CHAPTER 7
Social Influences on 1999 Voting Choices

This chapter seeks to explain the direction of the vote or the underlying bases of voting choice in the 1999 election. As in the 1955 election, voters chose parties, not individual candidates. Chapter 6 found empirical evidence of continuity between the party systems of 1955 and 1999, meaning there was correspondence between areas of support for certain parties in the two elections. Considering these patterns together with the influence of the "party in the electorate" during New Order elections mentioned in Chapter 2, we can infer that many voters identified with a particular party over time (across elections) and hypothesize that party identification was a determinant of voting choice in 1999. How strong it was relative to other influences will be explored through multivariate analysis in this chapter.

As discussed in previous chapters, in 1955 the Indonesian electorate was thought to have been divided along religious, ethnic and regional, and class and economic interest lines, and these cleavages furnished both a base of voting support and a set of political interests that parties vied to represent. After Suharto came to power in the 1960s, his New Order government attempted with some success to modify the cleavage structure. We also noted a secular tendency in Western democracies toward decline in social-based voting. The question thus arises, to what extent did sociological characteristics influence voting choice in the 1999 election?

This chapter identifies and measures social-based and other contextual influences on Indonesians' voting choices in the 1999 elec-

tion. It demonstrates that over half (on average) of the variation among districts in the votes for the five main parties (PDI-P, Golkar, PKB, PPP, and PAN) can be explained with statistical (regression) models using social and contextual variables. It thus provides evidence of the important role of the community context in individuals' voting choices and estimates the relative weights that ought to be attributed to explanations based on social characteristics versus those based on psychological or attitudinal ones derived through surveys of individual voters.

OBJECTIVES AND METHODOLOGY

In this chapter I first build quantitative indicators of the social context within which Indonesians cast their ballots and then use them to construct statistical models that measure the effects of these contextual variables on the voting for particular parties (direction of the vote). Virtually every previous study of Indonesian voting patterns that uses quantitative election returns is marked by one or more of several limitations. They fail to disaggregate below the provincial level. In a country where more voters cast ballots in each of three provinces than did voters in the entire country of Australia, and where nine or one-third of all provinces exceeded 2 million voters each, a great deal of variation within provinces is obscured by using provincial aggregates. Second, bivariate analysis is the norm; seldom have election analysts attempted multivariate analysis, which better captures the complexity of the empirical world and enables more accurate testing of alternative explanations (hypotheses). Third, they are based on a sample of cases that either have no pretense of representativeness (e.g., convenience sample) or, if they claim to be representative of some larger population, they contain a high margin of error.[1]

The methodology employed here largely overcomes these limitations. It utilizes a database in which the second-level administrative districts, consisting both of regencies (*kabupaten*) and cities (*kota*), are the units of data collection and analysis. Since these units are much smaller and over ten times more numerous than provinces, much more variation is retained and the larger number of cases allows more precise and powerful multivariate analysis, including factor analysis and multiple regression analysis. In addition, the database consists not of a sample, but of 94 percent of the population.[2] Also, socioeconomic data used to characterize the context were missing for about 15 percent of all districts (cases), usually because some regencies were split or some regency capitals were given equal, second-level administrative status (*kotamadya*) between the time

the contextual data were generated (1983 to 1995) and the 1999 elections. These have been handled by inserting estimated values on the indicators that adhere to the following guidelines: (1) if a new regency was created from a larger one, duplicate figures were used; (2) if a new city was previously a part of a regency, estimates were made, taking into consideration figures for the regency and for other cities in the province; and (3) if data were otherwise missing, averages (means) for regencies or cities (whichever appropriate) in the province were used. Analysis based partially on careful estimates was considered preferable to excluding cases with missing data, because the latter would have decreased the number of cases (N) and introduced regional bias by giving greater weight to the data on Java and Bali, which were seldom missing.

Undergirding the analysis are several premises. I assume that socioeconomic traits of area units (or groups of people living within defined territorial boundaries of regencies and cities) affect the behavior of individuals within those units, consciously or unconsciously, and thus help to explain the electoral outcomes in those areas. However, since the unit of measurement is the group rather than the individual, inferences and conclusions should be drawn about the probable collective behavior of individuals in groups, not about individual behavior. In short, voters' choices are determined more by their sensitivity to their social milieu than by the individual voter's (rational) calculus. This limitation—the inability of grouped data to measure attitudes or opinions of individuals—is less restricting in a more group- and communal-oriented society like Indonesia than it would be in an individualistic society like the United States.

Second, I utilize publicly available, aggregate, and contextual data describing districts, which were collected or generated and published by Indonesian government agencies (e.g., population census). Hence, although these data have been carefully inspected and cleaned prior to their use here, certain limitations remain, especially the constraints imposed by the availability of data. An example is the time discrepancy between indicators built from the 1990 census and the 1999 voting returns. Due to the nonexistence of a census in 1999, indicators from the 1990 census were constructed and intermingled with 1999 voting results in statistical analyses. Such a procedure is common in quantitative social science and can be defended in terms of cost effectiveness, the high degree of stability in these indicators over time, and the robustness of regression analysis. Second, because the geographical distribution of the units of observation (regencies and cities or municipalities, both of which I refer to as "districts") differ from the geographical distribution of the voters, the regressions were rerun using a population-weighted data file and

the results compared. Since the differences were very minor (a testimonial to the robustness of regression analysis), I decided to avoid unnecessary complexity and report the results obtained without weighting. Insofar as the procedures and calculations used here are logical and statistically sound, I am able to establish the degree to which electoral outcomes can be explained by general factors or traits common to all of them. The variance left unexplained by the models, the residual, represents the outside limit that can be attributed to individual calculus, the unique characteristics of particular areas, and measurement error.

I seek to explain electoral outcomes (dependent variables), which are operationalized in two ways. First, the "effective number of parties" is measured by the Rae fractionalization index and relates to such important theoretical issues as type of party system and extent of party competition.[3] Second, the direction of the vote is simply the vote obtained by each party in the election as a percentage of the total number of valid votes cast. It is important to note that all the indicators and measurements control for differences among districts in the size of population. By measuring electoral outcomes in these two ways for each district and then relating these measures to other social and contextual characteristics of the district, this analysis provides fresh insights about electoral behavior in 1999.

PATTERNS IN THE SOCIOECONOMIC CONTEXT

The review of previous studies on Indonesian elections in Chapter 2 identified aspects of the socioeconomic context that were thought to have influenced voting choice in previous elections. The next step was to measure or operationalize these aspects and assess their relative strength. Several steps were involved. First, twenty-four indicators were constructed using various kinds of data collected or generated by Indonesia's Central Bureau of Statistics (Biro Pusat Statistik; BPS).[4] Second, they were reduced to six meaningful and statistically independent factors or dimensions of common variation using factor analysis.[5] The indicators with their respective factor loadings are shown in Table 7.1.[6]

The first and strongest factor can be interpreted to represent the theoretical dimension of *urbanization* (F1), because indicators pertaining to larger manufacturing firms, population living in urban areas, population with television, population density, and, negatively, the percentage of the employed population working in agriculture have their highest loading on this factor. The second factor, on which measures about the civil service, government expenditure, and ex-

Table 7.1

Factor Loadings of Twenty-Four Indicators of Context on Six Factors

Indicator	**F1**	**F2**	**F3**	**F4**	**F5**	**F6**
1.1 Workers in medJIg mfg firms, 1992,p.c.	.86					
1.2 Lg/med mfg firms 1992,p.c.		.83				
1.3 Employed industry, rural, 1990 (%)	.76					-.32
1.4 Employed in agriculture, 1990 (%)	-.67					
1.5 Employed in agriculture, rural, 1990 (%)	-.63				.35	
1.6 Urban population, 1990 (%)	.57					.37
1.7 Households with TV, 1990 (%)	.55			-.32		.30
1.8 Population density, 1999 (%)	.54					
1.9 Tertiary school graduates, 1990 (%)	.48					
2.1 Gov't devel, expend. 1994-1995 p.c.		.89				
2.2 Civil servants 1989 p.c.		.85				
2.3 Real estate tax collected 1994-1995 p.c.			.83			
2.4 Subsidy receipts 1994-1995 p.c.		.75				
3.1 Christians, 1980 (%)			-.90			
3.2 Muslims, 1980 (%)			.90			
4.1 Illiterate females, 1990 (%)				.98		
4.2 Illiterate total, 1990 (%)				.97		
4.3 Pop > 10 yrs. w/o prim'y educ, 1990 (%)				.71		
5.1 Farmers controlling >2 ha. 1983(%)					.84	
5.2 Land owned, 1983 average						.80
5.3 Religion teachers/primary teachers,1990		.35	-.33	-.56		
6.1 Employed industry, total, 1990 (%)						.89
6.2 Gov't own revenue 1994-1995 p.c.	.32	.31				.53
6.3 Farmers controlling <.5 ha. 1983 (%)					-.33	.52
Percentage of variance	35.5	18.9	7.5	6.5	5.6	4.2

tractive capability load heaviest, represents a theoretical dimension which can be labeled *government activity* (F2). The third factor can be designated *Islamicness* (F3) dimension, and is measured by the proportion of Muslim population and an indicator of piety or orthodoxy of religious practice in the area; namely, religion teachers in elementary schools as a percentage of public school teachers. Both indicators load positively on the factor, justifying its label. As would be expected, the loading for Christians on this factor is strong and negative (–.90).[7] Two indicators of illiteracy and one of lack of primary education load on the fourth factor, which can be designated *illiteracy* (F4). Indicators of access to large amounts of land (≥ 2 hectares) and the average size of owned land holdings load on the fifth factor, which can be labeled *relative inequality* (F5). Where land holdings are larger, population density tends to be lower, which can explain the negative loading of religion teachers on this factor. The three indicators that load on the sixth factor—employment in (mostly small) industry, locally generated public revenue, and farmers with very small land holdings—are likely to be high in areas that have a relatively high level of *development* (F6), and will be labeled accordingly.

Thus far, factor analysis has assisted in the simplification of data and the construction of multiple item scales (F1, F2, etc.), which are more valid and reliable than single-item scales. From the twenty-four indicators, factor analysis identified six underlying dimensions of the socioeconomic context. In a subsequent step, a score on each of the six factors was computed for each district. In other words, the six dimensions derived from analysis of all the cases combined were subsequently used to weight and combine the values of each case on the twenty-four indicators. Using these six factor scores to measure the socioeconomic context has the methodological advantage of increasing the reliability of the multivariate analysis below in two ways. First, the confidence interval for any one factor is greater than for any of the individual indicators of which they are composed (i.e., fewer random errors, less measurement error, and less influenced by missing data). Second, the factors are almost uncorrelated with one another (due to oblimin rotation), upholding the important statistical assumption of multiple regression of no multicollinearity among the factor scores (independent variables).

EXPLAINING THE EFFECTIVE NUMBER OF PARTIES

As discussed, one of the dependent variables in this analysis is the fractionalization of the vote as measured by the Rae fractionalization index (F-index) or the "effective number of parties" (N-index) derived from it.[8] Being more intuitively understandable, the latter

will be used here. On the (nationwide) average, there were 3.98 effective parties in districts in the 1999 election, up from 1.51 in 1997, when two of the three parties allowed were heavily constrained by New Order authorities. However, in 1999 there was considerable interdistrict variation in the N-index, as reflected in the range, a minimum of 1.31 and a maximum of 8.00, and the large standard deviation of 1.29. How can this variation be explained? Why did some areas have more effective parties than other areas?

Several hypotheses come to mind. We might expect that urbanization and education had a positive influence on the effective number of parties based on the theoretical understanding that urbanization is often accompanied by greater social and political pluralism. More competing social groups furnish bases of voting support for more parties. Education tends to increase independent thinking, including rational assessment of political parties, and political participation of all types. We might also expect a residue or legacy of the traditions formed during the last two New Order elections with regard to the effective number of parties (within the legal limitation of three parties). In other words, districts having a higher effective number of parties during New Order elections would have higher levels in 1999 as well.[9] Finally, remembering the diversity of the population, we would expect regional effects or differences related to particular histories, culture, and ethnicity.[10]

Table 7.2 reports the best linear model that could be built from the data available for this study for (statistically) explaining the effective number of parties. The explanatory power of each independent variable relative to and controlling for the effects of the others can be ascertained by comparing the (standardized) *beta* coefficients in the third column. The explanatory variables are listed in descending order of influence.

The two strongest influences were the tradition of effective parties during the last decade of the New Order (.479) and illiteracy (–.370). That is, those regencies and cities with a tradition of more effective parties tended to have more effective parties in the 1999 election as well. Those areas with higher levels of literacy (or less illiteracy) tended to have more effective parties. This finding well illustrates how the New Order, by its success in nearly eradicating illiteracy through universal access to basic education, unwittingly contributed to the demise of monolithic party politics in 1999 once the controls had been relaxed. The number of parties also tended to be higher in Sumatra, for several reasons.[11] Golkar maintained much of its strength there, but PDI-P also made inroads, especially in areas of PNI strength in 1955. Masjumi had dominated in Sumatra in 1955, but in 1999 those areas were seriously split between PPP, PAN, and PBB.

Table 7.2

Model of Influences on Effective Number of Parties, 1999 Election

Independent Variable	**b**	**B (*beta*)**	**T**	**Significance of T**
1. Tradition during New Order	.372	.479	9.542	.000
2. Illiteracy (F4)	-.044	-.370	7.042	.000
3. Sumatra region	.058	.217	4.269	.000
4. Relative inequality (F5)	.020	.184	3.817	.000
5. Urbanization (F1)	-.017	-.134	-2.683	.008
6. Islamicness (F3)	.011	.107	2.286	.023
(Constant)	.540		36.646	.000

Note: R^2 = .45, S.E.E. = .090, F = 39, Significance = .0005.

Contrary to expectations, urbanization had a slight negative impact (–.134). Perhaps urban tendencies toward political pluralism were offset by greater exposure to the mass media campaigns of a few wealthy parties, and thus greater concentration of the vote in those parties as well. Islamicness was a positive stimulus to more effective parties, which is reflected in the *beta* of .107. Relative inequality also had an impact (.184), suggesting that areas with wealthier farmers were fertile ground for new parties.

Ethnicity

Ethnic factors markedly influenced voting behavior in 1999 and need to be explicitly addressed. Consider the provinces of Bali and South Sulawesi, which had (district average) 1.59 and 2.03 effective parties, respectively, among the lowest in the entire country. In Bali the top party (PDI-P) got 79 percent of the vote, more than double its national average, the second party (Golkar) took 10.4 percent, and the third party (PKB) 1.7 percent. This lopsided pattern had little to do with illiteracy, urbanization, or the tradition of effective parties. It had everything to do with the fact that the Balinese voted as Balinese, who saw a vote to PDI-P as not just a rejection of the "status quo," but as an expression of their ethnic identity and perceived interests at that point in time. As Hindus they were a small minority in Indonesia, and numerically a declining one. To the normal sensitivities of a minority were added a perceived special relationship with PDI-P based on Megawati's (PDI-P chairperson) Balinese grandmother. An incident during the campaign further solidified the relationship. Government minister and PPP politician A. M. Saifuddin claimed that Megawati was evidently a Hindu and therefore unfit to be president. An islandwide apoplexy ensued, ranging from demands for Saifuddin's dismissal to threats of secession. In short, the politics of Balinese identity in context led to a greater proportional Golkar collapse in Bali than anywhere else, exclusively to the benefit of PDI-P.[12]

The players were different but the underlying dynamic much the same in South Sulawesi. Golkar got 66.5 percent, close to three times its national average, followed by 8.4 percent for PPP and 6.6 percent for PDI-P. Clearly Golkar held its ground there better than anywhere else. Why? Again, the factors mentioned in the nationwide model (i.e., tradition, illiteracy, urbanization, Islamicness, inequality) are clearly insufficient. More important, President Habibie being a native son, the Buginese and Makasarese had come to associate his fortunes with their ethnic identities and perceived interests. In short, having someone perceived as one of them ascend to the highest of-

fice and stay there was reason to put aside any inclination to protest longtime Golkar domination by voting for other parties.

Acknowledging the importance of ethnic factors for election outcomes is one thing, but measuring them and integrating them into the analysis here that seeks to uncover nationwide patterns is quite another. The variance left unexplained by the models, the residual, represents the outside limit that can be attributed to these difficult-to-measure factors and the unique characteristics of particular areas.

EXPLAINING THE DIRECTION OF THE VOTE

The following sections present for each of the five main parties the best nationwide linear model that could be constructed with the data available for this analysis. Each model was built through an iterative process that began by regressing a party's vote on the scores of the six contextual factors identified, several dummy variables denoting region, and indicators from the 1955 and the 1997 elections. None of the initial models were optimum; many different combinations of independent variables were fitted to the data.[13]

Indonesia Democracy Party of Struggle (PDI-P)

The existing scholarly literature and conventional wisdom about PDI-P's overall plurality in the election pose alternative hypotheses that can be tested here. First, the PDI-P vote was widely considered a protest vote, a vote against the status quo. Hence, we might hypothesize that high densities of civil servants, more tax extraction, higher government expenditures—all indicators of a high government profile—were counterproductive as far as support for the government party (Golkar) was concerned, producing instead higher levels of voting for PDI-P. Conversely, with 22 percent of the total vote going to Golkar, it seems plausible that PDI-P may have had difficulty making inroads in areas of higher government activity, as the bureaucracy was in a position to dispense and target resources strategically to the advantage of Golkar and to the disadvantage of PDI-P.

Second, the PDI-P vote was strongest in the districts of Java and Bali (although it did well nationwide), and it was especially strong in the large metropolitan areas. A variety of reasons have been offered by observers. The PDI-P leader, Megawati Soekarnoputri, was revered in part because of her mixed Javanese and Balinese ethnic ancestry. Being the daughter of Indonesia's independence leader and first president, Soekarno, enhanced her "revolutionary" credentials and legitimacy, and her party was viewed by many as a continuation of the Indonesian National Party, founded by her father.

During the campaign PDI-P became known for its attraction to young people, the militancy of its youthful cadre, and its ability to mobilize mass rallies and parades in the largest cities on Java. More than any of the other major parties, PDI-P campaigned on rectifying social and economic inequalities and combating corruption, themes that reverberated well among the underclass and in areas of previous PKI support.

These hypotheses are put to the test in Table 7.3. Recall the previous chapter, where evidence of a positive relationship was found between areas supporting the Indonesian National Party or the Indonesian Communist Party in 1955 and areas supporting PDI-P in 1999. Here those relationships are subjected to more rigorous testing in regression analysis, enabling us to (statistically) isolate their effects, measuring each one while simultaneously controlling for the effects of the other eight independent variables in the model. Comparing the magnitude of the *betas* in Table 7.3, the PNI–1955 (.404) had the strongest influence and PKI–1955 (.291) ranked fourth. The regional variable, Java–Bali (.382) had the second strongest influence. As expected, there is a strong negative influence from Islamicness (–.329), indicating that the more Islamic the area, the less the vote for PDI-P, and reflecting the continuing reality of the basic division in the electorate between nationalist–religiously inclusive orientation and orthodox Muslim orientation. PDI-P made inroads into areas that in 1997 voted strongly for Golkar (.245) and PDI (.144).[14] It also benefited from areas where relative inequality was higher (.168), from more urbanized areas (.132), and from areas of lower illiteracy (–.132). This negative influence of illiteracy should be interpreted in relation to the positive effect of urbanization; that is, illiteracy was lower in the large urbanized areas where PDI-P ran strong. Overall, these findings are remarkably confirmatory of our expectations and supportive of our hypotheses about the influences on voting choices for PDI-P. In light of the contradictory hypotheses about the effects of government activity, it is interesting that no influence could be found.

Functional Groups (Golkar)

Prior to the election, predictions about the extent of support for Golkar varied widely. Similar to the debate about PDI-P, observers disagreed about the effect of government activity on the prospects for Golkar in the election. Some thought it would be counterproductive, as it was often accompanied by allegations and evidence of corruption, collusion, and nepotism. Other observers argued that higher levels of government presence and activism would enhance

Table 7.3

Model of Influences on Indonesian Democracy Party of Struggle, 1999 Election

Independent Variable	**b**	**B (*beta*)**	**T**	**Significance of T**
1. PNI-1955	.004	.404	8.562	.000
2. Java-Bali Region	.133	.382	5.357	.000
3. Islamicness (F3)	-.046	-.329	-7.899	.000
4. PK1-1955	.004	.291	6.623	.000
5. Golkar-1997	.003	.245	4.327	.000
6. Relative inequality (F5).	.026	.168	3.715	.000
7. PD1-1997	.009	.144	2.983	.003
8.5. Illiteracy (F4)	-.023	-.132	-3.121	.002
8.5. Urbanization (F1)	.024	.132	3.029	.003
(Constant)	-.146		-2.449	.015

Note: $R^2 = .69$, S.E.E. = .098, F = 63, Significance = .0005.

Golkar's prospects in the election, contending that Golkar's "channel B" (bureaucracy) remained a formidable electoral machine, even if "channel A" (armed forces) had been largely neutralized and many of those in "channel G" (young party cadre) had deserted the party. Golkar's hold on the bureaucracy and support in the electorate was acknowledged to have weakened in Java–Bali, especially in the large cities, but it was thought to have remained largely intact in rural areas of previous PKI strength, as voters in those areas were in the habit of demonstrating loyalty to the government, as well as in areas outside Java where the bureaucracy's profile tended to be higher and civil society weaker. Also, observers had identified a "greening" underway in Golkar for at least a decade, as the party sought to neutralize threats to its dominance from modernist orthodox Muslims. Entering the campaign behind two leaders with strong modernist Muslim credentials, President Habibie and Chairman Akbar Tandjung, Golkar sought to reposition itself by attracting modernist Muslims.

The model for Golkar is presented in Table 7.4. By far the strongest influence on Golkar's support was regional; Golkar did especially well in eastern Indonesia (.631), as compared to Java–Bali and Sumatra. Another strong influence came from areas that voted heavily for Golkar in the 1997 election (.411), suggesting that its formidable organization and status as party in the electorate remained in place in many areas. The party's appeal to modernist Muslims met with some success, indicated by the *betas* with areas of previous Masjumi support in 1955 (.173) and Islamicness (.136). Finally, areas of higher relative inequality were disadvantageous for Golkar (–.164); we can infer that poor and lower-class voters preferred other parties (e.g., PDI-P, PKB). Thus, except for the surprising lack of influence, neither positive nor negative (counterproductive), from government activity, the regression results support the hypotheses.

National Awakening Party (PKB)

Keeping in mind its recent founding in 1998 by and for members of the Awakening of the Islamic Teachers, we expected the foremost influence on the PKB would be religion. Other noticeable but secondary influences would include region, because the vast majority of NU members reside in Java, urbanization (negative), because most NU members live in rural areas, illiteracy (positive), which is higher in rural areas, and positive effects from areas where NU and PKI attracted votes in 1955 (recall correlations in the previous chapter).

The evidence pertaining to these hypotheses is presented in Table 7.5. Similar to the model for PDI-P, the strongest influence emanates

Table 7.4

Model of Influences on Functional Groups' Party, 1999 Election

Independent Variable	**b**	**B (*beta*)**	**T**	**Significance of T**
1. Eastern region	.240	.631	15.857	.000
2. Golkar-1997	.005	.411	10.171	.000
3. Masjumi-1955	.002	.173	4.192	.000
4. Relative inequality (F5)	-.030	-.164	- 4.232	.000
5. Islamicness (F3)	.020	.136	3.222	.001
(Constant)	-.241		-6.470	.000

Note: R^2 = .69, S.E.E. = .1012, F = 120, Significance = .0005.

Table 7.5

Model of Influences on National Awakening Party, 1999 Election

Independent Variable	b	B (*beta*)	T	Significance of T
1. NU-1955	.003	.400	9.855	.000
2.Java-Bali region	.089	.339	6.902	.000
3. PPP-1997	.003	.280	5.427	.000
4. IIIiteracy (F4)	.028	.215	5.023	.000
5. Urbanization (F1)	-.020	-.152	-2.960	.003
6. Municipality status	.047	.145	2.287	.023
7. Development (F6)	-.017	-.094	-2.107	.036
8. Government activity (F2)	.009	-.082	-2.148	.033
(Constant)	-.048		-4.443	.000

Note: R^2 = .72, S.E.E. = .069, F = 84, Significance = .0005.

from voting patterns in the 1955 election, but here it was from areas that previously supported NU (.400). PKB also benefited from areas of PPP strength in 1997 (.280). In other words, this is evidence that some PPP voters in 1997 switched to PKB in 1999. PPP, it will be recalled, was a fusion of four Islamic parties in 1973 and was considered the vehicle of orthodox Muslim aspirations until 1999. It is noteworthy that we find an Islamic connection through PPP rather than through the contextual Islamicness factor (F3). There was also a strong regional effect; the party's attraction was stronger in Java– Bali (.339). The level of illiteracy had a positive effect on the vote for PKB (.215), and the level of development a slight negative one (–.072), indicating that the party appealed to poor and lower-class voters. The weak inverse relationship with government activity (–.082) seems consistent with this pattern, as it would have been lower in more impoverished areas. Finally, as expected, large metropolitan areas had a negative influence on the PKB vote (–.152), although small and medium-size cities having the administrative status of municipality tended to be fertile ground for PKB support (.145).

Development Unity Party (PPP)

Like Golkar, PPP was a creation of New Order authorities, established as a fusion of four Islamic parties and intended as the sole vehicle for orthodox Muslims' political aspirations. Voting for PPP could be expected, therefore, to have been sensitive to the degree of Islamicness of the community (F3). Since it came into being through a fusion in 1973, we would expect that it drew support from both modernist (Masjumi) and traditionalist (NU) areas in 1955 (see Chapter 6).

As can be seen from Table 7.6, the general Islamicness of the context mattered less than the previous party alignment of the community. The expectation about influence from areas of previous Masjumi support (.409) is confirmed, but not the one about NU. The strongest influence came from areas of PPP support in the 1997 election (.505), indicating that the party in the electorate or party identification was an important influence on voting choices for PPP. The regression results also show that the party tended to be disadvantaged by large metropolitan areas, which is reflected by the negative influence from urbanization (–.297) and by areas having higher levels of illiteracy (–.170). We can infer that, compared to PKB, PPP had less appeal to poor and lower-class voters. Finally, it should be pointed out that this model accounts for only 35 percent of the variation among districts in the PPP vote, making it the least powerful of the six models discussed in this chapter.

Table 7.6

Model of Influences on Development Unity Party, 1999 Election

Independent Variable	b	B (*beta*)	T	Significance of T
1. PPP-1997	.003	.505	8.769	.000
2. Masjumi-1955	.002	.409	7.493	.000
3. Urbanization (F1)	-.024	-.297	-4.962	.000
4. Illiteracy (F4)	-.013	-.170	-3.077	.000
(Constant)	.004		.426	.670

Note: R^2 = .35, S.E.E. = .0636, F = 36, Significance = .0005.

National Mandate Party (PAN)

Like PKB and PPP, PAN was clearly perceived as an Islamic party and thus expected to win votes in the more devoutly Islamic areas. However, in contrast to PKB, PAN was identified with modernist Islam. So we would expect influence on PAN from the Islamicness factor and from former Masjumi areas. However, in the campaign PAN was the most inclusive of these three Islamic parties. It attempted to attract a "rainbow coalition" and it was the most cerebral of the Islamic parties, symbolized by its professorial leader, Amien Rais. Hence, we would expect that PAN appealed to a more educated and urban-dwelling constituency than either of the other two Islamic parties.

Table 7.7 puts these expectations to the test. Similar to the pattern with the other new Islamic party (PKB), it was not the general Islamicness of the context that influenced the vote. Rather, the influence of Islam came through areas of Masjumi strength in 1955 (.328) and PPP strength in the 1997 election. However, the best predictor of PAN success was a regional variable: Support for PAN tended to be stronger in Sumatra than in Java–Bali and eastern Indonesia. The positive influence of urbanization (.154) and the negative one of illiteracy (–.155) are supportive of the expectations about PAN's more urban-dwelling and educated constituency. Finally, the party's appeal was enhanced in communities of lower inequality (–.287).

SUMMARY AND CONCLUSION

Substantively, the objective of this chapter was to explain the underlying bases of voters' choices in the 1999 Indonesian election. In previous chapters we observed that in 1955 most electors voted on the basis of religion, ethnicity or region, or economic interest (class). But Suharto's New Order government repressed or modified the electoral expression of these cleavages through prohibitions on some parties and the fusion of others. Research on New Order elections indicated that the religion-based voting did not disappear, with orthodox Muslims (*santri*) voting disproportionately for the Development Unity Party and syncretists (*abangan*) and non-Muslims preferring Golkar or PDI. In addition, some evidence was found that voting reflected a new divide between younger voters concentrated in the cities and urbanized areas and older voters in the rural areas. When the New Order controls were lifted in 1998 the question arose as to whether the traditional social cleavages would reappear or whether society and politics had been permanently transformed by the social engineering and economic development of the New Order.

Table 7.7

Model of Influences on National Mandate Party, 1999 Election

Independent Variable	**b**	**B (*beta*)**	**T**	**Significance of T**
1. Sumatra region	.053	.379	7.818	.000
2. Masjumi-1955	.013	.328	6.820	.035
3. Relative inequality (F5)	-.016	-.287	-6.519	.000
4. PPP-1997	.001	.230	4.825	.000
5. Illiteracy (F4)	-.001	-.155	-3.334	.001
6. Urbanization (F1)	.001	.154	3.264	.001
(Constant)	.013		2.114	.035

Note: R^2 = .60, S.E.E. = .038, F = 67, Significance = .0005.

The analysis in this chapter addressed these issues. Using the powerful statistical technique of multiple regression analysis, the independent effects of a variety of social-based influences on voting choices for the five top parties were measured. Urbanization (F1), which was particularly well measured, influenced the vote for four parties.[15] It enhanced the voting choices for PDI-P and PAN, but was detrimental to PKB and PPP. In other words, we can conclude that the urban–rural divide was a reality in the 1999 election and that it was articulated by these four parties, with urbanites preferring PDI-P or PAN and rural voters tending toward PKB and PPP. Apparently electors choosing Golkar were rather evenly divided between urban and rural areas. Contrary to expectations that urbanization fosters political pluralism, we found a dampening effect on the effective number of parties. Apparently any tendencies toward greater political pluralism in urban areas was overcome by greater exposure to the mass media campaigns of a few wealthy parties, and thus greater concentration of the vote in those parties.

The general Islamicness (F3) of an area had a strong negative impact on the vote for the largest party, PDI-P, attesting to the continued reality of religious-based voting. It had a weak but positive influence on the voting for Golkar and on the number of effective parties. Surprisingly, however, the Islamicness of the context did not help explain voting choices for any one of the three Islamic parties (PPP, PKB, and PAN). Perhaps this finding of no effect is an artifact of the fragmentation of the vote among these three and several smaller Islamic parties in the more orthodox Islamic areas. However, we did discover inheritance from areas supporting Islamic-based parties in the 1955 and 1997 elections on the electoral fortunes of Islamic parties in 1999, which will be discussed later. In other words, more important for the electoral success of PKB, PPP or PAN in the 1999 election than the (general) Islamicness of the community was the level of support for particular parties in previous elections.

In gauging effects of Islam on the direction of the vote, a word of caution is in order. My "seemingly unrelated regressions" can obscure the collective influence of Islam on the outcome of the 1999 election.[16] This can be plausibly measured by simply accumulating the vote for Islamic parties. PKB, PPP, and PAN combined obtained about 30 percent of the vote. If we add the vote for minor Islamic parties, we can infer that Islamic religion likely influenced the voting of approximately one-third of the electorate. If this estimate of one-third of the electorate is compared with the average vote for PPP during the six New Order elections (23 percent), we can conclude that Islamic, religious-based voting increased in the 1999 election. However, if the estimate is compared with the results of the

1955 election, the proportion of voters choosing Islamic parties declined in 1999.

Illiteracy (F4) had a negative impact on the effective number of parties and on the vote for four parties (PDI-P, Golkar, PPP, and PAN), but a positive effect on support for PKB. Since illiteracy and low education are a function of poverty, we can infer that PKB was more successful than any of the other four parties in attracting voters in poorer areas. The negative influence of economic development (F6) on support for PKB is consistent with this inference; these two findings are part of a single pattern.

Areas of higher relative inequality (F5) gave rise to a larger "effective number of parties" (N-index), possibly because in those areas there was a larger proportion of voters whose wealth allowed them some political autonomy. They were thus more able to choose new parties than were poor voters, who were more under the influence of patrons, superiors, and so on. In these areas there was also a higher probability of voting for PDI-P, but a lower probability of votes being cast for PAN or Golkar.

We found a significant regional dimension to the voting for most of the parties, which no doubt encompassed important ethnic factors, such as those bearing on the effective number of parties in Bali and South Sulawesi, discussed earlier. Despite the use of very rough or rudimentary measures (dummy variables), these influences ranked first or second in the models for four out of five parties. Votes for PDI-P and PKB came disproportionately from Java and Bali, those for PAN from Sumatra, and those for Golkar from eastern Indonesia (residual). It is important to note the multiplicity in the findings that arises from the technique of multiple regression. It allows us to isolate and measure the effects of individual variables while simultaneously controlling for the effects of all other variables in the model. Hence, for example, from the model for PDI-P we can infer that its electors came heavily from Java or Bali in addition to those who resided in particular areas of PKI and PNI strength in 1955. In another example, Golkar drew support in areas of eastern Indonesia that were different from the areas where it dominated in the 1997 election, where Masjumi was strong in 1955, where Islamicness was higher, and where relative inequality was lower.

Following up on correlations established in the previous chapter, the legacies of the pattern of voting in 1955 for each of the "big four" (i.e., PNI, Masjumi, NU, and PKI) were subjected to more rigorous empirical testing in this chapter. The regression models, by controlling statistically for the other determinants (independent variables) in the model, enabled us to gauge the independent effects of areas of support for 1955 parties on areas of support for 1999 parties. The

overarching finding is that the effects did not disappear (i.e., the statistical associations in Chapter 6 were not spurious). Second, when the variables in each model are ranked according to relative influence (as measured by the size of the *beta* coefficient), the influences from 1955 were stronger on the three new parties.[17] These findings add further evidence of social-based voting in 1999.

The models also illumine how voting choices changed between the 1997 and the 1999 elections. The votes for PDI-P in 1999 came from areas that voted most heavily for Golkar or PDI in 1997. In contrast, electors choosing PKB and PAN resided largely in areas of PPP strength in 1997.[18] In other words, the evidence here indicates that despite PKB's and PAN's attempts to attract voters across the religious divide, they were largely unsuccessful, contributing rather to the fragmentation of orthodox Muslim votes across three parties (PKB, PAN, and PPP). This is further evidence of the salience of religious-based voting in 1999.

The findings of this chapter can be compared and contrasted to those of Liddle and Mujani. On the basis of their sample survey of individual voters, they assessed the relative impact of seven influences on voters' choice of party, including three "sociological factors" of religion, region or ethnicity, and class.[19] Our studies are mutually reinforcing in that both found a substantial relationship between religion and party choice and between regional or ethnic differences and party choice.

My findings differ, however, with regard to class, party identification, and, possibly, the relative importance of social-based voting. They did not find significant influence of class on voting choice and argue that class cleavage was not articulated by the large parties. But I found some influence of class on support for PDI-P, PKB, and PAN.[20] Second, they were unable to establish persuasively whether voters chose their party because of the preference for the party or for the party leader. In contrast, my intertemporal (cross-election) analysis and finding of "inheritance" from particular parties in 1955 to particular parties in 1999 provides a basis for arguing that the causal arrow runs from party to leader and not vice versa.[21] Reinforcing evidence comes as well from the strength of the party in the electorate during New Order elections, as noted in Chapter 2.

Finally, Liddle and Mujani argue that attachment to national leaders is "by far the most important" of the seven influences on partisan choice they studied. Lacking comparable psychological data collected from surveying individuals, I have little basis to assess their claim except to note the magnitude of the coefficients of determination (R^2) on the models reported in this chapter. If coefficients of determination (R^2) are compared across the six models, they can

be arrayed between a minimum of .35 for the model on PPP and a maximum of .72 for the model of voting for PKB. This means that the PPP model explains 35 percent of the variation among districts, the model for PKB explains 72 percent of the variation, and so on. The (simple) average of the coefficients in all six models is .57. Explanatory models that on average account for 57 percent of the variation are quite respectable for models in the social sciences. The variance left unexplained by the models, the residual, represents the outside limit that can be attributed to individual (psychological) calculus, the unique characteristics of particular areas, and measurement error. In other words, social- and contextual-based influences on voting choice in the 1999 election were at least as important as individual–psychological ones, and may have been more so.

This chapter also had methodological objectives. I have sought to demonstrate how quantitative data, disaggregated to the district level and covering nearly the entire country, can be utilized to test theories, search for patterns, and generate new questions for in-depth research about Indonesian electoral behavior. Due to the relatively large number of units of data collection and analysis (N = 300+), much of the regional variation is preserved and used as an analytical lever in more powerful multivariate statistical techniques. Because they are collected or generated periodically, often at regular intervals (e.g., censuses, elections), these data facilitate intertemporal analysis. Using them is also very cost-effective, as they are routinely collected or generated and publicly available.

NOTES

1. For example, Liddle and Mujani drew a national probability sample of almost 2,500 respondents "within limitations imposed by geography, level of development, population densities, and cost." They report that the difference between partisan choice in the election (population) and in their sample averaged about 12 percent, which is about four times the margin of error usually achieved in voter surveys in Western democracies (±3 percent). See William R. Liddle and Saiful Mujani, "The Triumph of Leadership: Explaining the 1999 Indonesian Vote," 2000, Table III-1.

2. Because of their special characteristics, quite unique in Indonesia, I excluded from the analysis all the districts in the (primate city) of Jakarta and the provinces of East Timor and Irian Jaya. This resulted in the exclusion of 8 percent of total districts and 6 percent of all voters.

3. This index responds to the need for a measure of the number of parties that takes into account their relative attraction or support. The least arbitrary way is to let the vote shares determine their own weights in the following way: A party with a fractional share of 40 percent also receives a weight of .40 so that its weighted value is .40 × .40 = .16. A party with a 10-

percent share receives a much smaller weighted value of .10 × .10 = .01. The Rae fractionalization index (F-index) is thus 1 – ∑ pi, where pi is the fractional share of the *i*th component and ∑ stands for the summation over all vote shares. This F-index varies from 0 to 1, with 0 fractionalization corresponding to extreme concentration (one party winning all votes) and vice versa. See Rein Taagepera and Matthew Soberg Shugart, *Seats and Votes: The Effects and Determinants of Electoral Systems* (New Haven: Yale University Press, 1989), 77–81.

4. An example of data collected by BPS are financial statistics from regional governments. An example of data they generate is the decennial population census.

5. Factor analysis is a statistical technique for classifying a large number of interrelated variables into a limited number of dimensions or factors. It is a useful method for constructing multiple-item scales, where each scale represents a dimension in a more abstract construct. The procedure involved a principal component analysis rotated to an oblimin solution. The eigenvalue of the sixth or weakest factor was 1.015. The total communality or percentage of variance among all the variables that is accounted for by the six factors is 78 percent. This means that 22 percent of the variation in the original twenty-four variables occurs randomly, rather than according to the shared pattern depicted in the six factors.

6. A factor loading is similar to a correlation coefficient; it varies between 0 and 1 and can be interpreted in the same way.

7. Bivariate analysis suggests that the religious teachers indicator is a more valid measure of Muslim than Christian piety. The bivariate correlation between Christians and religious teachers is weaker and negative (–.38) compared to the correlation between Muslims and religious teachers (.45). In other words, in areas where religious teachers were present in public schools, those teachers tended to be Muslim, regardless of the level of Christians in the district. Apparently Christian youth did not obtain religious instruction in the public schools.

8. $N = 1/(1 – F)$.

9. Because of the collapse of PDI in the 1997 election due to a regime-orchestrated internal schism, the effective number of parties during the New Order was operationalized by averaging the N-index across the last two elections (1992 and 1997). In a few districts the index for a single election was utilized due to missing data.

10. In order to make the analysis at least somewhat sensitive to regional effects, regional differences were very roughly operationalized by creating three dummy variables (eastern Indonesia, Java–Bali, and Sumatra) and entering them, alternately, into the regression equations. For explanation and statistical rationale, see Michael S. Lewis-Beck, "Applied Regression," in *Series: Quantitative Applications in the Social Sciences, No. 22* (Beverly Hills, Calif.: Sage, 1980).

11. The average number of effective parties for Sumatra was 4.88, for Java–Bali 3.83, and for eastern Indonesia 3.64. Note the difference between Java–Bali and Sumatra is 1.05, whereas the difference between Java–Bali and eastern Indonesia is only 0.19.

12. Lance Castles, personal communication, July 2000.
13. Evaluation of regression models is a complex topic on which a large literature exits. Suffice it to mention here that several criteria were utilized, including maximizing the adjusted R^2 and minimizing the standard error of the regression.
14. After PDI won about 15 percent of the national vote in the 1992 election, its highest ever, the New Order government orchestrated a split in PDI and it nearly collapsed in the 1997 election, drawing only about 3 percent of the vote. Because of this stronger showing in 1992, I tested for influence from areas of PDI strength in 1992, but they were insignificant, suggesting that PDI support in 1992 may have been "inflated" by orthodox Muslims who temporarily supported the party as the best way to express opposition or criticism of government policies, but who subsequently abandoned PDI in 1997.
15. Urbanization (F1) accounted for the most variance (36 percent) among the twenty-four indicators of the socioeconomic context during factor analysis.
16. For this point I am indebted to Charles Cappell.
17. In the model for PDI-P, PNI–1955 and PKI–1955 ranked first and second, respectively. In the model for PKB, NU–1955 ranked first. In the model for PAN, Masjumi–1955 ranked second. In contrast, the influence of Masjumi–1955 ranked third in the model for Golkar and second in the model for PPP.
18. When Golkar's vote in 1997 was entered into the equations with PKB or PAN, the *beta* coefficients were statistically insignificant.
19. See Liddle and Mujani, "The Triumph of Leadership," Appendix B. These findings are based on a coefficient of .559 for *santri* in their Religious Voting Model and a coefficient of .686 for Javanese in their Ethnic Voting Model. Although they utilize logistic regression in each model, the dependent variables differ, making it impossible to assess whether religion or ethnicity is the stronger influence. They claim that region or ethnicity is stronger, but the empirical basis appears tenuously based on the difference between r = .22 and r = .31 in bivariate analysis.
20. Class measured as vote for PKI in 1955 influenced the vote for PDI-P, and class measured at illiteracy had positive effects on voting for PKB but negative effects on voting for PKB and PAN.
21. Unfortunately, Liddle and Mujani dropped party identification from their multivariate analysis "because party preference and voting are difficult to disentangle analytically since voters choose party rather than candidate."