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Explaining and Predicting Japanese General Elections, 1960–1980

Despite the recent application of Western social science theories and methods to the study of Japanese elections, the result has been a reemphasis of cultural and idiosyncratic factors in electoral politics. The study of Japanese elections has thus once more become isolated from comparative social science research. Much of the cause of this problem has been the failure to develop a systematic theoretical model of voting behavior with the ability to account for electoral results.

The major thrust of this article is to demonstrate that even the simplest version of a theoretically oriented model performs reasonably well in explaining and predicting electoral outcomes—indeed, better than the predictions of major Japanese newspapers made shortly before each general election—and that no resort to cultural peculiarities or uniqueness is necessary to explain more than 62 per cent of the variance in electoral outcomes.

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This paper constitutes a part of my project on the Japanese Political-Economic System under a Ministry of Education scientific research grant for the years 1979–81.

This paper presents a simple model to explain the outcomes of the eight general elections for major parties in Japan during the 1960–1980 period. The model draws widely from such divergent conceptions as Downs' party competition and calculus of voting model and Sartori's theory of predominant-party systems, political-economic interactions, and electoral mobilization variables, together with insights obtained from the study of Japanese electoral politics.¹ Four kinds of independent variables are identified: ideological congruence, buffer size, economic conditions, and electoral mobilization. The model serves both explanatory and predictive purposes, as will be demonstrated below in the empirical results using 1960–1980 general election data.

First, I will present a brief review of the study of Japanese electoral politics, focusing on explanatory schemes to show that much has already been done in this field of study that can be utilized for synthesizing a model such as that found in this work. Second, the conceptual bases of my model will be briefly described, locating it in the broader, more general theoretical context of electoral politics. Third, data for my model will be described and justified. Fourth, estimation results will be shown, indicating that the overall performance of the model is reasonably good and that party-to-party differences in parameter estimates give interesting insights into the actual workings of electoral politics at each party level. Lastly, I will make some concluding remarks, both substantive and methodological.

Review of the Study of Japanese Electoral Politics Focusing on Explanatory Schemes

One of the most important characteristics of the study of Japanese electoral politics is that it has been somewhat reluctant to be analytically sharp in any one direction. Instead, it has often resorted to the cultural explanation when a theoretical framework, often brought in from American political science, does not prove to be robust enough to explain what is purported, or to use the idio-

1. Anthony Downs, *An Economic Theory of Democracy* (N.Y.: Harper and Row, 1957); Giovanni Sartori, *Parties and Party Systems: A Framework for Analysis*, Vol. 1 (Cambridge: Cambridge University Press, 1976); William D. Nordhaus, "The Political Business Cycle," *Review of Economics and Statistics*, Vol. 42 (1975), pp. 169–90; Edward Tufte, *Political Control of the Economy* (Princeton: Princeton University Press, 1978); Gary Jacobson, *Money in Congressional Elections* (New Haven: Yale University Press, 1980).

graphic approach, which is by definition theoretically weak. Thus, when the sociological analysis of politics, introduced to Japan after World War II and applied to Japanese electoral politics, has proved weak in explaining Japanese electoral behavior in terms of class, occupation, and income, the answer has been “cultural politics.”²

Survey research also was found to have its drawbacks, especially in view of somewhat weak party identification among Japanese respondents. All sorts of questions were added and the responses cross-tabulated, factor-analyzed, or used for prediction, but these usually add few particularly deep or sharp insights into Japanese electoral behavior, at least from the viewpoint of comparatively oriented political scientists. Even the best survey research does not have a strong theoretical design, and occasionally it resorts to the notion of holistic political culture.³ When the focus is on a social network called *jiban* (or areas where a particular candidate collects a large quantity of spatially concentrated votes), conceptual analysis tends to be slighted in favor of a graphic representation of vote-collecting patterns, with most attention paid to the very practical matter of who has taken votes from whom.⁴

All this is not to say that studies of Japanese electoral politics are underdeveloped or of low quality. Many are very advanced and are useful for understanding Japanese “peculiarities” or presenting the

2. Jōji Watanuki, “Patterns of Politics in Present-Day Japan,” in Seymore M. Lipset and Stein Rokkan, eds., *Party Support and Voter Alignments: Crossnational Perspectives* (N.Y.: Free Press, 1967), pp. 447–466; *Politics in Postwar Japanese Society* (University of Tokyo Press, 1978); Akuto Hiroshi, “Seitō shiji no kōzō bunseki,” in Nihon hōsō kyōkai hōsō yoron chōsasho, ed., *Dai-2 Nihonjin no ishiki—NHK yoron chōsa* (Shiseido, 1980), pp. 139–178. “Traditional” versus “modern” value orientation which is in turn strongly affected by generation and sex is singled out as the most important variable in determining party support patterns. As for Japanese political science, see Takashi Inoguchi, “Political Science in Japan,” in William G. Andrews, ed., *International Handbook of Political Science* (Connecticut: Greenwood Press, in press).

3. Ikeuchi Hajime, *Shimin ishiki no kenkyū* (Tokyo Daigaku Shuppankai, 1974); Miyake Ichirō et al., *Kotonaru reberu no senkyo ni okeru tōhyōkōdō no kenkyū* (Sobunsha, 1967); Tokeisuri Kenkyujo, *Nihon no kokuminsei*, 3 vols. (Shiseido, 1965, 1971, 1977); Nihon hōsō kyōkai hōsō yoron chōsasho, ed., *Nihonjin no ishiki*, 2 vols. (Shiseido, 1975, 1980); Ogawa Koichi et al., *Daitoshi no kakushinhyō* (Bokutasha, 1975); Akuto Hiroshi, *Amerika no seiji fūdo* (Tōyōkeizai Shuppansha, 1980); Kohei Shinsaku, *Tenkanki no seiji ishiki* (Keiotsūshin, 1980).

4. Ogata Norio and Kyōgoku Junichi, “Tokuhyō *jiban* no bunseki o megutte,” in Kitagawa Toshio et al., eds., *Inshibunseki* (JUSE Symposium on Mathematical Programming, Series No. 13, 1965); N. Ogata and M. Takabatake, “The Graphic Analysis of *Jiban* in Japanese Elections,” mimeo (St. Paul’s University, 1964).

Japanese "complex whole." The point here is that many of them are not necessarily presented in a form that can be sufficiently generalized or compared.

Two reasons may be given for this tendency. One is that Japanese electoral politics is in fact too complex, defying any one single theoretical explanation except the cultural, although cross-national comparative studies by British and American scholars do not necessarily support that conclusion.⁵ The other is that Japanese political science resists absorbing any one theoretical perspective *in toto* and carrying it to its logical extreme.⁶ Whatever the reasons for this tendency, it seems to be the impression of many comparativists that the study of Japanese electoral politics has not contributed much to the accumulation of comparative theoretical knowledge about electoral behavior and process. However, this review will show that much of the insight into Japanese electoral politics that has been accumulated within and outside Japan has been left largely "under-utilized." The main reasons for this underutilization are the insulation of Japan specialists from generalists and comparativists⁷, and the asymmetric relationship Japanese political scientists have with political scientists in North America and, to a lesser degree, in Western Europe, in terms of contributing and absorbing social science knowledge.⁸

5. Ian Budge and Dennis Farlie, *Voting and Party Competition: A Theoretical Critique and Synthesis Applied to Surveys from Ten Democracies* (London: Wiley, 1977); Sidney Verba, Norman H. Nie, and Jae-on Kim, *Participation and Political Equality: A Seven Nation Comparison* (Cambridge: Cambridge University Press, 1978); *The Modes of Democratic Participation: A Cross-National Comparison* (Beverly Hills, California: Sage, 1971). I have argued elsewhere against abuse of the cultural explanation by political scientists and economists: Takashi Inoguchi, "Masatsu no hi-bunkateki setsumei," to be included in a volume on conflicts between cultures, edited by Obayashi Taryo. One good example from the recent past is the contrast between the effects of a leader's death in the midst of campaigns on electoral outcomes in Japan and in North Rhine-Westphalia. Both Japanese Prime Minister Ohira Masayoshi and the Christian Democratic Prime Minister of the North Rhine-Westphalia government, Heinrich Köppler, passed away suddenly during the election campaigns in June and May 1980, respectively. The outcomes are starkly different: in Japan the LDP had a resounding victory whereas in North Rhine-Westphalia the CDU experienced an undisputable defeat. My question is: Is this attributed largely to the difference in political culture? In other words, is this due largely to the presence or absence of sympathy votes?

6. See Inoguchi, "Political Science in Japan."

7. "(APSA) 1981 Annual Meeting Paper Committee," *PS*, Vol. 13, No. 3 (Summer 1980), p. 341.

8. Inoguchi Takashi, "Nihon seihin no impakuto: kōgyō seihin to shakai-kagaku," *UP*, No. 96 (October 1980), pp. 6-10.

Six major explanatory schemes can be identified in the study of electoral politics in general and the study of Japanese electoral politics in particular: (1) social groups, (2) socio-psychological beliefs and attitudes, (3) social networks, (4) rational choice, (5) political-economic interactions, and (6) legal-institutional framework.⁹ Each of these explanations touches on an important facet of the complex process of electoral politics that leads to electoral outcomes (Table 1).

First, the social group explanation, if interpreted strictly, has not taken root in the study of Japanese politics largely because ethnic, religious, linguistic, and class-related cleavages are not strong in Japanese society.¹⁰ A good illustration of this is the invention of the notion of "cultural politics" by a sociologist, Watanuki Jōji. By this he means politics based on postwar value differences and not on distinction by class or other types of sociological categories (except generational experiences).¹¹ The kind of social groups model applied by Pool, Abelson, and Popkin to the U.S. has not been constructed in Japan,¹² despite the fact that the cross-national comparative study of party support by British authors indicates that the Japanese pattern is not excessively unique in the relative importance of class-related cleavages in party support patterns.¹³

9. For the first, second and fourth explanations, see Budge and Farlie, *op. cit.*; For the first, second and third, see Scott C. Flanagan and Bradley M. Richardson, *Japanese Electoral Behavior: Social Cleavages, Social Networks and Partisanship* (London: Sage, 1977); For the fifth, see Tufté, *op. cit.*, Nordhaus, *op. cit.*, and Bruno S. Frey and Friedrich Schneider, "An Empirical Study of Political-Economic Interactions in the U.S.," *Review of Economics and Statistics*, Vol. 60 (1978a), pp. 174-183; "A Politico-Economic Model of the United Kingdom," *Economic Journal*, Vol. 88 (1978b), pp. 243-253; "An Econometric Model with an Endogenous Government Sector," *Public Choice*, Vol. 34 (1978c), pp. 29-34; for the sixth, see Douglas Rae, *The Political Consequences of Electoral Laws* (New Haven: Yale University Press, 1967).

10. See Flanagan and Richardson, *op. cit.*, and Ishikawa Masumi, *Sengo seiji kōzōshi* (Nihonhyōronsha, 1978).

11. See Watanuki, "Patterns of Politics." It should be noted, however, that despite his invention of this notion, his work has consistently been very sociological. See also Sidney Verba, Norman H. Nie and Jae-on Kim, *op. cit.* (1971 and 1978); Murakami Yasusuke, "Shin chūkan taishū no jidai," *Chūō Kōron*, December 1980, pp. 202-209; Nishihira Sigeki, *Nihon no senkyo* (Shiseido, 1972); Ogawa Koichi et al., *op. cit.*

12. Ithiel de Sola Pool, Robert Abelson, and Samuel Popkin, *Candidates, Issues and Strategies: A Computer Simulation of the 1960 and 1964 Presidential Campaigns* (Cambridge, Mass.: MIT Press, 1964).

13. Budge and Farlie, *op. cit.*; cf. Richard Rose, ed., *Electoral Behavior: A Comparative Handbook* (N.Y.: Free Press, 1974); and Verba et al., *op. cit.*

Table 1: Competing/Complementary Explanations

	<u>authors</u>	<u>focus</u>	<u>explanatory/predictive schemes</u>
social groups	Jae-on Kim Yasusuke Murakami Sigeiki Nisihira Koichi Ogawa Joji Watanuki	sociological class, occupation, income and politics	cross-tabulation regression
social psychological attitudes and beliefs	Hiroshi Akuto Scott C. Flanagan Chikio Hayashi Nobutaka Ike Hajime Ikeuchi Shinsaku Kohei Ichiro Miyake Kikuo Nakamura Bradley M. Richardson	socio-psychological beliefs, attitudes, images, life style and party support	cross-tabulation regression factor analysis quantification scaling
social networks	Scott C. Flanagan Sadashi Kawato Junichi Kyogoku Norio Ogata Bradley M. Richardson Michitoshi Takabatake Nobuo Tomita	socio-communicational, residential and occupa- tional associations, home consciousness and party support	cross-tabulation quantification scaling quadratic program- ming
rational choice	Takashi Inoguchi Michael Leiserson Kan Kato Norio Okazawa Hajime Shinohara	rational choice based on utilitarian calcula- tion	formal models and statistical analysis
political-economic	Takao Fukuchi Nobutaka Ike Takashi Inoguchi Ikuo Kabashima Samuel Kernell Jae-on Kim Chae-jin Lee Seizaburo Sato Kimio Uno	economic conditions government support political participation electoral outcomes	cross-tabulation regression
legal-institutional framework	Sigeiki Nisihira Norio Sakagami	legal-institutional framework and party configuration	electoral formulas

Second, the socio-psychological explanation, influenced by the Michigan school, asks questions about party support and its socio-psychological determining factors. Because of weak party identification in Japan, a pure version of this approach has not been widely adopted in the study of Japanese electoral politics. Voters' superficial images of parties and, above all, of candidates' and parties' stands on national issues do not encourage the use of this explana-

tion.¹⁴ However, its Japanese variant, combining sociological attributes (e.g., education and occupation) and socio-psychological attitudes (e.g., party support, party image, and life style) has been very influential, both among Japanese¹⁵ and American scholars.¹⁶ Hayashi's predictive scheme, adopted in the mid-1960s by the *Asahi Shinbun*, uses the responses to questions in opinion polls conducted shortly (two to four weeks) before election day,¹⁷ and focuses on party support and sociological attributes. This incredibly complicated model concentrates on locally specific situations by giving varying weights to determining factors derived from regression equations using past electoral data and informed guesses in each electoral district.

Third, the social network explanation asks questions on special environments and communication networks, such as residential and occupational associations, and correlates these with party support.¹⁸ An influential Japanese variant sees most supporters (clients) as spatially concentrated in subunits of each district, and then focuses on the relatively fixed voters (loyalists) and "floating" and "flirting" voters. It assumes, partly justifiably, a fairly fixed candidate-voter relationship, often cultivated by personal support organizations, interest group branches, neighborhood associations and administrative networks. Its analytical scheme is to estimate the flows

14. Miyake Ichirō et al., *op. cit.*; Bradley M. Richardson, *The Political Culture of Japan* (Berkeley: University of California Press, 1974); and Flanagan and Richardson, *op. cit.*

15. Akuto Hiroshi, *Amerika no seiji fūdo*, and "Seitō shiji no kōzō bunseki"; Tokeisuri Kenkyūjo, *op. cit.*; Ikeuchi Hajime, *op. cit.*; Kohei Shinsaku, *op. cit.*; Miyake Ichirō et al., *op. cit.*; Nakamura Kikuo, *Gendai Nihon no seiji bunka*, (Kyoto: Minerva Shobo).

16. Nobutaka Ike, "Economic Growth and Intergenerational Change in Japan," *American Political Science Review*, Vol. 67, No. 4 (December 1973), pp. 1194-1203; Scott C. Flanagan, "The Genesis of Variant Political Culture: Contemporary Citizen Orientation in Japan, America, Britain and Italy," in Sidney Verba and Lucian Pye, eds., *The Citizen and Politics* (Stanford, Ct.: Greylock, 1977), and "Voting Behavior in Transition: The Persistence of Traditional Patterns," *Comparative Political Studies*, Vol. 1 (October 1968), pp. 391-412; Bradley M. Richardson, *The Political Culture of Japan*, and "Urbanization and Political Participation," *American Political Science Review*, Vol. 67, No. 2 (June 1973), pp. 433-452.

17. Hayashi Chikio and Takakura Setsuko, "Yosoku ni kansuru jishhōteki kenkyū: senkyo yosoku no hōhōron," *Tokeisuri Kenkyūjo Ihō*, Vol. 12 (1964-65), pp. 9-86.

18. Flanagan and Richardson, *op. cit.*; Tomita Nobuo, "Jimoto ishiki no bunseki," *Gikaiseiji eno shiza* (Hokujūshuppan, 1978), pp. 3-53.

of “switches” from party (candidate) X to party (candidate) Y in each district and vice versa.¹⁹

Fourth, the rational choice explanation attempts to formulate the formal theory of voting and party competition based on the assumption of rationality.²⁰ Partly because much of Japanese electoral politics consists of the down-to-earth, mundane give-and-take of benefits and favors under predominant party and bureaucratic dominance, this explanation has not yet attracted many adherents. It is only in the 1970s, when the birth of a coalition government was thought possible, that rational choice models attracted interest.²¹

Fifth, the political-economic explanation asks questions about the extent to which macroeconomic conditions affect political outcomes. This explanation has become increasingly influential, relating such economic variables as disposable income, price inflation, unemployment, urbanization, industrialization, public construction, government subsidies, official interest rate, and fiscal expenditure to political variables such as government support, political participation, and electoral outcomes.²² More recently, the need to explore

19. Takabatake Michitoshi, “Senkyo bunseki to nijikeikaku,” *Rikkyō hōgaku*, Vol. 12 (1972), pp. 139–166; Takabatake Michitoshi and Kyōgoku Junichi, “Daburu senkyo o tōshisuru,” *Mainichi Shinbun*, August 6–18, 1980; Kawato Sadashi, “Chihōseiji ni okeru senkyo no kachi,” *Nenpō Kindai Nihon Kenkyū*, Vol. 1 (October, 1979), pp. 344–427.

20. Downs, *op. cit.*; William Riker and Peter G. Ordeshook, *Positive Political Theory* (N.Y.: Prentice Hall, 1973); Kato Kan and Maruo Naomi, *Minshushugi no keizaigaku* (Senkyokushuppansha, 1976); Inoguchi Takashi, “Sūriseiji riron ni okeru kojini to shakai,” *Shisō*, No. 633 (March 1977), pp. 1–22.

21. Michael Leiserson, “Factions and Coalitions in One-Party Japan,” *American Political Science Review*, Vol. 62 (September 1968), pp. 770–787; Takashi Inoguchi, “Party Platforms and Manifestoes in a Gradually Eroding Predominant-Party System: The Case of Japan, 1960–80,” paper presented at the Meeting of the Research Group on Party Platforms and Manifestoes, European Consortium for Political Research, Florence, March 25–30, 1980; “Senkyo kōyaku ni miru kaku seitō no kiseki,” *Asahi Shinbun*, June 22, 1980 (a revised version of my Florence paper will be a chapter on Japan in Ian Budge and David Robertson, eds., *Party Strategy: A Fifteen-Country Study of Campaign Appeals*, London: Sage Publications Ltd., forthcoming in 1982); Iizuka Yoshiaki, Okazawa Norio and Fukuoka Masayuki, *Rengō seiji eno chōryū* (Tōyōkeizai shuppansha, 1979); Shinohara Hajime, *Rengōjidai no seiji riron* (Gendaino Rironsha, 1977).

22. Sung-il Choi, “Systems Outputs, Social Environments, and Political Cleavages in Japan: The Case of the 1969 General Election,” *American Journal of Political Science*, Vol. 17 (1973), pp. 99–122; Fukuchi Takao and Ko Tetsu, “Tōhyō kōdō no keiryōkeizaigakuteki bunseki: kōdo seichōki ni okeru Jimintō shijiritsu teika no bunseki,” mimeo (Tsukuba: Tsukuba University, n.d.); Nobutaka Ike, *A Theory of*

microeconomic consequences of government economic policy on voters has been stressed.²³

Sixth, the legal-institutional explanation is to look at the consequences of the laws, rules, and institutions of electoral practice on electoral outcomes. That Japan uses a multi-member district system without a party list is seen as one of the causes of a predominant-party system and its related phenomenon of fragmented opposition parties.²⁴

Having reviewed, albeit briefly, the stock of the study of Japanese electoral politics, it is clear that there is both the need and the opportunity to construct a theoretical model that integrates the major elements of these diverse and partial explanations.

Conceptual Foundations of the Model

I assume that no model can adequately analyze electoral outcomes without examining the following four factors: ideological

Japanese Democracy (Boulder, Colorado: Westview Press, 1979); Takashi Inoguchi, "Political Surfing over Economic Waves: A Simple Model of the Japanese Political-Economic System," paper presented at the 11th World Congress of the International Political Science Association, Moscow, August 11–18, 1979; "Economic Conditions and Mass Support in Japan, 1960–1976," in Paul Whiteley, ed., *Models of Political Economy* (London: Sage, 1980), pp. 121–151; Samuel Kernell, "Unemployment, Inflation, and Party Democracy: A Study of the Strategic Basis of Economic Policy in Advanced Industrial Democracies," paper delivered at the American Political Science Association's Annual Meeting, Washington, D.C., August 28–31, 1980; Kabashima Ikuo, a chapter on politics and economy, to be included in *Nempō Seijigaku*; Chong Lin Kim, "Socio-Economic Development and Political Democracy in Japanese Prefectures," *American Political Science Review*, Vol. 65, No. 1 (March 1971), pp. 134–154; Chae-jin Lee, "Socio-Economic Conditions and Party Politics in Japan: A Statistical Analysis," *Journal of Politics*, Vol. 33 (1971), pp. 158–179; Sato Seizaburo, a review session on the 1980 general election on the *Sankei Shinbun*, June 7–14, 1980; Kimio Uno, "Quality of Life and Voting Behavior in Japan, 1960 to 1979," paper presented at the Public Choice Scholar Group meeting, Keio University, Tokyo, April 19, 1980.

23. Takashi Inoguchi, "Political Business Cycles: Toward A Reconceptualization," paper presented at the Annual Meeting of the American Political Science Association, Washington, D.C., August 28–31, 1980.

24. Nisihira Sigeki, *Senkyo no kokusai hikaku* (Nihonhyōronsha, 1969); *Nihon no senkyo*; Norio Sakagami, *Nihon senkyo seidōron* (Seiji kōhō senta, 1977). In addition to those cited above, there are a number of important scholars and journalists who are equally active in this field of study. They are inclined to provide more general, less theoretically focused, but informative and/or timely commentary and analysis. They include: Hori Yukio, Horie Tan, Iizuka Shigetaro, Ishikawa Masumi, Iwami Takao, Miyakawa Takayoshi, Senda Hisashi, Shiratori Rei, Soma Masao, Tanaka Zenichiro, Uchida Kenzō, Uchida Mitsuru, and Yoshimura Tadashi.

congruence, electoral system, economic conditions, and electoral mobilization. My use of these concepts is briefly described and justified below.

My model has a simple and straightforward structure. It is additive in the independent variables (see below). The *dependent variable* is the electoral outcomes in terms of percentage of seats by party in the House of Representatives (SEATS). There are two ways to measure SEATS: one is to determine SEATS directly, the other to determine SEATS via VOTES. (The latter formula involves a two-step regression analysis, first determining VOTES by the independent variables and then determining SEATS by VOTES.) The electoral system makes it awfully complicated and a little cumbersome to determine SEATS via VOTES. Except for one case where one member is elected in the district, 3 to 5 persons are elected in the same district, without using a party list or vote transfer within the same party. This makes it vital for smaller parties to calculate whether or not to enter their party candidate(s) for election in a given district and for larger parties to calculate how many candidates should run in the same district. If determining SEATS via VOTES becomes too complicated and has a large margin of error, we might as well skip one step and determine the SEATS directly. We will present the results for both measures of SEATS.

(1) *Ideological congruence*: This variable assumes that voters are likely to vote for an ideologically similar party or candidate, and that it is very unlikely voters will vote consistently for ideologically dissimilar parties or candidates. The whole body of the Downsian party competition theory rests on the assumption that parties (candidates) flexibly change ideological and other stands to appeal to target voters in order to win support. The explanations focusing on social groups, social networks, beliefs and attitudes, and rational choice all have party (candidate)-voter congruence as their explanatory principle, whether it is of socio-economic (e.g., income and occupation), sociological (e.g., union membership), socio-psychological (e.g., party image), or rational utilitarian character.²⁵ We use the adjective *ideological* here to encompass all these kinds of congruence. Despite the fact that in Japanese politics, personality factors loom large because of a multi-member district system without a party list or a vote transfer within a party (compared to the first-pass-the-post system and the proportional representation sys-

25. Budge and Farlie, *op. cit.*; and Flanagan and Richardson, *op. cit.*

tem), similarity in policy positions has often been noted to be an implicit but basic factor in voting decisions.²⁶

It is likely that some of the ideological cleavages among parties occurred in the late 1940s and early 1950s, when the present party configuration was shaped to a large degree and fixed to a remarkable extent. However, it does not matter whether the ideological locations of parties on this dimension have been partially “fossilized” or not. What we are interested in is the overall patterns that connect certain types of voters to each party, whether this is done by policy position, “fossilized” ideological rhetoric, family background, occupational interests, or life style. In other words, the model relates causally the ideological locations of parties summarized along the left-right dimension to the percentage of votes cast for each party (or percentage of seats of each party) at each general election. We conceptualize that these relationships are assumed to set the basic patterns of voting behavior while the other independent variables will be more susceptible to change with the specific situations at each general election. In my model, party location along the left-right dimension is derived from factor analysis scores of 21 categories used for a comparative study of party electoral pledges. (Figure 1).²⁷

(2) *Electoral system*: Each electoral system has its own characteristic political consequences on electoral outcomes.²⁸ Many attempts have been made to conjecture expected consequences to electoral outcomes of different proposed electoral laws in Japan.²⁹ One of the most important political consequences of the electoral law is thought to be the formation of a predominant party and the fragmentation of opposition parties. The multi-member district system, given the strong rural support base of the LDP, rebounds to the benefit of the predominant party, giving it more seats than its proportion of votes.³⁰

The idea specifically taken up here is *buffer size*. My hypothesis is that the larger the buffer size between the present parliamentary strength of the ruling party and the simple majority, the more voters

26. Inoguchi Takashi, “Party Platforms and Manifestoes,” and “Senkyokōyaku ni okeru . . .”

27. *Ibid.*

28. Rae, *op. cit.*

29. Nishihira, *Nihon no senkyo*.

30. Sigeki Nishihira, “Historical Statistics,” Herbert Passin, ed., *A Season of Voting: The Japanese Elections of 1976 and 1977* (Washington, D.C.: American Enterprise Institute, 1979), pp. 81–112; Nobutaka Ike, *A Theory of Japanese Democracy* (Boulder, Colorado: Westview Press, 1979).

signal to the governing party. This hypothesis is a logical addition to Sartori's discussion of voting behavior in a predominant party system, which fits the Japanese case.³¹

Despite the fact that the electoral system also induces emphasis on candidate personality appeal, the model does not incorporate this factor. To do so would overly complicate this model, and this would also be a difficult variable to operationalize.³²

(3) *Economic conditions*: The idea is that voters are likely to vote for the government when they feel their economic circumstances are favorable. In the literature on politics and business cycles, the evaluation function is interrelated with the policy function. The evaluation function is concerned with what factors, including economic conditions, contribute to public support for the government. The policy function is concerned with what factors, including government political and electoral considerations, contribute to government macro-economic policy-making. Here we are interested only in the former. Although we retain a certain degree of scepticism about some of the assertions and arguments made in the literature on political business cycles, especially in some of its salient premises, i.e., Downsian politics and Keynesian economics,³³ there is no denying that macroeconomic performance affects the mass public's voting decision. Compared to the U.S., the U.K., and the Federal Republic of Germany, political support for government in Japan seems less variable with macroeconomic factors because of a lack of change in the governing party for a long period, the overall good economic performance during the period covered, and the importance of clientilistic microeconomic policy in electoral politics.³⁴ Nevertheless, macroeconomics does matter. It is also important in different degrees to each party, as we shall see. For macroeconomic performance indicators, we use statistics on employment, price inflation, and disposable income.³⁵

31. Sartori, *op cit.*, pp. 192–197.

32. Sigeki Nishihira, "Opinion Polling in Japan," mimeo (Tokyo: Institute of Statistical Mathematics, 1980), Table 3. Building such an extended model would be of primary interest to election practitioners, and some attempts have been made by the mass media for predictive purposes.

33. Inoguchi, "Political Business Cycles."

34. Inoguchi, "Political Surfing over Economic Waves"; "Economic Conditions and Mass Support: Japan, 1960–1976"; "Political Business Cycles"; and the trio by Frey and Schneider in footnote 9.

35. Economic Planning Agency, *Keizaihendō kansoku shiryō nenpō* (Okurasho, 1979). Perusal of them in relation to electoral outcomes in terms of scatterplots as

(4) *Electoral mobilization*: Party activity is important in democratic elections. One convenient indicator of party activity is party revenue; parties use money to maintain their daily activities as well as to mobilize voters during election campaigns.³⁶ Japanese politics operate in an environment of patron-client relations that is reinforced by the electoral system. Candidate-voter relationships have a straightforward, down-to-earth give-and-take character: candidates take care of their constituents largely through divisible material benefits such as bringing in factories, agricultural subsidies and railroad construction contracts, sending telegrams to wedding ceremonies of local notables, and helping their children get jobs. In return, voters cast their ballots for these candidates.³⁷ Electoral campaigns are a multi-faceted activity in which more than just professional campaigners, loyalist core members of parties, supporting interest groups and personal support organizations are involved; many ordinary people also become exposed to, and involved in, campaigns.³⁸ Exposure and involvement often arouse otherwise dormant party support. This aspect is especially important when the parties become stalemated in their competition for new sources of support, which seems to have occurred after the first oil crisis of 1973–74.³⁹ The crucial task then becomes not so much capturing new kinds of supporters as activating weak party identifiers and followers into voting.⁴⁰

Though not claiming that this list of factors exhausts all the major determinants of electoral outcomes, I argue that it represents a set of basic variables that is theoretically sound and capable of being operationalized.

Operationalizing the Variables

Table 2 presents a summary list of the variables, the data used to operationalize them, and the data sources. In the following section,

well as correlation coefficients indicate that their relations differ significantly from party to party. These variables are all measured by the percentage changes from the same month of the previous year. In the equations, each one of the three variables is included in view of the degree of freedom.

36. Jacobson, *op. cit.*

37. Nobutaka Ike, *op. cit.*, and Gerald Curtis, *Election Campaigning Japanese Style* (N.Y.: Columbia University Press, 1970).

38. Curtis, *op. cit.*

39. Takabatake Michitoshi, *Gendai Nihon no seitō to senkyō* (San'ichi shobō, 1980), pp. 311–359.

40. Murakami, "Shin chūkan taishū seiji no jidai."

Table 2: Data

<u>Dependent Variables</u>	<u>Data</u>	<u>Source</u> *
SEATS electoral outcomes by party in general elections	number or share of seats in the House of Representatives	MHA (1980) <u>Asahi Shinbun</u>
<u>Independent Variables</u>		
IDEO ideological congruence	parties' locations along left- right dimension derived from Varimax-rotated factor scores for parties' electoral pledges	Inoguchi (1980a, 1980b)
BUFFER buffer size	predominant party's lead from the House of Representatives majority	<u>Asahi Shinbun</u>
EMPLOY employment	regular workers' employment (all but service industries; 1975= 100); its ratio to the corres- ponding month of the previous year	EPA (1979) ML
INCOME disposable income	worker's household's disposable income index (1975=100); its ratio to the corresponding month of the previous year	EPA (1979) PMO
PRICE consumer price	consumer price index (all com- modities; 1975=100); its ratio to the corresponding month of the previous year	EPA (1979) PMO
MOBIL electoral mobilization	party revenue; 1980 figures extrapolated, assuming 1978-79 growth rate for 1979-80 period	MHA (1980)

* Takashi Inoguchi, "Party Platforms and Manifestoes in a Gradually Eroding Predominant-Party System: The Case of Japan, 1960-80," paper presented at the meeting of the research group on party platforms and manifestoes, European Consortium for Political Research, Florence, March 25-30, 1980; and "Senkyo koyaku ni miru kaku seito no kiseki," Asahi Shinbun, June 22, 1980.

Economic Planning Agency, Keizai hendo kansoku shiryo nempo (Annual Report on Business Cyclical Indication), Tokyo: Printing Office, Ministry of Finance, 1979.

Ministry of Home Affairs, Chiho jichi binran (Handbook on Local Self-Government), Tokyo: Chihozaimu kyokai, 1980.

Ministry of Labor; Prime Minister's Office; and Asahi Shinbun.

the specialist will find a more detailed description of the indicators and the data. Non-specialists may wish to proceed directly to our results in the next section.

The independent variables are ideological congruence (IDEO), buffer size (BUFFER), economic conditions (EMPLOY, PRICE, INCOME), and

electoral mobilization (MOBIL). IDEO is defined as parties' locations along the left-right dimension derived from Varimax-rotated factor analysis scores for parties' election pledges.⁴¹ Using 21 categories on policy positions, stated in response to the *Asahi Shinbun's* questionnaire sent to each party's headquarters about half a month before each general election, I have been able to come up with the left-right dimension, which is robust enough to pass the "validity test" of policy committeemen of each party headquarters.⁴² The pre-rotated results, i.e., principal components solution to factor

41. Inoguchi, "Party Platforms and Manifestoes" and "Senkyokōyaku ni miru kakuseitō no kiseki."

42. The 21 categories factor-analyzed are as follows:

- (1) special relationship with the U.S. (positive)
- (2) special relationship with the U.S. (negative)
- (3) military (positive)
- (4) military (negative)
- (5) internationalism (positive)
- (6) nationalism
- (7) enterprise
- (8) incentive
- (9) regulation of capitalism
- (10) productivity
- (11) technology and infrastructure
- (12) controlled economy
- (13) environmental protection
- (14) social justice
- (15) social service
- (16) freedom and domestic human rights
- (17) law and order
- (18) decentralization
- (19) government efficiency
- (20) government corruption
- (21) government effectiveness and authority

The criteria for selecting the 21 categories out of 64 categories coded are: (i) that they cover as a whole the important policy areas of foreign relations, economic management, political order, and social policy; (ii) that they reveal some important cleavages between the government and the oppositions; and (iii) that they cover as a whole both permanent and changing policy tasks (e.g., law and order for the former and environmental protection for the latter).

Interviews were conducted during February and April 1980. Those who kindly agreed to an interview and have given me their reactions to the results of our analysis on party electoral pledges for 1960–79 general elections (Inoguchi, "Party Platforms and Manifestoes"), especially with respect to the two-dimensional locations of their own parties, were:

Chimura Shinji, Secretary General, LDP Policy Affairs Research Council Secretariat

analysis, of the 1960–72, 1960–76, 1960–79, and 1960–80 periods show that the first left-right dimension explains 22 to 26% of the variance. It means that the scores of parties at each general election along the left-right dimension tap only tiny portions of party cleavages on policy positions. However, lacking feasible alternatives for measuring parties' ideological locations, I use these factor analysis scores. The data range roughly from -2 to $+2$.

BUFFER is defined as the predominant party's lead from the House of Representatives majority on the eve of each general election day. The number of seats normally changes between the election day and the eve of the next election day due to death of some Diet members and to the post-election switch from "independents," who were not able to get the official endorsement from a party at the time of election, to such a party, mostly to the LDP. The data range from -7 to $+52$. Until 1972 the LDP enjoyed a large buffer size, ranging from 29 to 54. However, since 1976 its size has dwindled from 19 in 1976 to -7 in 1979 and 2 in 1980. After the 1980 general election it went up to 28.

EMPLOY is defined as the ratio of regular workers' employment index in all but service industries to the corresponding month of the previous year (1975 = 100), as compiled in the Economic Planning Agency's *Annual Report on Business Cyclical Indicators* (1979) and supplemented by more recent data obtained from the Ministry of Labor. The data range roughly from -2 to $+12$. In the early 1960s it was very high, 12.39 in 1960 and 5.78 in 1963, but in the late 1960s it went down to the level of 2. In the 1970s it hovered between 0 and 0.2 except in 1976, when it dropped to -1.72 .

Unno Akenobu, Secretary General, JSP Policy Affairs Research Council Secretariat

Adachi Hidenori, Secretary General, DSP Policy Affairs Research Council Secretariat

Mitsutani Mitsuo, Secretary General, CGP Policy Affairs Research Council Secretariat

Yoshioka Yoshinori, Chairman, JCP Security and Foreign Policy Committee

Ono Takao, Vice-Chairman, JCP Economic Policy Committee

the late Takeuchi Kei, Member, NLC Policy Committee

Ikeyama Shigeaki, Secretary General, USDP Citizens' Committee Secretariat

In my Florence paper, I mapped the parties on two dimensions for each general election, the left-right dimension and the mid-industrial versus post-industrial dimension, using the 1960–79 general election pledges. These dimensions are derived from factor analysis of 12 categories. Since then I have added 9 more categories and one more set of general election data (1980). These results have been summarized in my *Asahi Shinbun* report. For the present paper, I have used factor scores of parties at each general election only on the first dimension. Prediction for the 1980 general election outcomes was attempted in my *Asahi Shinbun* report, without much success, by relating the 1960–79 electoral outcomes to the policy positions of each party at each general election on the first and second dimensions. The present paper has been built in part on this past failure.

INCOME is defined as the ratio of a worker's household disposable income index to the corresponding month of the previous year, as reported in the Economic Planning Agency's *Annual Report* (1979) and supplemented by more recent data obtained from the Statistics Bureau of the Prime Minister's Office. The data range roughly from -3 to $+15$. In the 1960s it registered 7 to 9 except in 1963, when it was -2.64 . In the late 1960s and early 1970s it recorded 10 to 15, and in the 1970s it went down to the level of 5 and 6.

PRICE is defined as the ratio of consumer price index (all commodities) to the corresponding month of the previous year, as reported in the Economic Planning Agency's *Annual Report* (1979) and supplemented by more recent data obtained from the Statistics Bureau of the Prime Minister's Office. The data range roughly from 3 to 10. It was fairly stable, registering between 3 and 8, except in 1976 when it was 10.40.

MOBIL is defined as the share of each party's revenue in percentages for the seven parties' total revenues, as reported in the Ministry of Home Affairs' *Handbook on Local Self-Government* (1980). The 1980 figures are extrapolated with the 1978–79 revenue growth rate by party assumed for the 1979–80 period. This estimation method is justified for the following reasons: 1979 was the year of a general election and the LDP presidential election whereas 1980 was also the year of a general election (and a House of Councillors' election); 1980 also was believed to be a competitive LDP presidential election year (until Prime Minister Ohira's death led to the uncontested selection of his successor). Party activities thus have been invigorated, especially since 1979. All this means that party activity had been geared for elections, although the 1980 general election was an unexpected event for almost everyone because of the surprising success of a no-confidence resolution against the Cabinet, and thus electoral activity was brief but intense. There also can be scepticism about the reliability of the party revenue statistics. According to one estimate, about 160 to 250 billion yen are spent in a general election year for political activities whereas 40 to 50 billion yen is the total of the reported figures of the 10 major and minor parties.⁴³

Our position is that (1) even if the figures are somewhat unreliable, which seems to be the case, they best represent the "true" unknown figures among available time-series statistics; (2) the reported and "true" unknown figures of a party are likely to have a certain, fairly fixed, and yet not precisely known relationship; and (3) our data are represented not in absolute terms but in terms of a party's share of the total reported political money market. The data range from 21% to 75% for the LDP, from 3% to 11% for the JSP, from 1% to 7% for the DSP, from 8% to 44% for the JCP and from 13% to 21% for the CGP. The LDP's share consistently decreased, from 75% in 1960 to 21% in 1976; it has started to recoup its loss since 1979,

43. Fujita Hiroaki, *Nihon no seiji to kane* (Keiso Shobō, 1980), pp. 31–32.

registering 36% in 1980. The JSP's share declined from 8.7% in 1960 to 3.8% in 1972; since 1976 it has gone up to the level of 10%, although absolute figures have been stagnating. The DSP's share declined from the level of 7% in 1960 to 1.5% in 1967; by 1969 it went up to 4% and has been staying around that level since. The JCP's share was on a steady rise from 1960 (8%) until 1976 (44%); its absolute amount has remained more or less on the same level, dwindling to 34% in 1980. The CGP's share reached its peak in 1969 when it recorded 21%, afterwards declining steadily, with a 16% share in 1980.

Our estimation is made by ordinary least squares procedure. Given the extremely small size of our sample and thus the small degree of freedom, utmost caution is necessary in interpreting the results and drawing conclusions. However, a limited sample is often a fact that political scientists live with, and we present our results below, leaving further improvements for a later date.

Results Using the SEATS via VOTES Formula

Data was analyzed using regression analysis with ordinary least squares procedure. The statistical results are presented in Table 3. Below is a description of the results.⁴⁴

(1) IDEO: Negative values for the LDP and the JCP show that they lose votes by moving further right. The LDP only antagonizes mildly conservative voters by emphasizing such controversial issues as law and order and military alliance. The JCP, on the contrary, weakens the morale of the loyalists by moderating its postures. The CGP and the DSP gain votes by moving rightward. The JSP gives a mixed picture.

(2) BUFFER: Our hypothesis tends to be confirmed for the JSP and the DSP but not for the other parties. The two socialist parties

44. R^2 s appear large enough, although the adjusted R^2 s for the JSP, the JCP and two of the DSP equations are significantly lower than unadjusted R^2 s. Durbin-Watson statistics also seem acceptable except for two of the DSP equations, which are somewhat higher, suggesting the presence of elements in error terms that can be modeled statistically. A close look at the scatterplots of residuals and the dependent variable does not suggest a problem serious enough to warrant modeling error terms.

Parameter estimates show interesting signs and magnitude. Rather than dismissing the results entirely because of the statistically less than significant magnitude of t -statistics for many of the coefficient estimates, we attempted to probe the results with an eye to the salient variables for each party. We also kept in mind, when looking at the estimates, that the period covers the entire 20 years, which experienced rapid and large scale economic, demographic, social and political transformation. The estimates thus represent results that might have been averaged out by qualitatively distinct subperiods.

Table 3: Parameter Estimation (VOTES)*: Indirect Formula

	constant	IDEO	BUFFER	EMPLOY	INCOME	PRICE	MOBIL	R ² (R ²)	D.W.
LDP	39.50	-0.17 (2.08)	-0.04 (0.05)	0.43 (0.30)			0.20 (0.07)	0.97 (0.93)	1.98
	38.79	-2.18 (2.11)	-0.01 (0.07)		-0.01 (0.17)		0.27 (0.08)	0.95 (0.89)	1.45
	38.79	-2.18 (2.16)	-0.01 (0.07)			-0.02 (0.34)	0.27 (0.07)	0.95 (0.89)	1.42
JSP	24.51	0.97 (4.41)	0.04 (0.11)	0.52 (0.41)			-0.43 (0.83)	0.71 (0.31)	1.86
	22.12	-2.19 (3.82)	0.12 (0.07)		-0.36 (0.24)		-0.01 (0.66)	0.74 (0.40)	2.46
	18.74	-1.64 (4.78)	0.14 (0.09)			-0.39 (0.65)	0.30 (0.84)	0.59 (0.05)	1.41
DSP	6.28	0.27 (0.58)	0.01 (0.01)	0.13 (0.06)			0.06 (0.15)	0.90 (0.77)	1.83
	4.63	1.12 (0.62)	0.03 (0.01)		-0.00 (0.04)		0.31 (0.14)	0.77 (0.46)	2.69
	5.66	0.84 (0.66)	0.02 (0.01)			-0.08 (0.10)	0.25 (0.15)	0.81 (0.55)	2.88
JCP	3.91	-1.75 (2.69)	-0.03 (0.07)	-0.25 (0.47)			0.10 (0.23)	0.82 (0.58)	1.73
	-0.17	-2.16 (2.72)	-0.02 (0.08)		-0.02 (0.18)		0.21 (0.15)	0.80 (0.54)	1.95
	0.19	-4.46 (5.71)	-0.08 (0.15)			0.41 (0.89)	0.05 (0.35)	0.82 (0.57)	1.83
CGP	-1.78	0.60 (0.07)	-0.03 (0.00)	-0.05 (0.01)			0.67 (0.00)	1.00 (1.00)	3.01
	-1.89	0.82 (0.35)	-0.02 (0.01)		-0.02 (0.04)		0.69 (0.04)	1.00 (1.00)	2.05
	-1.72	1.01 (0.40)	-0.02 (0.01)			-0.00 (0.03)	0.67 (0.02)	1.00 (1.00)	1.74

* Parenthesized figures are standard errors.

gain as buffer size increases. They may be a favorite temporary shelter for voters who switch from the LDP when it has a comfortable majority because they are neither too left-winged nor right-winged. On the other hand, the JCP and the CGP suffer from the big BUFFER size. The tactical punishment phenomenon that we have hypothesized seems to take place under certain conditions that we have failed to specify with sufficient articulation in the present model. For instance, a group of otherwise dormant LDP supporters

seemed to have been very alarmed by the extremely thin lead the LDP had in the House of Representatives on the eve of the 1980 election, but not so much by a similar situation before the 1979 election.

(3) EMPLOY: Good employment situations favor the LDP, the JSP, and the DSP whereas they work against the CGP and the JCP. In other words, the CGP and the JCP collect votes when the economy is in trouble. It seems that the negative sign for the parameter in the latter equations represents "protest" votes. The JSP's and the DSP's positive sign along with the LDP's seems to show that many supporters of these parties are in fact what might be called "within-system" utilitarian.

(4) INCOME: All parties show negative signs and all, except that of the JSP, are close to zero. In other words, disposable income changes seem to have little effect on voting.

(5) PRICE: The JCP collects more votes when PRICE is higher. This seems to indicate that the JCP collect "protest" votes under inflationary circumstances. Quite the opposite is true for the JSP. The rest shows insignificant magnitude.

The results seem to indicate that, since the economy basically has been doing well—compared to those of many other industrialized countries in the world—it may not be surprising that variations in macroeconomic variables over the last twenty years have not had dramatic effect. Among the three variables, EMPLOY seems to influence VOTES most, however. The CGP support is also very important and positively affected by bad employment situations, and JCP support is sensitive to inflationary situations.

(6) MOBIL: High party revenue that activates electoral mobilization seems to work very favorably in the electoral outcomes in the LDP and the CGP equations. Indeed, the LDP's electoral outcomes are crucially affected by it. MOBIL seems to contribute to the activation of otherwise dormant conservative voters or weak party identifiers. The DSP and the JCP show a more moderate relationship between MOBIL and VOTES. The JSP gives a mixed picture. The weak influence of MOBIL in the JSP and, to a lesser degree, in the DSP and the JCP equations seems to indicate the importance of their calculations of how many candidate(s) to put in which districts. In a multi-member district system, the decision about whether a candidate be put in a district—and if so, how many—seems to be more important in terms of efficiently mobilizing party resources for smaller parties than larger ones, at least in the short run. Since the JCP has a unique policy of utilizing elections for propaganda and public relations, it may be excepted from the above generalization.

Since our primary interest is in the differentiated importance of the variables to each party, let us look at the results by party.

(1) LDP: Crucial to the LDP is the MOBIL variable. Compared to this variable, all the other variables seem weak. However, the LDP mildly suffers from a rightward shift (IDEO) and gains from good employment situations (EMPLOY).

(2) JSP: Of the four kinds of variables, macroeconomic conditions are most important in JSP's electoral outcomes. The following macroeconomic conditions work against the JSP: a bad employment situation, price inflation, and rapid growth. The JSP gains when the party configuration is closer to the one-and-a-half party system of an overwhelming LDP majority—this situation results in the smaller opposition parties being unable to nibble away votes from the JSP's electoral bases (BUFFER).

(3) DSP: Smaller parties are generally much affected by BUFFER, and the DSP is no exception. The next most important variable is electoral mobilization; third is IDEO. Rightward movement enables the DSP to catch more votes.

(4) JCP: The IDEO variable is important in determining the JCP's votes. The JCP loses a number of its supporters by moving toward the middle. The JCP suffers also from larger BUFFER size. The macroeconomic variables give an interesting picture. The JCP is a protest party, gaining from a bad employment situation, poor living standards in terms of income and inflationary situations.

(5) CGP: Like the JCP, the CGP is influenced negatively by the BUFFER variable. Also important is the IDEO variable, indicating that by moving to the right, it tends to gain more votes. However, most outstanding is the EMPLOY variable, indicating that poor employment situations are a hotbed for CGP's electoral gains. This makes sense, given that one of the most important support bases of the CGP is the urban, less-educated, under-paid and often young employees of private service and manufacturing sectors.

Results Using the Direct Formula

The same analysis was conducted using the direct "VOTES" formula to see if they differed significantly from the indirect "SEATS via VOTES" formula. The results showed that the direct formula did not differ greatly in results from the indirect formula (Table 4).

Comparing these two formulas, however, the SEATS via VOTES formula seems to reveal more about the differentiated

Table 4: Parameter Estimation (SEATS)*: Direct Formula

	constant	IDEO	BUFFER	EMPLOY	INCOME	PRICE	MOBIL	R ² (\bar{R}^2)	D.W.
LDP	50.39	-5.40 (4.21)	0.12 (0.10)	-0.09 (0.60)			0.18 (0.14)	0.88 (0.73)	1.88
	45.42	-4.10 (2.71)	0.05 (0.09)		0.26 (0.21)		0.25 (0.10)	0.92 (0.82)	1.96
	52.24	-5.20 (3.35)	0.13 (0.11)			-0.14 (0.52)	0.15 (0.11)	0.88 (0.73)	1.78
JSP	25.92	5.33 (5.31)	0.05 (0.14)	0.55 (0.49)			-0.20 (1.00)	0.70 (0.30)	1.89
	23.56	1.98 (4.59)	0.14 (0.09)		-0.39 (0.29)		0.17 (0.79)	0.74 (0.39)	2.48
	19.88	2.59 (5.55)	0.17 (0.11)			-0.41 (0.75)	0.57 (0.97)	0.62 (0.10)	1.52
DSP	8.58	-0.25 (0.84)	-0.05 (0.02)	0.07 (0.09)			-0.45 (0.22)	0.91 (0.80)	1.86
	7.39	0.27 (0.57)	-0.04 (0.01)		0.03 (0.04)		-0.32 (0.13)	0.91 (0.80)	2.77
	7.96	0.04 (0.74)	-0.04 (0.01)			-0.02 (0.12)	-0.33 (0.17)	0.90 (0.76)	2.47
JCP	8.20	-4.16 (3.38)	-0.12 (0.09)	-0.43 (0.59)			-0.20 (0.29)	0.66 (0.20)	1.80
	1.19	-4.83 (3.56)	-0.10 (0.10)		-0.02 (0.23)		-0.02 (0.19)	0.60 (0.06)	2.07
	1.62	-8.10 (7.40)	-0.19 (0.20)			0.58 (1.16)	-0.24 (0.46)	0.63 (0.13)	1.90
CGP	-4.62	-14.23 (4.09)	-0.39 (0.09)	-1.11 (0.39)			0.99 (0.16)	0.98 (0.91)	3.01
	-6.35	-7.71 (9.82)	-0.21 (0.17)		-0.43 (1.02)		1.20 (1.00)	0.86 (0.30)	2.05
	-3.79	-5.47 (10.16)	-0.20 (0.23)			0.09 (0.74)	0.81 (0.46)	0.84 (0.19)	1.74

* Parenthesized figures are standard errors.

weights each party puts on those factors that can be used as instruments of winning support from voters. Very simply put, MOBIL is most important to the LDP. Macroeconomic variables are important to the JSP, which does not seem to have any particularly effective instrument for eliciting voter support. For the DSP and the CGP, IDEO is very important, since their small size enables them to be agile in shifting their policy positions according to the prevailing mood of their target voters. The CGP also utilizes effectively the

MOBIL variable. IDEO and MOBIL are two mildly important variables for the JCP. In order to test the validity and effectiveness of the model, I compared my results via both formulas to actual election results. The Appendix describes the results of this operation. In general, both formulas of my model perform quite well and better than the predictive model previously used.

Concluding Remarks

Having located my model construction effort in a general theoretical context, I have built a model simple enough for explaining and predicting electoral outcomes in terms of ideological congruence, buffer size, economic conditions and electoral mobilization. The results have proved to be generally satisfactory in terms of explanatory and predictive performance; 47 to 68% of the cases show a discrepancy of 5 or less between the actual and the fitted figures, and 73 to 82% of the cases are very close, with discrepancy not surpassing 10 seats. It should be noted that this performance is all the more commendable because all previous attempts to explain or predict electoral outcomes have been based on very costly survey data conducted shortly before the elections and on somewhat esoteric and only locally obtainable insights of experts, and because this model does not use lagged endogenous variables.

The model performs well also in terms of pointing out the most strategic factor for each party's electoral policy or non-policy. For the LDP the electoral mobilization of nearly dormant conservatives seems to be crucial. For the JSP macroeconomic conditions are important. For the smaller opposition parties, the effect of the larger parties' growth in the Diet is substantial. The CGP and the JCP rely significantly on "protest" votes in response to bad employment situations and inflation. The CGP and the DSP utilize IDEO effectively, shifting their policy positions nimbly to the emergently dominant preferences of their target voters. The CGP also utilizes the MOBIL variable effectively. For the JCP, IDEO and MOBIL are only mildly important factors.

Seen from a slightly different angle, my model suggests the dilemmas of each party's strategy. The LDP's heavy reliance on electoral mobilization would only exacerbate its reputation as being a "money party" beset by corrupt practices. With the LDP's self-confidence often verging on arrogance because of its last general election victory, the single-minded recourse to its most powerful strategy might become one of the main causes of a future major electoral setback. The JSP has no strong instruments for electoral

strategy at its disposal besides waiting, often in vain, for the optimal mix of macroeconomic conditions—a good employment situation, no rapid income rise, and no price hike—to prevail. The economic conditions in the recent past and the near future do not seem to favor the JSP very much. A fully employed and non-inflationary zero-growth economy is unlikely to be realized in the foreseeable future. However, stable growth of the economy with a low unemployment rate and a manageable inflation rate would enable the JSP to keep its present electoral strength from shrinking too rapidly.

The DSP's and the CGP's ideological agility has the partially adverse effect of alienating some "laggards" among each party's supporters as well as jeopardizing each party's credibility with the public. The CGP's recent electoral setback and the DSP's stalemate in the last general election seem to be related to this tendency. The one-time pet idea of a coalition government (the CGP, the DSP, and the JSP) disappeared with the LDP's resounding victory and the JSP's distancing from the CGP. The CGP and the DSP now find it necessary to work more closely together and also to approach the LDP with the aim of sharing power with part of the LDP, which they hope will split. The image of the JCP and the CGP as protest parties is bound to limit each party's support base, while relaxing this image tends to erode the strong appeal to the discontented voters. The CGP's shift to the middle of the road and, more recently, farther toward the conservative side, on a few important issues somewhat weakens its stance as a party protesting for social justice and fairness. The recent trouble in the Sokagakkai seems to have exacerbated this process. The JCP's electoral ups and downs in the last decade or so seem to reflect its shifting emphasis on membership expansion and ideological purity.

In summing up all these observations, the most likely (albeit very tentative) scenario for the future of the party system would be that the LDP will retain a lion's share of the votes, although its extravagant practice of "money politics" or excessive preaching and implementation of "unpleasant" issues and policies (e.g., taxation) will likely prove damaging, and the opposition parties will remain small and feeble in the policy-influencing process. The JCP will retain its version of glorious isolation while the DSP, the CGP, and the NLC will become closer to the LDP in ideological stance. The JSP will remain muddled with internal strife, slowly shrinking to a size comparable to the CGP and the DSP combined.

More methodologically, the less than significant estimates of many of the regression coefficients counsel us to be cautious about

making overreaching arguments or claims. However, the fact that the signs and magnitude of these estimates for each party make sense and are extremely revealing in regard to the kind of resources and instruments at each party's disposal encourages us to pursue this line of research.

With a few minor modifications, this model can be used for practical predictive purposes.⁴⁵ First, since parties' election pledges become available about half a month before election day, IDEO can be derived from content and factor analysis of these pledges which takes less than a week. Second, BUFFER on election eve is normally similar to that of a month before election day unless some Dietmen pass away. Third, economic statistics have some availability problems. Since we use the indicators' ratio to the corresponding month of the previous year, we may have to use indicators not of the election month but of a month or two before the election, but this would not cause too serious a distortion to model performance. Fourth, since MOBIL statistics from the Ministry of Home Affairs are not available until the following July or September, it is necessary to give estimated figures. This operation is bound to involve some distortions, and no perfect solution is suggested.

A few more fundamental points should be discussed. First, use of the IDEO variable scores derived from factor analysis of party election pledges might be disputed, especially in the light of the oft-made observation that the left-right dimension has been diminishing in importance. According to one study, the simplistic conservative-progressive dimension, along with its related elements of life style, value orientation, and socio-economic status, has ceased to be the most important dimension of party support. Instead, non-party identifiers and middle-of-the-road voters roughly converge with the "conservatives" in their locations on the first dimension, with the "progressives" standing on the opposite side.⁴⁶ Although we acknowledge that the party support patterns have

45. Quite recently I made, with much success, the prediction of fishing quota negotiations between Japan and the Soviet Union, using both state space and structural equations models. See Takashi Inoguchi and Nobuharu Miyatake, "The Politics of Decrementalism: The Case of Soviet-Japanese Salmon Catch Negotiations, 1957-1977," *Behavioral Science*, Vol. 23, No. 6 (November 1978), pp. 457-469, and "Negotiations as Quasi-Budgeting: The Salmon Catch Negotiations Between Two World Fishery Powers," *International Organization*, Vol. 33, No. 2 (Spring 1979), pp. 229-256.

46. Akuto, "Seitō shiji no kōzō bunseki."

become more complicated than before and that the importance of left-right cleavages has somewhat dwindled and moderated, the fact still remains that this dimension is important in explaining 22 to 26% of the variance (at the pre-rotated stages) when conducting factor analysis on party election pledges for the periods of 1960–72, 1960–76, 1960–79, and 1960–80 (the percentage diminishes in this order).

Second, the BUFFER variable does not show up in a clear-cut manner in terms of *t*-statistics in most of the equations. Alternatives might have to be found to conceptualize an important facet of party configuration under a predominant-party system. One of the ways to handle this problem is to combine some of the parties into the same category, looking both at ideological proximity and correlational seat-winning patterns. (The latter phenomenon is found, for instance, in the nearly constant sum pattern of the JSP and the JCP during the 1960s.) Examples might be the LDP and the NLC, the JSP and the JCP, and the rest (the CGP plus the DSP plus the USDP); or the LDP plus the DSP plus the NLC, the JSP with the CGP and the USDP, and the JCP.

Third, the moderately important macroeconomic variables could be replaced with some other variables. It is often pointed out that environmental improvement, especially in large cities, which has been occurring recently after a 5 to 10 year lag due to the large amount of social capital that has been invested continuously since the late 1960s, has contributed enormously to the recent unequivocal recoup of the conservatives.⁴⁷ The bulk of “floating” voters, especially in large cities where this improvement is most conspicuous, have switched their support from the JSP and the JCP to the LDP and the NLC, largely because of this factor and a general improvement and equalization in the quality of life. We may have to use different variables to represent the major concerns of the high growth period and the stable growth period.⁴⁸

Fourth, the MOBIL variable has shown its effectiveness, especially for the LDP and the CGP. The problem is its reliability. There is no doubt that a far larger amount of money is spent for political activities than is indicated by the revenue and expenditure statistics of each party as reported to the Ministry of Home Affairs. Since party revenue and expenditure statistics have not been well studied,

47. Sato Seizaburo in a review session on the 1980 general election in *Sankei Shinbun*; Murakami, *op. cit.*; Fukuchi and Ko, *op. cit.*

48. Nihon hōsō kyōkai hōsō yoron chōsasho, ed., *Dai-2 Nihonjin no ishiki*; and Murakami, *op. cit.*

let alone compiled, it is our judgment that our choice for the MOBIL variable is justified, at least until a better indicator can be constructed.

Fifth, our sample is so small that we might consider including the House of Councillors elections as well. Sixth, in order to strengthen and supplement our findings, we may consider constructing a similar model focusing on one district or a dozen or so districts. The availability of macroeconomic statistics by district is an obstacle to this scheme. Administrative districts, which coincide generally with statistical units for economic and other indicators, are different from electoral districts. Furthermore, the fact that most Japanese cities have had virtually no city planning and that industrial, commercial, residential and other kinds of districts coexist in mosaic fashion makes the task of characterizing the electoral districts with one or a few indicators more difficult. One possibility is to use the Ministry of Home Affairs' demographic-industrial typology of cities to characterize electoral districts.⁴⁹

Seventh, we have not been able to include the competition factor in our model, although our BUFFER variable can be considered as a kind of competition factor between the governing and opposition parties. This factor is notably lacking in the survey-based predictive model also, which is often thought to be one of the major causes of the unusually large predictive errors for the LDP's share in the 1979 and 1980 general elections. We might as well construct a model, for instance, in which the JCP's and the JSP's equations include each other's seats on the eve of election, in light of the nearly constant sum relationship between them, especially during the 1960s.

Eighth, the argument can be justifiably made that "predicted" rather than "fitted" values should be computed prior to each general election to see the real performance of the model. Our preliminary attempt to predict the 1979 and 1980 electoral outcomes using the coefficient estimates obtained on the basis of the data prior to each general election show the following (Table 5): (1) The best predicted values for the LDP's, the JSP's and the DSP's 1979 outcomes are 248, 107 and 35 when the actual outcomes are 253, 107 and 35, and the best predicted values for the LDP's, the JSP's and the DSP's 1980 outcomes are 272, 106 and 33 when the actual values are 284, 107 and 32; (2) The six predicted values for each party's electoral

49. Jichi daijin kanbō bunsho kōhō ka, ed., *Chihō jichi binran (1980)* (Chihō zaimu kyōkai, 1980), pp. 6–17.

TABLE 5
 "REAL" PREDICTION OF THE 1979 AND THE 1980 ELECTORAL OUTCOMES*

	Actual	Predicted						Predicted Newspapers**							
		EMPLOY		INCOME		PRICE		Mainichi	Asahi	Yomiuri					
		Indirect	Direct	Indirect	Direct	Indirect	Direct								
1979															
LDP	253	263	241	259	216	261	248	269	270	274					
JSP	107	113	107	131	131	113	103	112	102	116					
DSP	35	28	35	30	34	28	39	31	31	30					
1980															
LDP	284	271	262	272	262	268	253	266	272	—***					
JSP	107	112	119	106	120	94	109	107	105	—					
DSP	32	29	33	28	33	29	33	36	36	—					

* The prediction of the 1979 election is based on the 1960-1976 data whereas that of the 1980 election 1960-1979 data. However, IDEO values for the 1979 election are based on the factor analysis of the 1960-1979 data set and those for the 1980 election on that of the 1960-1980 data set.

** Sigeki Nishihira, "Opinion Polling in Japan," mimeo., Tokyo: Institute of Statistical Mathematics, 1980, table 3. See also Table 8 in Appendix for comparison for the whole period.

*** The Yomiuri Shimbun did not make a pre-election prediction in 1980.

outcome (we have the two formulas and the three macroeconomic variables) differ so significantly that we cannot yet use them for practical purposes; (3) The CGP's values cannot be computed because of the problem of degree of freedom, and the JCP's values produce unrealistically extreme values, due largely to the nature of regression; (4) The worse predictive fits of the 1979 and 1980 outcomes, compared to those for the 1960–1980 data, seem to lend support to the argument that a kind of structural change occurred in the advantage of the conservatives in Japanese electoral politics in the late 1970s.

It is our belief that most of these problems are manageable and that they can be solved at the practical level. The strength of our model is that it is so general and simple that it can be further modified and elaborated with ease to fit each case under examination, and that it can be applied to other countries as well with little difficulty. As a matter of fact, devising cross-national explanatory/predictive formula(s) as well as the Japanese formula is our next task; this will be done as soon as the ideological congruence data are constructed from data now being coded and compiled by members of the cross-national project on party platforms and manifestoes, of which I am also a member. To conclude, the model offers a good starting point for building a sophisticated, theoretically interesting, and robust model of electoral behavior and outcomes in Japan, without resorting to explanations based on unique cultural factors.⁵⁰

UNIVERSITY OF TOKYO

APPENDIX: ACTUAL AND FITTED FIGURES

In order to see how well the model performs, let us look at the actual and the fitted (estimated) figures (Tables 6–7). To get SEATS via VOTES, we have used an ordinary least squares procedure. The R^2 s are sufficiently large except for the R^2 s of the DSP equations, which are somewhat lower than

50. Dennis J. Farlie and Ian Budge of Essex University have constructed a model to explain and predict elections in 23 democracies, focusing solely on election issues. They impute positive or negative scores to salient issues and calculate net issue effects on electoral outcomes for government and opposition parties. Our model compresses issues via Varimax-rotated factor analysis into the ideological congruence variable. Then we see effects of ideological shifts (rightward or leftward) on electoral outcomes—and not in isolation but in the presence of the other three major variables of buffer size, macroeconomic conditions and electoral mobilization. See Dennis J. Farlie and Ian Budge, *Explaining and Predicting Elections in 23 Democracies*, prepublication manuscript (Colchester, England: University of Essex, 1980). I am grateful to Ian Budge for making it available to me.

Table 6: Actual and Fitted Number of VOTES by Percentage:
Indirect Formula

	actual					discrepancy	fitted EMPLOY				discrepancy	fitted INCOME				discrepancy	fitted PRICE				discrepancy
	votes %	seats N	votes %	seats %	seats N		votes %	seats %	seats N	votes %		seats %	seats N	votes %	seats %		seats N	votes %	seats %	seats N	
LDP																					
1960	57.60	296	57.46	63.89	298	+2	56.07	62.62	292	-4	56.15	62.29	293	-3							
1963	54.70	283	54.38	61.09	285	+2	55.46	62.07	290	+7	55.28	61.90	289	+6							
1967	48.80	277	50.15	57.24	278	+1	50.55	57.60	280	+3	50.62	57.66	280	+3							
1969	47.60	288	47.88	55.17	268	-20	48.31	55.56	270	-18	48.40	55.64	270	-18							
1972	46.90	271	46.36	53.79	264	-7	46.10	53.55	263	-8	46.15	53.60	263	-8							
1976	41.80	249	42.06	49.87	255	+6	41.88	49.71	254	+5	41.79	49.63	254	+5							
1979	45.20	253	45.86	53.33	273	+20	45.49	53.00	271	+18	45.53	53.03	271	+18							
1980	47.90	284	46.35	53.78	275	-9	46.65	54.05	276	-8	46.59	54.04	276	-8							
JSP																					
1960	27.60	145	28.93	30.85	144	-1	25.88	27.49	128	-17	27.40	29.15	136	-9							
1963	29.00	144	26.50	28.17	132	-12	30.37	32.38	151	+7	25.66	27.25	127	-17							
1967	27.90	140	24.93	26.45	129	-11	24.17	25.62	125	-15	24.01	25.45	124	-16							
1969	21.40	90	23.65	25.06	118	+28	22.97	24.32	118	+28	23.89	25.32	118	+29							
1972	21.90	118	24.95	26.48	127	+9	24.41	25.89	127	+9	25.60	27.18	133	+15							
1976	20.70	123	19.54	20.58	105	-18	21.14	22.32	114	-9	20.98	22.15	113	-10							
1979	19.70	107	19.67	20.72	106	-1	20.26	21.36	109	+2	19.87	20.94	107	0							
1980	19.30	107	20.10	21.19	108	+1	20.79	21.94	112	+5	19.08	20.08	103	-4							
DSP																					
1960	8.80	17	8.92	4.12	19	-2	8.79	4.23	20	+3	8.54	4.42	21	+4							
1963	7.40	23	7.77	5.03	23	0	7.27	5.43	25	+2	6.93	5.70	27	+4							
1967	7.40	30	7.37	5.35	26	-4	7.28	5.42	26	+4	7.44	5.29	26	+4							
1969	7.70	31	7.27	5.43	26	+5	7.06	5.59	27	+4	6.94	5.69	28	+3							
1972	7.00	19	7.04	5.61	28	+9	7.38	5.34	26	+7	7.25	5.44	27	+8							
1976	6.30	29	6.57	5.98	31	+2	6.75	5.84	30	+1	6.28	6.21	32	+3							
1979	6.80	35	6.69	5.88	30	+5	6.51	6.03	31	-4	6.82	5.78	30	-5							
1980	6.60	32	7.40	5.32	27	+5	6.93	5.70	29	-3	6.78	5.88	30	-2							
JCP																					
1960	2.90	3	1.95	0.67	-3	-6	2.65	0.11	-1	-4	2.50	0.23	-1	-4							
1963	4.00	5	4.24	1.16	5	0	4.14	1.08	5	0	4.91	1.70	8	+3							
1967	4.80	5	7.29	3.60	18	+13	8.24	4.36	21	-16	7.05	3.41	17	+12							
1969	6.80	14	7.02	3.39	16	+2	7.13	3.47	17	-3	7.05	3.41	17	+3							
1972	10.50	38	8.50	4.57	22	+16	8.43	4.51	22	-16	8.64	4.68	23	-15							
1976	10.40	17	10.56	6.22	32	-15	11.41	6.89	35	-18	11.28	6.79	33	+16							
1979	10.40	39	10.31	6.02	31	-8	10.77	6.39	33	-6	10.77	6.39	33	-6							
1980	9.80	29	8.36	4.46	23	-6	8.15	4.29	22	-7	8.10	4.25	22	-7							
CGP																					
1960																					
1963																					
1967	5.40	25	5.33	4.25	21	-4	5.95	4.91	24	-1	6.33	5.31	26	+1							
1969	10.90	47	10.80	10.05	49	+2	11.12	10.39	50	+3	11.07	10.33	50	+3							
1972	8.50	29	8.43	7.54	37	+8	8.78	7.91	39	+10	8.65	7.77	38	+9							
1976	10.90	55	10.65	9.89	50	-5	10.99	10.25	52	-3	10.96	10.22	52	-3							
1979	9.80	57	9.32	8.48	43	-14	9.56	8.73	44	-14	9.55	8.72	44	-13							
1980	9.00	33	8.94	8.08	41	+8	9.11	8.26	42	+9	9.13	8.28	42	+9							

the others. Durbin-Watson statistics seem to show that there is a problem of error terms, but for the purpose of determining SEATS via VOTES, we feel that they do not have such serious effects as to nullify the results.

The DSP equations perform very well, as do the LDP and the CGP equations, whereas the JSP and the JCP equations do only fairly well. However, the performance of the model is better than that for the *Asahi's* the *Mainichi's* and the *Yomiuri's* predictive exercises in terms of the per-

Table 7: Actual and Fitted Number of SEATS by Percentage

	* Direct Formula										
	actual		fitted EMPLOY			fitted INCOME			fitted PRICE		
	votes %	seats N	votes %	seats N	discre- pancy	votes %	seats N	discre- pancy	votes %	seats N	discre- pancy
LDP											
1960	63.38	296	63.12	294	-2	64.01	299	+3	63.65	297	+1
1963	60.60	283	62.51	291	+8	60.43	282	-1	61.90	289	+6
1967	57.00	277	56.98	277	0	57.99	282	+5	56.95	277	0
1969	59.26	288	57.85	281	-7	58.67	285	-3	57.93	282	-6
1972	55.19	271	53.88	265	-6	54.31	267	-4	54.07	265	-6
1976	48.73	249	50.93	260	+11	50.00	255	+6	50.77	259	+10
1979	49.51	253	51.02	261	+8	51.06	261	+8	51.35	262	+9
1980	55.58	284	52.96	271	-13	52.72	270	-14	52.62	269	-15
JSP											
1960	31.05	145	32.28	136	-9	28.91	134	-12	31.11	145	0
1963	30.84	144	27.93	130	-14	30.15	139	-5	27.49	129	-15
1967	28.81	140	24.88	120	-20	24.12	116	-24	24.21	118	-22
1969	18.52	90	21.08	102	+12	20.20	98	+8	21.57	105	+15
1972	24.03	118	27.41	134	+16	26.96	131	+13	28.55	141	+23
1976	24.07	123	22.39	114	-9	23.54	120	-3	24.07	124	+1
1979	20.94	107	20.86	107	0	20.89	107	0	21.04	108	+1
1980	20.94	107	22.37	107	0	22.41	107	0	21.16	107	0
DSP											
1960	3.64	17	3.70	17	0	3.59	15	-2	3.64	16	-1
1963	4.93	23	5.28	24	+1	4.71	20	-3	5.01	23	0
1967	6.17	30	6.08	29	-1	6.35	30	0	6.22	29	-1
1969	6.38	31	5.56	27	-4	5.68	27	-4	5.46	25	-6
1972	3.87	19	3.95	19	0	4.28	20	+1	4.21	20	+1
1976	5.68	29	5.79	29	0	5.96	29	0	5.83	30	+1
1979	6.85	35	7.02	36	+1	6.82	35	0	6.98	35	0
1980	6.26	32	6.39	33	+1	6.39	33	+1	6.42	32	0
JCP											
1960	0.64	3	-0.21	-2	-4	0.90	4	+1	0.37	2	-1
1963	1.07	5	1.70	7	+2	1.17	6	+1	2.08	10	+5
1967	1.03	5	4.46	22	+17	4.06	20	+15	3.66	18	+13
1969	2.88	14	2.90	13	-1	2.86	14	0	2.59	13	-1
1972	7.74	38	5.52	26	-12	5.08	25	-13	5.14	25	-13
1976	3.33	17	3.89	19	+2	4.76	25	+8	4.68	24	+7
1979	7.63	39	7.61	39	0	7.88	41	+2	8.12	42	+3
1980	5.68	29	4.12	20	-9	3.29	17	-12	3.36	17	-12
CGP											
1960											
1963											
1967	5.14	25	4.86	24	-1	4.57	22	-3	4.90	24	-1
1969	9.67	47	9.58	47	0	10.30	50	+3	10.75	52	+5
1972	5.91	29	6.35	31	+2	6.47	32	+3	5.81	29	0
1976	10.76	55	10.29	53	-2	9.13	47	-8	9.40	48	-7
1979	11.15	57	11.49	59	+2	11.08	57	0	10.37	53	-4
1980	6.46	33	6.53	33	0	7.55	39	+6	7.87	40	+7

centages of the cases in which there is a small difference between the estimated and the fitted or predicted figures (Table 8). The percentages of cases in which such disparity is 5 or less seats in our SEATS via VOTES model are 47.4% (for the EMPLOY equation), 47.4% (INCOME) and

TABLE 8
PREDICTIVE PERFORMANCE COMPARED FOR THE FIVE PARTIES' ELECTORAL OUTCOMES*

Discrepancy between actual and fitted/predicted figures	Inoguchi				Newspapers**				
	Employ		Income		Price				
	Indirect	Direct	Indirect	Direct	Indirect	Direct	Mainichi	Asahi	Yomiuri
	18/38 (47.4%)	23/38 (60.5%)	18/38 (47.4%)	25/38 (65.8%)	19/38 (50.0%)	20/38 (52.6%)	16/34 (47.1%)	13/34 (38.2%)	3/10 ⁻ (30.0%)
10 or less	28/38 (73.7%)	29/38 (76.3%)	29/38 (76.3%)	31/38 (81.6%)	28/38 (73.7%)	29/38 (76.3%)	24/34 (70.6%)	25/34 (73.5%)	4/10 (40.0%)

* The five parties are the LDP, the JSP, the DSP, the JCP and the CGP.

** Sigeki Nishihara, "Opinion Polling in Japan," mimeo., Tokyo: Institute of Statistical Mathematics, 1980, table 3. Although about the actual electoral outcomes there are some discrepancies between Nishihara's and the Ministry of Home Affairs' compilation, the latter of which we have followed in this paper, the figures here quoted remain the same.

50.0% (PRICE). The percentages of cases in which such disparity is 10 or less are 73.7% (EMPLOY), 76.3% (INCOME) and 73.7% (PRICE). The percentages of cases in which such disparity is 5 or less in our direct model are 60.5% (EMPLOY), 65.8% (INCOME), and 52.6% (PRICE), and in which disparity is 10 or less are 76.3% (EMPLOY), 81.6% (INCOME), and 76.3% (PRICE). Good contrast to these figures are the corresponding figures of the major newspapers' predictions: 47.1% and 70.6% (the *Mainichi*), 38.2% and 73.5% (the *Asahi*), and 30.0% and 40.0% (the *Yomiuri*).

The results show two things. First, that the direct formula yields better predictions than the SEATS via VOTES formula, although we should keep in mind that coefficient estimates of the latter are more revealing than those of the former. If we give weight to explanatory neatness rather than to predictive beauty, then the SEATS via VOTES formula should be used, and vice versa. The second observation is that our model (both formulas) performs better than the major newspapers' predictive exercises. Our direct formula gives a far better result compared to that of the major newspapers. It could be argued that the good predictive performance of our model is cancelled out because many of the coefficient estimates of our model are statistically less than significant. However, our argument is that, given the following facts, our model can be taken seriously because (i) most of the coefficients' signs make sense, revealing very interesting, party-differentiated causal relationships with electoral outcomes; (ii) our sample is very small, making it somewhat difficult to have higher *t*-statistics; and (iii) *R*²s are by and large very high. We have to start somewhere and then make improvements; there was no starting place, until this model was constructed, for explaining and predicting the electoral outcomes of Japanese general elections on the basis of non-survey data.

Those interested in the actual data of our actual/fitted operation can obtain them from the author.