The Nationalization of Japanese Elections

Kenneth Mori McElwain

The postwar electoral dominance of the Liberal Democratic Party (LDP) was founded on (1) strong incumbency advantage, which insulated its legislators from declining party popularity, and (2) the malapportionment of districts, which overvalued the electoral clout of the party’s rural base. The LDP’s demise in 2009 was due to the reversal of both factors, each of which was related to electoral reforms in the 1990s. First, I demonstrate that elections are becoming more “nationalized,” due to the growing weight that voters attach to the attractiveness of party leaders. Past performance has become a poorer predictor of incumbent reelection, giving way to large partisan swings that are increasingly correlated across districts. Second, malapportionment was reduced by almost half in 1994, meaning that rural votes are now worth fewer seats. As a result, parties that can attract swing voters nationally are better positioned for victory than those with a narrow regional base.

KEYWORDS: Japan, elections, malapportionment, party, electoral reform, public opinion, partisan swing

Japanese politics has traditionally hinged on personalistic linkages between legislators and their constituents. Politicians attracted support through their individual accomplishments, ties to local organizations, and the promise of particularistic benefits. These linkages were especially strong in rural areas, where social networks were denser and local businesses relied heavily on government contracts and subsidies. This type of personalism produced high levels of incumbency advantage and low electoral turnover, especially for the long-ruling Liberal Democratic Party (LDP), which leveraged its access to fiscal resources and higher quality candidates to dominate the Japanese Diet from 1955 to 2009.

Recent election outcomes, however, suggest a fundamental transformation in this political nexus. Steven Reed, Ethan Scheiner, and Michael Thies (2012) find that in 2005 and 2009, party affiliation supplanted candidate characteristics as the strongest predictor of electoral victory. As voters’ preferences became unmoored from personalistic ties to specific
candidates, a large number of incumbents lost their seats. This instability in voter preferences manifested as a landslide victory for the LDP in 2005 and, more consequentially, as a massive swing in favor of the Democratic Party of Japan (DPJ) in 2009. This last reversal of fortunes was particularly striking in rural regions such as Kyushu and Shikoku, where the LDP had long enjoyed an electoral monopoly.

In this article, I investigate one overarching question regarding current and future trends in Japan: Do parties have a better shot at winning a majority if they diversify their support base nationally to attract swing voters than if they cultivate a narrower, stable clientele in particular regions? This is of particular relevance to the LDP, whose supporters have historically been concentrated in rural Japan. Although the DPJ won in 2009 by increasing their vote share nationally, should the LDP mimic this approach or, instead, double down on its rural base? Is the urban-rural cleavage in voter preferences, which has long influenced patterns of fiscal redistribution, still salient today?

To answer this question, I analyze two separate factors before and after electoral reform in 1994: (1) the magnitude of incumbency advantage, and (2) the relative weight of rural votes. First, I demonstrate that elections are becoming more “nationalized,” meaning that personalistic support no longer insulates incumbents from national shifts in voter sentiment. Nationalization is a result of greater voter attention to the attractiveness of party leaders than to individual candidate qualities. Its extent can be estimated through the magnitude of electoral volatility—fluctuations in vote share over time—and cohesiveness—covariance of vote shares across districts. Adapting techniques from the study of US elections, I test whether the victory or loss of individual incumbents is better predicted by their past performance or by national vote swings experienced by their party. I find that for both the LDP and the main opposition parties, the salience of partisan vote swings has increased almost fivefold since the 1990s, reducing the reelection chances of incumbents significantly. Crucially, there is strong evidence that the LDP has relinquished its dominance of rural districts, leaving it fewer safe havens.

Second, I argue that this decline in incumbency advantage harms the LDP disproportionately because of the reduction in malapportionment in 1994. The party’s support base has been clustered in rural areas, and as Reed, Scheiner, and Thies (2012) and Ko Maeda (2010) show, this continues to be true today. The LDP’s lock in rural areas was founded on decades of fiscal redistribution and favorable subsidies for declining industries. This was a viable strategy in the past, because rural districts were consistently apportioned more legislators per capita than their urban
counterparts. However, this approach has begun to backfire following the substantial equalization of seat apportionment. While the LDP continues to experience higher vote share in rural areas, those votes do not yield as many legislative seats. As a result, the LDP would do better nationally if they cultivated a broader electoral base instead of investing further in rural dominance.

At the moment, disaffection with the LDP’s policies has produced more floating voters that are up for grabs, allowing the DPJ to make inroads into the LDP’s rural bailiwicks. With fewer “safe” districts, the LDP and DPJ now face similar incentives to make programmatic appeals to the median voter instead of consolidating their base through clientelistic redistribution. Electoral victory today relies on national trends, not local factors, and parties that are more diversified should perform better in the long run.

From Localized to Nationalized Elections

Through much of postwar history, the primary determinant of Japanese electoral outcomes has been candidate- and district-specific characteristics. Scheiner (2005) demonstrates that the LDP’s postwar dominance was built on its ability to recruit better candidates, especially former local politicians and well-known celebrities. Because Japanese laws restrict election campaigning to a short time period, candidates who can marshal votes quickly through preexisting support networks and name recognition have been better positioned to win (McElwain 2008). The party’s close linkages to rural districts further contributed to its longevity. The dependence of rural economies on fiscal transfers, especially in the agricultural and construction sectors, made them a reliable vote bloc for the LDP. By contrast, voter partisanship has been more volatile in urban regions, where social networks are less dense and the private sector economy is more self-sufficient. However, because district boundaries and seat apportionment were updated infrequently, rural votes counted relatively more than urban ballots, placing a primacy on winning in the former (Christensen 2002; Curtis 1999; Horiuchi and Saito 2003; Ohmiya 1992).

These two factors—candidate quality and geography of partisanship—have produced election outcomes that have varied district by district based on local conditions. Empirically, this lack of a unified, national trend in voter preferences has resulted in low levels of electoral volatility and cohesiveness. Volatility refers to fluctuations in each party’s vote share across time, while cohesiveness is the spatial correlation in party vote share across districts. Descriptive analysis of elections between 1958 and 1990—the
LDP’s heyday—gives us a flavor of these trends. The correlation in LDP vote share in a given district between two consecutive elections is a robust 0.91, suggesting low levels of volatility. By contrast, the correlation between the LDP’s vote share in a given district and the party’s mean vote share across all other districts in the same year is only 0.26, denoting low levels of spatial cohesiveness.

The backdrop to district-level stability is the electoral system itself. For most of the postwar period, Japanese elections were fought under the multimember district, single nontransferable vote (MMD-SNTV) system. District magnitudes (M)—the number of seats per district—typically ranged from three to five, with the top M vote-getters winning representation to the House of Representatives. Parties seeking a parliamentary majority needed to win at least half the seats in each district, which meant that copartisan candidates frequently fought over the same ideological subset of voters. This incentivized copartisans to differentiate themselves based on personal qualifications, such as their ability to bring central government funds back to the district (Curtis 1971; Ramseyer and Rosenbluth 1993). The explicit focus on the “personal vote” meant that campaigns—at least within the LDP—downplayed political ideology or broad programmatic appeals, making contests highly localized and lowering the spatial cohesiveness of elections. Furthermore, because the LDP based its internal promotion ladder and policy influence on seniority norms (Krauss and Pekkanen 2011; Sato and Matsuzaki 1986), incumbents could credibly claim greater political clout than challengers, cementing their reelection chances and reducing diachronic electoral volatility.

Personalistic electoral competition, however, also generated negative political externalities. Close linkages between incumbents and interest groups, based on quid pro quo exchanges of policy benefits for campaign contributions and votes, resulted in recurring corruption scandals (Nyblade and Reed 2008). Political observers pressed for electoral reform to elevate ideological competition over personalism and to encourage more frequent government turnover (Christensen 1994; Curtis 1999; Reed and Thies 2001). Following the watershed 1993 election, an eight-party coalition ousted the LDP and instituted a new mixed-member majoritarian (MMM) electoral system that is still in operation today. Multimember districts were replaced with 300 single-member districts (SMDs), wherein the plurality vote-getter wins the seat. In addition, 180 separate proportional representation (PR) seats (200 in 1996) are now distributed among eleven regional blocs. In the PR tier, parties rank-order their candidates on a preordained “closed” list, with seats given to candidates in order of their ranking. However, candidates can be nominated
in both the SMD and PR tiers, and these dual candidates can also be ranked equally on their party’s list (e.g., multiple candidates can be ranked as “Number 1”). In this latter scenario, SMD losers who have the highest sekihai-ritsu (losing ratio), defined as their SMD vote share relative to the winner, are allocated seats first.

The dual candidacy system places a premium on maximizing votes in the SMD tier, since even SMD losers can increase their odds of winning a PR insurance seat by waging a competitive race (McKean and Scheiner 2000). As Ethan Scheiner demonstrates in this issue, there has been a Duvergerian convergence to two competitive candidates per SMD seat (Scheiner 2012). The rise of the DPJ as a viable alternative to the LDP has made it easier for voters to make an explicit choice between duel ing government options. Prior to 2003, an array of different parties challenged the LDP, but the implementation of a predominantly first-past-the-post electoral system encouraged opposition groups to coalesce. Now, instead of anti-LDP votes being spread among numerous challengers, they are more easily funneled to the DPJ. Ko Maeda (2010) echoes this idea, demonstrating that the DPJ benefited greatly from the decision of minor progressive parties, especially the Communist Party, to forgo nominating competing candidates, thereby minimizing the vote fragmentation that had historically plagued the opposition. At the national level, we have seen the emergence of a stable two-party system, led by the LDP on the center-right and the DPJ on the center-left.

The purpose of electoral reform, however, was not only to establish a two-party system, but also to transform elections from localized, personalistic contests to nationalized, party-oriented ones. To the extent that the old MMD-SNTV system contributed to low levels of electoral volatility and cohesiveness, we would expect institutional reform to shake up these two indicators. With only one winner per SMD, parties no longer have incentives to run multiple candidates, eliminating copartisan competition and deemphasizing personalistic campaigns. In addition, parliamentary reforms in the last two decades, particularly the growing policy capacity and autonomy of the prime minister (Estévez-Abe 2006), have heightened the electoral salience of party leaders (Kabashima and Imai 2002; McElwain 2009). As voters and the media pay increasing attention to party leaders (Krauss and Nyblade 2005), electoral volatility has increased, because the popularity of leaders fluctuates much more than does voter affinity to their parties (McElwain and Umeda 2011). Kay Shimizu, in this issue, also points to underlying changes in local politics (Shimizu 2012). Municipal mergers since 2003 have reduced the absolute number of local politicians, who play an important role in attracting and
mobilizing supporters for national-level contests. Accordingly, the salience of local networks has decreased substantially, making elections less subject to personalistic or district-specific factors.

Of course, swing voters with relatively independent partisanship have always comprised a sizable bloc of urban constituents. Attracting their allegiance has been crucial to capturing a parliamentary majority, as rural voters have been less persuadable in their ballot preferences. As Scheiner (2005) argues, Japan has had a “parallel party system”: the LDP monopolizes rural regions, but there is competitive bipartyism in urban areas. Because of the disproportionate allocation of seats, however, the LDP could rely on rural dominance to cushion against temporary setbacks in their popularity among urban independents. If, however, rural voters are increasingly up for grabs, then we should observe opposition parties making inroads in rural districts as well.

The growing nationalization of elections, especially the weakening of incumbency advantage, has enormous ramifications for policymaking in the Diet. Incumbents are, by definition, sitting legislators who can directly influence government policy. If voters are turning their focus from local to national factors, then incumbent legislators will be incentivized to prioritize common programmatic policies, such as social welfare or government deficit reduction, over local goods. At the same time, it will also shift the most important vote bloc from rural districts, where incumbency advantage was strongest, to swing votes in urban areas.

Before ascertaining whether this policy shift will occur, we must determine the magnitude of electoral “nationalization.” This will allow us to estimate the relative value of cultivating a narrow but reliable core of rural voters versus a broader but less stable national coalition of swing voters. I do this by examining the extent to which incumbency advantage has eroded over time. Historically, high reelection rates were anchored by low levels of electoral volatility and cohesiveness—that is, the vote shares of incumbent candidates were fairly stable over time and uncorrelated with one another. Figure 1 displays changes in the reelection rate of incumbents from the LDP and the main opposition party—the Japan Socialist Party (JSP) until 1994, the New Frontier Party in 1996, and the DPJ thereafter. We can see that incumbents survived elections at an 80 percent rate until 1993, after which electoral reform and the resulting party realignment produced a temporary decline. Although this rate rebounded in 2000, we can observe an unprecedented drop in 2009, due to the sudden national swing in favor of the DPJ. Another point is that the reelection rates of LDP and non-LDP candidates diverge in 2005. Prior to reform, the incumbency survival rates of the LDP and the opposition
were negatively correlated, but not excessively so. In the 2005 and 2009 elections, however, we see a much sharper deviation in their relative performance, reflecting the growing size of partisan vote swings. The implication here is that party affiliation may be driving electoral outcomes more than individual characteristics.

This drop in the incumbency advantage is likely driven by the rise in independent, nonpartisan voters, not only in urban Japan but also in rural regions. Figure 2 shows the ratio of voters who claim no party preference in the Asahi newspaper’s preelection polls. These polls, which are taken in the two weeks leading up to a lower house election, conduct separate surveys for each prefecture, allowing us to observe geographic variation. The horizontal axis in Figure 2 is the prefectoral average of the densely inhabited districts (DID) measure, where higher values indicate greater urbanization. If tradition holds, then partisanship should be stronger in rural areas. While the correlation between urbanization and the ratio of floating voters is indeed positive (0.39), the graphs suggest that intertemporal variation is substantially greater than cross-district variation, especially when comparing the vastly different intercepts for the 2005 and 2009 surveys. This poses a challenge for any party trying to establish a stable support base in rural regions.

If these “floating” voters make ballot choices based on their (fluctuating) evaluations of political parties, not candidates, then we should observe

Figure 1 Incumbent Reelection Rates Drop
greater volatility in vote shares over time. At the same time, electoral cohesiveness across constituencies should also increase. With two viable candidates per district—typically representing the two dominant parties—voters are effectively choosing between two competing policy platforms and/or prime ministerial candidates. As the voters’ gaze shifts from political control of their resident district to the national parliament, we should expect a reduction in the electoral salience of local factors. In other words, elections should transform from narrow contests between specific incumbents and challengers to a more unified, national contest between parties.

**Incumbency Advantage Gives Way to Partisan Swings**

*Methodology: National Partisan Swings Versus District-Level Factors*

As shown in Figure 1, the reelection rate of incumbents was over 80 percent under MMD-SNTV, for both the LDP and its main rival, the JSP. This reelection rate held even as the popularity of the LDP itself steadily dropped through the 1970s and 1980s. The resilience of the LDP speaks
to institutional advantages that insulate incumbents, such as access to pork barrel funds and restrictive electioneering laws that benefit better-known candidates (McElwain 2008). Unsurprisingly, incumbency advantage produced low levels of electoral volatility and cohesiveness.

Has this incumbency advantage waned since electoral reform? Is there continuing variance in the survivability of urban versus rural candidates? I test these questions by analyzing the “partisan swing” (Tufte 1973), or the extent to which a candidate’s electoral prospects are affected by national swings in his or her party’s popularity. In the case of a “weak” partisan swing, changes in the vote share of copartisan candidates in other districts do not correlate with an incumbent’s own reelection probability. This would suggest that electoral cohesiveness is lacking: national trends do not greatly affect individual candidate performance. We can contrast the explanatory power of the national partisan swing with that of a candidate’s own vote share in past years. This latter measure captures electoral volatility, or the propensity of local voters to pick the same candidate in successive elections. Weak partisan swings are associated with low volatility: previous vote share should be a better predictor of incumbent reelection than national trends.

There are a number of ways to estimate the size of the partisan swing, varying in methodology and the number of control variables. Here, I utilize a basic logistic regression model that replicates and expands on an earlier analysis of the pre-1993 period by Gary Cox and Frances Rosenbluth (1995). Cox and Rosenbluth focus on electoral cohesiveness, defined as the extent to which the reelection rates of same-party incumbents are intertwined. They first run a probit model, using a dichotomous dependent variable for whether an incumbent was reelected or defeated. As explanatory factors, they include the incumbent’s margin of victory in the preceding election (Last Margin) and the average vote swing to all other incumbents from the same party that year (Party Swing). Using the coefficients from the probit model, they then simulate the expected probability decrement suffered by a typical incumbent when Party Swing is changed from zero to average. Comparing incumbents in Japan, the United States, and the United Kingdom, they find that the impact of the party swing is smallest in Japan and greatest in the UK. This finding reflects conventional wisdom that voter partisanship is very strong in the UK, while candidate quality matters most in Japan.

I replicate Cox and Rosenbluth’s study, albeit with two wrinkles. First, I incorporate data from the single-member district tier after the introduction of MMM, spanning five elections from 1996 to 2009. Second, I include a district-specific measure of population density, Urban. One
recurring finding in Japanese elections is that vote volatility tends to be higher in more urban districts. If urbanization has weaker partisan effects today, meaning it no longer influences the LDP and the opposition parties differently, then it provides an important clue as to the geographical causes of recent volatility. My statistical model takes the form:

\[ \text{Win}_i = B_0 + B_1(\text{Last Margin}_i) + B_2(\text{Party Swing}_i) + B_3(\text{Urban}_i) + e \]

- Each incumbent is denoted by \( i \), who belongs to Party \( j \) and competes in District \( k \). My analysis is restricted to incumbents from the two major parties. Under the MMD-SNTV system, these are the LDP and JSP; under MMM, these are the LDP and DPJ.
- The dependent variable, \( \text{Win}_i \), takes the value “1” when a given incumbent \( i \) wins reelection, and “0” when Incumbent \( i \) loses.
- \( \text{Last Margin} \) is the difference between the vote shares of Incumbent \( i \) and the losing candidate with the highest vote share (i.e., the “first loser”) in District \( k \) in the preceding election. Under MMD-SNTV (−1993), \( \text{Last Margin} \) is the vote difference between \( i \) and the candidate with \( M+1 \) highest vote share, where \( M \) is the number of seats allocated to that district. In a four-seat district, for example, \( \text{Last Margin} \) is the difference between the vote shares of each incumbent and the fifth highest vote-getter. Under MMM (1994–), the first loser is the candidate with the second-highest district vote share.
- \( \text{Party Swing} \) is the mean vote change of all other incumbents from Party \( j \) that Incumbent \( i \) belongs to, from the last to current elections.
- \( \text{Urban} \) is the population density of each District \( k \). Under MMD-SNTV, \( \text{Urban} \) is a four-part ordinal variable where “1” is rural and “4” is metropolitan districts. Under MMM, \( \text{Urban} \) is a continuous variable ranging from 0 to 1, measuring the percentage of the district’s population that lives in densely inhabited districts (DID), as defined by the national census.
- In terms of scope, the sample is restricted as follows. Under MMD-SNTV, I omit incumbents from districts where the number of seats is 1, 2, or 6, which are rare and idiosyncratic. I also include only the thirteen elections between 1958 and 1993, as 1958 is the first year that the LDP competed in elections. Under MMM, I look only at incumbents from the four elections between 2000 and 2009, in order to focus on candidates who had previously won an SMD contest. This omits the 1996 election, which was the first under MMM.
Findings

Table 1 shows the regression coefficients and standard errors for four models. Model 1 is restricted to LDP incumbents under MMD-SNTV, while Model 2 is restricted to JSP incumbents under the same. Model 3 is restricted to LDP incumbents under MMM, while Model 4 is restricted to DPJ incumbents under the same. I use separate models for the SNTV and MMM periods because of differences in the operationalization and implication of key independent variables, especially Urban and Last Margin.

Table 1 Partisan Swings in Japanese Elections

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<tr>
<th></th>
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<tbody>
<tr>
<td>Last margin</td>
<td>14.54</td>
<td>10.73</td>
<td>13.14</td>
<td>15.26</td>
</tr>
<tr>
<td></td>
<td>(1.50)**</td>
<td>(1.91)**</td>
<td>(2.219)**</td>
<td>(3.111)**</td>
</tr>
<tr>
<td>Party swing</td>
<td>27.05</td>
<td>27.72</td>
<td>33.66</td>
<td>23.95</td>
</tr>
<tr>
<td></td>
<td>(4.80)**</td>
<td>(3.00)**</td>
<td>(3.373)**</td>
<td>(3.489)**</td>
</tr>
<tr>
<td>Urban</td>
<td>−0.13</td>
<td>0.12</td>
<td>−1.72</td>
<td>−1.99</td>
</tr>
<tr>
<td></td>
<td>(−0.05)*</td>
<td>(0.06)*</td>
<td>(0.442)**</td>
<td>(0.990)*</td>
</tr>
<tr>
<td>Constant</td>
<td>1.49</td>
<td>0.75</td>
<td>0.96</td>
<td>1.14</td>
</tr>
<tr>
<td></td>
<td>(0.15)**</td>
<td>(0.19)**</td>
<td>(0.384)*</td>
<td>(−0.84)</td>
</tr>
<tr>
<td>Proportional reduction in errors</td>
<td>−0.6%</td>
<td>+1.2%</td>
<td>+57.9%</td>
<td>+40.5%</td>
</tr>
<tr>
<td>Pseudo-R²</td>
<td>0.06</td>
<td>0.07</td>
<td>0.46</td>
<td>0.33</td>
</tr>
<tr>
<td>N</td>
<td>3,308</td>
<td>1,431</td>
<td>631</td>
<td>253</td>
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Descriptive Statistics (Median)

<table>
<thead>
<tr>
<th></th>
<th>LDP1</th>
<th>JSP</th>
<th>LDP2</th>
<th>DPJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last margin</td>
<td>0.041</td>
<td>0.035</td>
<td>0.149</td>
<td>0.071</td>
</tr>
<tr>
<td>Party swing</td>
<td>−0.004</td>
<td>−0.007</td>
<td>0.014</td>
<td>0.030</td>
</tr>
<tr>
<td>Urban a</td>
<td>2</td>
<td>3</td>
<td>0.510</td>
<td>0.860</td>
</tr>
</tbody>
</table>

Notes: Dependent variable = Win versus Loss (1, 0) for incumbent candidates. Robust standard errors in parentheses.

* significant at 5%; ** significant at 1%

Proportional reduction in errors is calculated relative to the modal outcome. For Models 1, 2, and 3, the default prediction is that Win = 1. For Model 4, the model prediction is that Win = 0.

a. Under MMD-SNTV, Urban ranges from 1 to 4, where 4 is the most urban. Under MMM, Urban ranges from 0 to 1, where 1 is the most urban.
In every model, the two key variables—*Last Margin* and *Party Swing*—are statistically significant at conventional levels. The positive coefficients indicate that the probability of incumbent victory increases when previous vote margins are higher and the party’s national vote share is trending upward. *Urban*, in contrast, shows different results by party. Substantively, LDP incumbents have higher reelection probabilities in more rural districts (as seen by the negative coefficients in Models 1 and 3), as do DPJ incumbents in the postreform era. The JSP, however, tended to do better in more urban districts.

To interpret the actual substantive predictions of these models, we need to transform the logistic regression coefficients in Table 1, which give us log-odds ratios, into predicted probabilities. I do this by first setting all independent variables (IVs) at their median levels and then examining marginal changes in reelection probability when we let the IVs vary. Figure 3 shows these marginal changes for the LDP, JSP, and DPJ before and after electoral reform. The descriptive statistics used for the analysis can be found at the bottom of Table 1. Predictions for the LDP are denoted with an “x” symbol, while those for the JSP/DPJ are “•”s. Confidence intervals at the 95 percent level are depicted as bars (solid = SNTV elections, dotted = MMM elections). For *Last Margin*, I examine the marginal change in incumbent reelection chances when last election’s vote margin increases from the median rate to the median +1 percent. Under MMD-SNTV, a 1 percent increase in past performance improved the victory rate of LDP incumbents by 2.2 percent and JSP incumbents by 1.8 percent. After electoral reform, DPJ incumbents improved their prospects similarly (+2.5 percent) but LDP incumbents fared less well (only +0.9 percent). Indeed, this is a statistically significant drop in the substantive effects of *Last Margin* for the LDP, albeit not for the JSP/DPJ.

The most striking change is the uniform increase in the significance of *Party Swing* after electoral reform. The standard econometric practice is to examine changes in reelection probability when the partisan swing to one’s party is changed from zero to the absolute value of the median level. Figure 3 shows that the probability shift in reelection chances due to partisan swings almost quintupled from before to after reform. One reason is that the magnitude of party swings themselves has almost tripled over time (see the descriptive statistics in Table 1). This is an interesting trend in itself and has been documented by Maeda (2010) and Reed, Scheiner, and Thies (2012). The larger significance for this article is that the partisan swing plays a greater role in election outcomes today.

The rising influence of the partisan swing is due in part to the competitiveness of the DPJ, which has broader geographical popularity than the urbanite JSP. The *Urban* coefficient shows that LDP incumbents who
compete in the median DPJ district (which is quite urban) see their reelection probability drop by 5.4 percent. By contrast, DPJ incumbents would improve their prospects by 10 percent even if they were in a typical LDP district. That the DPJ is catching up in rural areas is a radical departure from past elections. The LDP’s fifty-year control over the government allowed it to use a broad range of fiscal and regulatory tools to establish a stable electoral base, especially in poorer, rural districts that depended on budgetary largesse. The DPJ’s encroachment into LDP strongholds is reflected in their increasing electoral viability in rural areas. This means that there are no more regional bailiwicks that consistently benefit particular parties, suggesting that the urban-rural partisan divide characterizing the “1955 system” has lost salience. I return to this point in the next section.

A number of methodological caveats are in order here, because the results under SNTV and MMM are not perfectly comparable. First, there were multiple seats per district up for grabs under SNTV (3–5), meaning that more candidates and parties entered each race. The proliferation of candidates meant that margins of victory also tended to be smaller, leading to systematic variation across electoral systems in the observed empirical range of the Last Margin variable. Second, even after electoral

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**Note:** Bars denote 95 percent confidence intervals.
reform, it is not so easy to compare LDP and DPJ candidates. This is most obvious in the case of the Urbanization variable. Given the LDP’s stronghold in rural districts, there are very few actual DPJ incumbents in rural areas. This means that our predictions of how well a typical DPJ candidate would do in a normal (i.e., rural) LDP district are subject to greater error. This is reflected in the wider confidence intervals for Urban in Figure 3, although the coefficient is easily statistically significant. Even with these caveats, however, the analysis here indicates that incumbency advantage—the hallmark of the localized, personalistic elections under SNTV—has receded greatly.

Before concluding this section, let me make a quick remark about the overall model fit. While there are various ways to estimate the explanatory power of statistical models, I focus here on the “proportional reduction in errors,” or PRE. PRE compares the proportion of incumbent “win” and “loss”—the two possible values of Win—that the model correctly predicts relative to a base model that simply expects incumbents to perform at modal rates. Under SNTV, this base model assumes that both LDP and JSP incumbents always win. The same is true for LDP incumbents under MMM, but in sharp contrast, the modal DPJ incumbent is expected to lose.

Table 1 lists the proportional reduction in errors for each model, as well as the pseudo-R^2, an alternative measure for estimating model fit. In the models for SNTV (1 and 2), the PRE is very small, both yielding 1 percent or less improvement in predictive power. By contrast, the models of MMM elections do much better. By incorporating previous margins of victory, partisan swing, and the urbanization of electoral districts, Model 3 explains whether LDP incumbents won or lost 58 percent better than the base prediction that its incumbents were always reelected. Similarly, Model 4 improves our ability to predict the fate of DPJ incumbents by more than 40 percent. One interpretation is that the influence of omitted variables is much greater in the SNTV cases, because the successes of the LDP and JSP were affected by the presence of minor parties that are no longer serious contenders under MMM (Scheiner 2012). The broader implication, however, is that the partisan swing and past margins of victory explain a greater proportion of electoral fluctuations besetting incumbents today than in the past.

One unresolved question, however, is whether bigger fluctuations in party support are likely to benefit the DPJ more than the LDP, or vice versa. To put it differently, should the LDP focus on trying to regain its rural dominance by doubling down on redistributive policies and patronage favors, or should it concentrate its policy agenda on appealing to national interests more broadly? I turn to this issue next.
The Urbanization of the Median Voter in Japan

Recent election outcomes suggest that some of the goals of electoral reform have been met. Electoral cohesiveness has strengthened, seen by the increased predictive power of partisan vote swings on incumbent reelection. Similarly, electoral volatility has become a fact of life, given that an incumbent’s previous vote margin no longer insulates him or her from national vote trends. These two indicators should co-vary: greater cohesiveness implies that copartisans increasingly share a common fate, which in turn means that past individual performance should also be less important.

Of course, the statistical analysis in the previous section does not elucidate why cohesiveness and volatility have increased, but we can postulate a number of plausible explanations. For one, the gradual reduction in competitive parties to two per district means that voters have an easier and more explicit choice between competing policy platforms and prime ministerial candidates. For another, voter partisanship has been decreasing significantly. This may seem counterintuitive, given that partisan vote swings are bigger now than ever before. But if we define partisanship narrowly as voters’ long-term affinity to specific parties, then what we observe in Japan today is a growth in independent, nonpartisan voters, as shown in Figure 2.

The Equalization of Seat Apportionment

This brings us to the next question: How much more valuable are rural than urban votes? In the past, the LDP’s solid lock on rural districts made competition over urban votes the only way for opposition parties to expand their Diet presence, but high malapportionment limited the ultimate significance of urban electoral warfare. However, the growing nationalization of elections and increasing competitiveness of the DPJ in rural districts imply that the value of regional dominance is eroding.

To answer this, we must look more carefully at one of the fundamental effects of the 1994 electoral reform: changing Japan’s electoral geography. One finding from the preceding regression analysis is that under MMD-SNTV, the LDP and JSP carved out distinct geographical bases of support in rural versus urban areas. Given the agglomeration of industrial centers in coastal port cities, it is not surprising that the union-backed JSP would be more successful in urban environs with more blue-collar workers. After electoral reform, however, more DPJ candidates have become competitive in rural areas. This is no accident: the DPJ has strategically sought to nationalize its vote base instead of simply protecting its urban seats. Take the case of the agricultural sector, an important source of votes and donations for the LDP. Under Prime Minister Junichiro Koizumi’s
market reform initiatives, the government promoted the liberalization of rice distribution and focused subsidies on larger agribusinesses that could take advantage of economies of scale to increase profits. This predictably upset small-scale, part-time farmers who are electorally influential and organized in rural areas. In 2009, the DPJ swooped in by promising subsidies to all farmers regardless of size, allowing it to win in rural districts that had consistently voted for the LDP in the past.

This is not to say that the LDP and DPJ are equally competitive in all districts. Since 2000, the median urbanization level of constituencies won by LDP candidates, as measured by the percentage of voters residing in densely inhabited districts (DID), is 0.53. By contrast, the median DPJ victor hails from districts with a much higher DID value of 0.72. Figure 4 displays a scatter plot and quadratic regression line of relative LDP and DPJ support. The vertical axis denotes the difference between LDP and DPJ vote shares in each district in the 2000, 2003, 2005, and 2009 elections, with positive values indicating greater LDP support. The horizontal axis is the district’s DID level. We can clearly see that the LDP’s advantage over the DPJ is greater in rural areas, denoting the persistence of geographical divisions in electoral support.5

Figure 4 Partisan Support and District Geography

![Figure 4](https://www.cambridge.org/core/asset/...)

\[ N = 1,039 \]
The dominance of the LDP in rural areas has been a long-term problem for its competitors. Traditionally, rural districts have enjoyed outsized electoral influence due to high degrees of malapportionment. Because of rapid reindustrialization in the postwar period, more people moved from rural to urban regions than vice versa, leaving the former with progressively fewer voters relative to their number of seats. In effect, it was possible to win a rural seat with substantially fewer votes than an urban seat. This malapportionment can be ameliorated by periodically reallocating seats or by redrawing district boundaries. Indeed, the Supreme Court has interpreted Article 14 of the Japanese constitution—mandating political, social, and economic nondiscrimination—to mean that the gap between the number of voters per representative cannot deviate by more than 3:1 between the most and least populated districts (Ohmiya 1992). The Diet is required to reallocate seats after every quinquennial census, but in practice, the LDP routinely ignored this principle except when the Supreme Court threatened to void election results (McElwain 2008). The LDP’s tactic is not surprising in light of Ray Christensen and Paul Johnson’s (1995) finding that malapportionment produced a statistically significant bump in how disproportionately LDP votes were translated into Diet seats.

Following the 1994 electoral reform, however, the preexisting 129 multimember districts were transformed into 300 single-member districts. Two important rules were built into the regulations governing constituency design. First, each prefecture was automatically given one seat, with additional seats distributed based on population size. While this meant that underpopulated rural prefectures continued to be awarded more seats than technically warranted, the resulting distortion was still much less than under MMD-SNTV. Second, the independent Boundary Demarcation Commission was established in 1994. Its mandate was to apply neutral administrative criteria for district boundaries and seat allocations in order to keep malapportionment below 2:1. Every government since then has implemented the commission’s recommendations, and Christensen (2002) finds no discernible partisan bias in recent seat apportionment patterns.

Figure 5 is a box plot displaying changes in malapportionment levels, based on each district’s number of voters per representative relative to the median district. By definition, the box for each year is centered on “1,” or the median constituency. Districts that are overapportioned seats—relatively few voters per representative—have values less than “1,” while those that are underapportioned are greater than “1.” The horizontal box in Figure 5 captures the 25th to 75th percentile range, the extended lines show the 5th and 95th percentiles, and the dots indicate outliers. As we can see, malap-
portionment expanded to 5:1 between the most and least populated districts in the 1960s and 1970s, but since electoral reform, the disparity has fallen dramatically to around 2:1. Indeed, the last time malapportionment was so low was 1958—the first election that the LDP competed in.

The reduction in malapportionment has profound consequences for electoral outcomes in Japan. As discussed earlier, voter identification with political parties—especially with the LDP—has been significantly stronger in rural areas. This also made public policies that were favorable to rural districts, such as fiscal redistribution and trade protection for the construction and agricultural sectors, electorally efficacious. However, the declining value of rural votes following reapportionment, coupled with the rising percentage of independent votes (see Figure 2) and the greater sensitivity of election contests to partisan swings (see simulations in Figure 3), suggests that the LDP’s strategic focus on rural districts may backfire. Indeed, given that the 2009 election produced the decisive ouster of the LDP, the geographical biases of the electoral system may no longer favor the LDP at all.

Calculating Distribution Biases
In this section, I estimate how cross-district variation in electorate size can produce a malapportionment bias. While institutional safeguards now exist
to ensure population parity of at least 2:1, migration between censuses and some flexibility in the Boundary Commission’s guidelines means that rural votes continue to count more than others. The question is whether the size of this bias, which allowed the LDP to capture more seats than its popularity warranted, has declined since the 1994 electoral reform.

We can estimate the relative salience of malapportionment biases through algebraic transformations of electoral data. Bernard Grofman, William Koetzle, and Thomas Brunell (1997) focus on two key measures: the average vote share of each party across all districts, and the population size of the electorate in each district. I leave a full discussion of this methodology to Grofman et al. but review each component piece here. First, $P_i$ is the mean vote share of Party $i$ in all districts where $i$ has run candidates. Second, $M_i$ is the population-corrected vote share of a party, which is calculated by multiplying each party’s district vote share by that district’s electorate ratio. Mathematically, these two indicators are calculated as follows:

$$P_i = \frac{\sum p_{ij}}{S},$$

or the mean vote share of Party $i$ in all Districts $j$ that year. “$p_{ij}$” is the vote share obtained by Party $i$ in District $j$. $S$ is the total number of contested seats across all districts.

$$M_i = \sum p_{ij} \times d(j),$$

or the population-corrected vote share of Party $i$. “$d^{(j)}$” is the ratio of the raw electorate—the number of eligible voters—in District $j$ to the total raw national electorate.

Malapportionment bias is calculated as $M_i - P_i$, or the difference between Party $i$’s population-corrected vote share and its mean district vote share. Mathematically, $P_i$ captures the status quo by weighting each district’s vote share equally. $M_i$ estimates the counterfactual scenario of perfect apportionment by discounting the party’s vote share in districts with small electorates and increasing its weight where the electorate is larger. As a result, parties like the LDP that consistently win more votes in less populated, overapportioned districts would have a smaller $M_i$ than $P_i$. A negative value in the difference between $M_i$ and $P_i$ indicates that Party $i$ is currently more popular in overapportioned districts, and so would do worse if population imbalances were corrected. By contrast, a positive value tells us that Party $i$ would do better without malapportionment, because its current support is concentrated in districts with too many voters. If all districts are already equally apportioned—that is, the number of voters is identical—then there will be no difference between $M_i$ and $P_i$. 

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Declining Malapportionment Bias to the LDP

I have calculated each of these component parts for the MMD-SNTV (1958–1993) and MMM periods (1996–2009). In this section, I use raw vote shares for each party, although I reestimate two-party vote shares between the LDP and DPJ later. Figure 6 compares the malapportionment biases of the LDP and the JSP/DPJ. To reiterate, each line indicates how much the national vote shares of each party would change \((M_i - P_i)\) if we corrected for cross-district variation in malapportionment. Negative values mean that the party would be worse off. Not surprisingly, we find that the LDP benefited significantly from malapportioned rural districts, generating an average vote boost of 2.4 percent (prereform) and 2.7 percent (postreform). While the JSP was not significantly affected by malapportionment during the SNTV period, the DPJ is actually quite similar to the LDP, benefiting by 3.3 percent more votes on average under MMM. This convergence in the benefits of malapportionment to the LDP and DPJ—which was also apparent in the regression results in Figure 3—reflects the increasing nationalization of the DPJ’s support and its ongoing efforts to penetrate the traditional support bases of the LDP.

Given that the LDP and DPJ are now (mostly) in a two-party contest in almost every district, it is worthwhile to compare their relative performances directly. As alluded to earlier, the Grofman et al. methodology was designed for two-party elections. In a two-party setting, gains made by one

![Figure 6 Malapportionment Bias in Electoral Competition, 1958–2009 Elections](image)
party are inherently losses to another, since vote shares must sum to 1. In a multiparty setting, however, different non-LDP parties could gain from some factors more than others. For example, the Komeito may be harmed by malapportionment because it competes mainly in urban areas, while the Communists receives no benefits because they run candidates in every district. The operationalization in Figure 6 does not make this distinction and simply treats the LDP and the JSP/DPJ as each competing against a bloc of other parties. This makes sense if there is regional variation in party competition, as during MMD-SNTV when the LDP faced different constellations of opposition parties in every district. However, the LDP and DPJ are in direct competition in almost every single-member district today. We should thus replicate the analysis from Figure 6 by recalibrating each party’s post-MMM vote share as a two-party share.

In a two-party setting, any gains or losses to the LDP are picked up by the DPJ—that is, vote shares always sum to 1. Table 2 lists the malapportionment bias to the LDP in the 2000, 2003, 2005, and 2009 elections. It indicates no malapportionment benefits to the LDP, with any gains or losses being less than 0.5 percent of the national vote. This reflects the striking change to electoral geography after reform. While malapportionment produced a sizable boon to the LDP during the MMD-SNTV period, most benefits vis-à-vis their main opponents were erased when MMM was instituted. We can attribute this shift to new laws now in place, especially the creation of the Boundary Demarcation Commission, that ensure periodic redistricting. In effect, the concentration of LDP supporters in rural areas no longer translates into disproportionately better aggregate performance.

### Conclusion

Before discussing the larger implications of this article, let me briefly summarize the main empirical findings. My first result is that incumbent

<table>
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<tr>
<th>Year</th>
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<td>2000</td>
<td>0.004</td>
</tr>
<tr>
<td>2003</td>
<td>0.000</td>
</tr>
<tr>
<td>2005</td>
<td>0.001</td>
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<tr>
<td>2009</td>
<td>0.001</td>
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*Note: a. Malapportionment bias = $M_i - P_i$. Positive values indicate that the DPJ benefits more from malapportionment bias than does the LDP.*
reelection is increasingly determined by partisan swings, not past performance or local networks. Traditionally, electoral incumbents were insulated from challengers because voters prioritized candidate characteristics at the polls. Since the switch to the MMM system in 1994, however, both electoral volatility and cohesiveness have increased, indicating that contests today are determined by party- and national-level trends in voter sentiment. Second, I show that the reapportionment of seats in 1994 reduced the value of dominating rural districts. While the LDP’s parliamentary majorities used to stem from the concentration of its supporters in rural regions, those rural votes are less valuable because there are now relatively more urban seats. As a result, there is no significant benefit to the LDP of having a geographically narrow vote base.

There are two broader implications of this study to future developments in Japanese politics. First, greater electoral volatility implies a low likelihood of future single-party dominance. The number of floating voters has increased since the 1990s, and those voters are more likely to make ballot decisions based on their evaluation of competing party leaders, not ideological convictions. As Michio Umeda and I have shown (McElwain and Umeda 2011), leader popularity is significantly more volatile than party affinity, increasing the odds of large vote swings. Furthermore, the high salience of party leaders makes Diet members less tolerant of unpopular leaders who lower their individual reelection odds, resulting in higher frequencies of government turnover outside elections. Figure 7 shows the average tenure (in days) of prime ministers in a broad range of developed democracies after 1990, using data from the ParlGov database (Döring and Manow 2011). Japan is second on the list, trailing Italy, and it is well short of the average survival rate of most premiers.

Second, any party that seeks future success needs to appeal to both urban and rural regions. Indeed, the growing devaluation of rural votes suggests that Prime Minister Koizumi’s attempts to sever the LDP’s overreliance on its traditional base were strategically appropriate. His policy priorities, such as the privatization of public sector companies, were more attractive to urban voters, who are more amenable to free market competition and reductions in pork barreling. However, Koizumi’s initiatives were strongly opposed by many LDP incumbents, whose own electoral survival depended on meeting the demands of rural constituents. The DPJ has tried to capitalize on rural mistrust of Koizumi’s agenda by promising greater wealth redistribution and trade protection for vulnerable industries. In effect, the DPJ’s victory in 2009 was predicated on its decision to become more like the LDP, while preserving its legacy of urban appeal. Looking forward, I believe it is costly for parties to rely on...
narrow support in specific regions, since the growth in electoral volatility signifies the lack of any safe bailiwicks.

Having said that, weaker incumbency advantage implies shorter time horizons for politicians, which in turn makes the enactment of fundamental policy reforms challenging. Koizumi’s advocacy of structural reform was predicated on “pain now, gains later.” This intertemporal trade-off requires political parties to stick to their guns over an extended time period. The LDP could afford to do this in the past because of a reliable rural support network. However, growing volatility will tempt parties to prioritize incremental short-term payoffs, such as sacking unpopular leaders quickly, instead of tackling major policy issues such as social welfare or tax system overhaul. For vote swings to restabilize, parties must become more ideologically attractive and coherent, but there are few indications that this transition is coming in the near future.

Kenneth Mori McElwain is assistant professor of political science at the University of Michigan, Ann Arbor. His research focuses on the politics of institutional design, including the manipulation of electoral rules, the democratization of political parties, and the formation of national constitutions. His current project examines why Japanese governments are short-lived. He is the coeditor of Political Change in Japan: Electoral Behavior, Party Realignment, and the Koizumi Reforms (2009).
Appendix: Alternative Models of Estimating the Partisan Swing

<table>
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<tr>
<th>System:</th>
<th>SNTV</th>
<th>SNTV</th>
<th>MMM</th>
<th>MMM</th>
<th>SNTV</th>
<th>SNTV</th>
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<td>Votes</td>
<td>Votes</td>
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<td>(18.79)**</td>
<td>(10.51)**</td>
<td>(10.94)**</td>
<td>(4.10)**</td>
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<td></td>
<td>(13.21)**</td>
<td>(18.13)**</td>
<td>(15.70)**</td>
<td>(15.11)**</td>
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<td>-0.039</td>
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<td>(11.02)**</td>
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Notes: Robust t statistics in parentheses; * significant at 5%; ** significant at 1%
a. Each dependent variable ranges from 0 to 1.
b. Urban ranges from 1 to 4 under SNTV and 0 to 1 under MMM.
Notes

1. I tabulate the LDP’s total vote share by district-year between 1958 and 1990 (inclusive). In estimating district vote share, I include not only LDP-endorsed candidates, but also LDP-affiliated independents and ex-LDP candidates of the New Liberal Club, who coordinated their electoral efforts with the LDP. While it is not strictly necessary to include these “unofficial” LDP candidates, other studies have found this method to be a better proxy for total conservative vote share at the district level. I further restrict the analysis to constituencies whose district magnitude was between three and five. During the time period under observation, a small number of districts had one, two, and six seats (less than 1.5 percent of the total districts). These were relatively idiosyncratic cases and so were excluded from the analysis to focus on modal patterns of LDP support.

2. Here, and in the rest of this article, I gratefully use data shared by Steven Reed.

3. The “pseudo-R^2” ranges from 0 to 1 and approximates how much of the variation in the dependent variable is accounted for by the explanatory factors. It is similar in interpretation to the “R^2” commonly calculated for ordinary least squares regressions. As with the PRE estimates, the pseudo-R^2 indicates that Last Margin and Party Swing have more explanatory purchase after 1996. The model fit as estimated by the pseudo-R^2 was quite low under MMD-SNTV elections (0.06 for LDP, 0.07 for the JSP), but much higher under MMM (0.46 for LDP and 0.33 for DPJ).

4. I have replicated this analysis using different dependent variables. Instead of the dichotomous Win, I have tried using (1) Margin, the vote margin in the current election between the incumbent and the first loser, and (2) Votes, the vote share of the incumbent in the current election. Both models were estimated using an ordinary least squares (OLS) regression. One small difference is that for the model using Votes as the dependent variable, I replaced Last Margin with the more appropriate Last Votes as an explanatory factor. The regression results are included in the Appendix. There are some notable findings. First, as in the logistic model discussed in the text, the substantive coefficient sizes of Last Margin and Last Votes drop after electoral reform. By contrast, the coefficient size of the Partisan Swing increases, except for the model predicting the Margin for LDP incumbents. Finally, I find that Urban becomes statistically insignificant at conventional levels after electoral reform, echoing the findings in the logistic regression that the LDP’s dominance of rural districts is fading.

5. This relationship holds even if we draw separate scatter plots for each election.

6. This method is similar to the distribution of legislative seats to each state in the US House of Representatives.

7. There are a number of different ways to measure these sources (and others) of partisan bias. For example, Johnston, Rossiter, and Pattie (1999) advocate an alternative process called “Brookes’ method,” named after Richard Brookes, who estimated partisan biases in New Zealand. Substantively, both Grofman, Koetzle, and Brunell (1997) and Johnston, Rossiter, and Pattie (1999) produce similar results, and so I focus on the former in this article.
8. Instead of calculating each party’s votes relative to all ballots cast, I reestimate vote shares as ratios of the LDP plus DPJ votes. In other words, the LDP’s two-party vote share = (Absolute LDP Votes)/(Absolute LDP + DPJ Votes).

9. Many countries’ ideological cleavages and party systems changed significantly after the collapse of the Soviet Union and the declining salience of the capitalism versus communism debate in the early 1990s. As such, it can be seen as a time of electoral turmoil for many countries, not just Japan.

References


