming. "The Timing of Cabinet Reshuffles in Five Westminster Parliamentary Systems." *Legislative Studies Quarterly*.
- King, Gary, Michael Tomz, and Jason Wittenberg. 2000. "Making the Most of Statistical Analyses: Improving Interpretation and Presentation." *American Journal of Political Science* 44:347-61.
- Kohno, Masaru. 2001. "Why Didn't the Japanese Socialists Moderate Their Policies Much Earlier to Become a Viable Alternative to the Liberal Democratic Party?" In *Political Science as Puzzle Solving*, ed. Bernard Grofman. Ann Arbor, MI: The University of Michigan Press.
- Krauss, Ellis S., and Benjamin Nyblade. 2005. "Presidentialization' in Japan? The Prime Minister, Media, and Elections in Japan." *British Journal of Political Science* 35:357-68.
- Lewis-Beck, Michael S. 1988. *Economics and Elections: The Major Western Democracies*. Ann Arbor, MI: The University of Michigan Press.
- Lewis-Beck, Michael S., and Martin Paldam. 2000. "Economic Voting: An Introduction." *Electoral Studies* 19:113-21.
- MacKuen, Michael B., Robert S. Erikson, and James A. Stimson. 1992. "Peasants or Bankers? The American Electorate and the U.S. Economy." *American Political Science Review* 86:597-611.
- McKean, Margaret, and Ethan Scheiner. 2000. "Japan's New Electoral System: La Plus Ça Change..." *Electoral Studies* 19:447-77.
- Miyake, Ichirō, Yoshitaka Nishizawa, and Masaru Kōno. 2001. *55-nen taiseika no seiji to keizai: Jiji seron chōsa dēta no bunseki* [Politics and Economics under the 1955 System: An Analysis of the Jiji Public Opinion Data.] Tōkyō, Japan: Bokutakusha.
- Mueller, John. 1973. War, Presidents, and Public Opinion. New York, NY: John Wiley.
- Newman, Brian. 2002. "Bill Clinton's Approval Ratings: The More Things Change, the More They Stay the Same." *Political Research Quarterly* 55:781-804.
- Nickelsburg, Michael, and Helmut Norpoth. 2000. "Commander-in-Chief or Chief Economist? The President in the Eye of the Public." *Electoral Studies* 19:313-32.
- Norpoth, Helmut. 1985. "Politics, Economics and the Cycle of Presidential Popularity." In *Economics and Electoral Outcomes*, ed. Heinz Eulau and Michael Lewis-Beck. New York: Agathon.

- Norpoth, Helmut. 1987. "Guns and Butter and Government Popularity in Britain." *American Political Science Review* 81:949-59.
- Paldam, Martin, and Peter Skott. 1995. "A Rational-Voter Explanation of the Cost of Ruling." *Public Choice* 83:159-72.
- Palmer, Harvey D., and Guy D. Whitten. 2000. "Government Competence, Economic Performance, and Endogenous Election Dates." *Electoral Studies* 19:413-26.
- Pempel, T.J., ed. 1990. *Uncommon Democracies: The One-Party Dominant Regimes*. Ithaca, NY: Cornell University Press.
- Pempel, T.J. 1998. *Regime Shift: Comparative Dynamics of the Japanese Political Economy*. Ithaca, NY: Cornell University Press.
- Pharr, Susan J. 2000. "Officials' Misconduct and Public Distrust: Japan and the Trilateral Democracies." In *Disaffected Democracies: What's Troubling the Trilateral Countries?*, ed. Susan J. Pharr and Robert D. Putnam. Princeton, NJ: Princeton University Press.
- Powell, G. Bingham Powell, Jr., and Guy D. Whitten. 1993. "A Cross-National Analysis of Economic Voting: Taking Account of the Political Context." *American Journal of Political Science* 37:391-414.
- Ramseyer, J. Mark, and Frances McCall Rosenbluth. 1997. *Japan's Political Marketplace*. Cambridge, MA: Harvard University Press.
- Reed, Steven R. 1990. "Structure and Behaviour: Extending Duverger's Law to the Japanese Case." *British Journal of Political Science* 20:335-56.
- Reed, Steven R. 1994. "Democracy and the Personal Vote: A Cautionary Tale from Japan." *Electoral Studies* 13:17-28.
- Reed, Steven, and Gregory G. Brunk. 1984. "A Test of Two Theories of Economically Motivated Voting: The Case of Japan." *Comparative Politics* 17:55-66.
- Reed, Steven R., and Ikuo Kabashima. 2001. "The Effect of the Choices Available on Voting Behaviour: The Two Japanese Elections of 1993." *Electoral Studies* 20:627-40.
- Satō, Seizaburō, and Tetsuhisa Matsuzaki. 1986. Jimintō seiken. Tokyo: Chūō Kōronsha.
- Shugart, Matthew, and Martin P. Wattenberg. 2003. *Mixed-Member Electoral Systems: The Best of Both Worlds?* New York, NY: Oxford University Press.
- Stimson, James A. 1976. "Public Support for American Presidents: A Cyclical Model." *Public Opinion* Quarterly 40:1-21.
- Wood, B. Dan. 2000. "The Federal Balanced Budget Force: Modeling Variations from 1904 to 1996." *Journal of Politics* 62:817-45.