

## Appendix 8c – Statistical Analysis of Candidate Campaign Platforms: Principal Components Factor Analysis

I created a data set from the 1996 HR election of the campaign appeals made by 145 politicians from Akita, Fukui, Iwate, Kagoshima, Kanagawa, Niigata, Osaka, and Tokyo, through their published “Election Information” (*Senkyo Kôhō*).

My coding system is fairly simple. Although not as “objective” as a system that counts only the number of times a particular issue-related word is mentioned, I created a series of dummy variables for each issue I sought to code, whereby I coded as 1 any time a candidate made a statement on that issue.<sup>1</sup> Candidates rarely took opposing views on a given issue. For example, while many candidates indicated their displeasure with a consumption tax hike, none that I coded indicated approval of the hike. I coded all variables as 0-1 dummies, except in three cases. For public works, I coded the variable according to the number of projects the candidate mentioned. In my original coding, I created two different 0-1 dummy variables dealing with small- and medium-sized business. The first was coded as 1 if a candidate merely mentioned such businesses and his general support for them. The second was coded as 1 if the candidate actively sought their protection or specific policies to help them. I combined these variables to create a 3-point sliding scale, coded 1 if merely mentioning support for small- and medium-sized businesses and 2 if suggesting specific ways to help such businesses (all others were coded as 0). Finally, I also coded whether candidates actively criticized heavy expenditures on public works. This variable was coded as 1 when candidates put forth such criticism, and coded as –1 when a candidate indicated the need to use public works to help the economy.

By and large, I avoided coding strong valence issues, such as the importance of ending bullying in schools and the need to promote citizen welfare, which politicians of all parties and all areas emphasized. A number of the issues I coded were fairly election-specific (e.g., the raising of a consumption tax) or were commonly cited by candidates from a variety of different parties (e.g., administrative reform). However, my coding of a number of different issues delivered some striking results.

The clearest difference between urban and rural areas was in the use of public works as a campaign vehicle. Rural candidates mentioned, on average, 1.6 projects, while urban candidates mentioned only 0.7, with the difference significant at the .01 level. Even stronger differences exist between candidates of different parties. Controlling for a few variables using an OLS regression on public works, I confirm that as districts grew more urban, the number of public works mentioned declined. In addition, candidates from the non-LDP parties were less likely than those from the LDP to mention public works projects.

To illustrate the meaning of these results more clearly, I ran a principal components factor analysis model of the main variables that appeared to define the parties in 1996 (see Table 8.4). In the first factor, which I call Public Works, issues surrounding public works and agriculture load strongly. In the second, which I call Liberalization, issues surrounding the protection of (typically non-competitive) small- and medium-sized business load particularly

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<sup>1</sup> For example, the “word” coding scheme would give a score of 3 on issue “X” to a candidate who mentioned the word “X” three times. In contrast, I would give a score of 1 on issue “X” to any candidate who mentioned the concept of “X,” whether he used the word “X” or a synonym for the word.

strongly. On this second dimension, a number of issues explicitly surrounding deregulation and decentralization load fairly strongly as well.

**Table 8.4 – Principal Component Factor Analysis of Candidate Platforms**

	<u>Factor I</u>	<u>Factor II</u>
	<b>Public Works</b>	<b>Liberalization</b>
Economy	+0.36	-0.07
Local Issues: Pork and Local Projects	+0.41	+0.28
Number of Public Works	+0.50	+0.04
Anti-Public Works	-0.35	+0.12
Farming, Fisheries or Lumber	+0.31	-0.12
Small and Medium Sized Business	+0.13	-0.54
Protect Small and Medium Sized Business	+0.02	-0.48
Deregulation	+0.23	+0.26
Decentralization	+0.13	+0.35
Public Information Disclosure/Governmental Transparency	-0.29	+0.24
Anti-Bureaucracy	-0.01	+0.33
Cut "Sticky Ties" Between Politicians/Bureaucracy/ /Business/Finance	-0.24	-0.09
<b>Eigenvalues</b>	2.25	1.7
<b>Party Factor Scores</b>		
LDP (N=51)	+1.67	-0.44
DPJ 1996 (N=26)	-1.36	+0.49
DPJ 2000 (N=33)	-1.04	+0.48
NFP (N=39)	+0.41	+0.42
Soc/Com (N=9)	-0.73	-1.21

Based on author's coding of candidate platforms from the 1996 HR election.