Following the Lipset-Rokkan cleavage approach, we present an ecological analysis of the electoral outcomes at the regional level of the political parties in 16 European democracies. The search for relationships between voter alignments and the social structure is conducted in terms of a comparative ecology model. Ecological factors at the regional level within each country account for 75% of the variance in support for 93 parties over three elections during the 1970s. More than half of the "regional" variance could be explained by five "structural" properties of the regions: industry, agriculture, affluence, religion, and ethnicity. The impact of these structural properties varied across countries and across party types. Some of the more theoretically interesting variations are discussed for specific countries, individual parties, and party types.

## ECOLOGY OF PARTY STRENGTH IN WESTERN EUROPE A Regional Analysis

SVANTE ERSSON University of Umeå

KENNETH JANDA Northwestern University

> JAN-ERIK LANE University of Umeå

The search for the cleavage bases of party systems is a dominant theme in political sociology. The usual theoretical framework maintains that the support for political parties expresses the cleavages that prevail in society. The cleavage approach in political sociology received much of its impetus from the famous Lipset and Rokkan article on the cleavage sources of voter alignments. They stated:

AUTHORS'NOTE: Some of the data used in the analysis in this article were provided to us by national data archives. We wish to express our gratitude to the Danish Data

COMPARATIVE POLITICAL STUDIES, Vol. 18 No. 2, July 1985 170-205 © 1985 Sage Publications, Inc.

We shall give attention to alignments by such obvious criteria as *region*, *class*, and *religious denomination*, but also to alignments by strictly political criteria of membership in "we" versus "they" groups. We shall consider the possibility that the *parties themselves* produce their own alignments independently of the geographical, the social, and the cultural underpinning of the movements [Lipset and Rokkan, 1967: 3].

The extent to which the electoral strength of political parties varies as a function of structural properties is a task for comparative research. Our purpose is to compare the implications for voter alignments of cleavage structures in 16 European democracies. We focus on the systematic relationship between political party support and social structure at the regional level. A cross-national comparison reveals whether the same structural properties have similar impact in various countries as well as whether the same type of party is dependent upon similar structural properties. Because we focus on structural effects on party strength, we use data on votes cast for parties within geographical areas—we will use the *ecological approach*.

## **CLEAVAGE BASES**

In the Lipset-Rokkan quotation, four factors are mentioned that affect voter alignments: class, religion, region, and political tradition. We introduce a distinction between *structural* and *nonstructural* cleavage bases in order to separate the implications of the social structure for party support. Structural properties refer to enduring social classifications that differentiate among people within a collectivity—class, religion, and ethnicity. Nonstructural properties are transitory factors, such as candidates and issues, that interact with structural properties in electoral choice. Our objective is to estimate how much variation in electoral strength of a party over time can be accounted for by social structure, treating nonstructural properties as residual effects.

Region enters the analysis in two different ways. The dependent variable—the electoral strength of a political party—is measured at

Archives (Odense), Norwegian Social Sciences Data Services (Bergen), SSRC Survey Archive (Essex), Zentralarchiv fur Empirische Sozialforschung (Koln), Inter-University Consortium for Political and Social Research (Ann Arbor), and Frederic Bon (Grenoble). Neither the original collectors of the data nor the data archives bear any responsibility for the analyses or interpretations presented here. We are also grateful to Michael Gallagher and John Coakley for helpful comments on the Irish data. the regional level. Although "region" is also used as a nominal variable to explain variation in party strength, it is not viewed as a structural property. Although political parties may vary considerably in their electoral outcomes between various regions, it does not follow that region accounts for the variation. We approach the regional variable in terms of the distinction by Przeworski and Teune between idiographical and nomothetical variables, and we attempt to explain as much as possible of the regional variation by means of structural properties. Przeworski and Teune (1970: 29) state:

The basic assumption is the names of nations, or of social systems in general, are treated as residual variables that influence the phenomenon being explained but have not yet been considered. Thus such concepts as "culture", "nation", "society", and "political system", are treated as residua of variables, which can be incorporated into a general theory.

It is, of course, an *empirical question* to what extent it is possible to substitute structural variables for region in ecological analysis. The purpose of this article is an exploration in regional analysis using the ecological method. The ambition is not to arrive at a comprehensive answer to the problem concerning the possibility of a political sociology, refraining from the debate concerning an implicit reductionist bias in structural models (Sartori, 1969). Our goal is to estimate whatever links to the social structure the various political parties in Western Europe may have allowing for the possibility of structural variability (Westlund and Lane, 1983). Although structural factors may have different effects on party strength in different party systems, the effects may also be similar and detectable in statistical analysis. It should be emphasized that we deliberately stick to the analysis of aggregate relations-regional electoral outcomes and their correlates in social structure properties—as our focus is upon the political party and not the individual voter. Of course, whatever social links are identified in the subsequent analysis could not without further assumptions be assumed to hold at the individual level. No attempt at ecological inference is made here as our perspective is a macrosociological one (see Ersson and Lane, 1983).

It is uncommon for *comparative* ecological research to focus on the aggregate election results of the political parties at some regional level as the *explanandum*. The most ambitious attempt is the 1975 study by Rose and Urwin, Regional Differentiation and Political Unity in Western Nations, which concluded:

In most nations of the Western world, there is either little dispersion in electoral support for the parties, and thus a low cumulative inequality rating, or else a cumulative inequality rating above the minimum does not lead to regionally distinctive parties because deviations from pure proportionality are based upon status rather than spatial concerns [p. 31].

The Rose-Urwin distinction between status and spatial properties parallels our separation between structural and nonstructural variables, though our concept of structural factors is a broader one. Assuming that spatial factors (i.e. idiographical properties summarized in a regional label) do not account for much of the variation in political party support, we must search for general explanatory variables—the *explanans*.

If political parties are modeled as somehow dependent upon the cleavages in the social structure for their electoral outcomes, identifying the set of structural dimensions becomes a crucial problem. From a theoretical point of view, it seems appropriate to include both religion and ethnicity but to interpret ethnicity broadly as a general cultural structure dimension. The distinction between behavior and consciousness is valid in relation to these two dimensions as it does matter for party outcomes whether a cleavage is manifest or simply latent. Class is also a basis for cleavage in the social structure, but the concept of class is difficult to measure with aggregate data. We will use industry, size of agricultural holdings, and affluence (wealth). These variables all pertain to class cleavages and yet may vary independently in relation to each other.

The specification of the set of structural variables follows the finding in political sociology as reported in well-known studies (Bendix and Lipset, 1957; Lipset and Rokkan, 1967; Janowitz, 1968; Rose and Urwin, 1969; Rose, 1974; and McRae, 1974). Data on the independent variables have been collected on the following indicators:

- (1) Industry—indicators measuring the proportion of those employed within different branches of industry as reported in censuses;
- (2) Agriculture—data on size of farms or types of farmers, for example, percentage freeholders or sharecroppers;

- (3) Affluence—indices measuring the distribution of income between regions;
- (4) Religious Structure—indicators for the share of the population belonging to a certain creed as well as the share of the population that is religiously active; and
- (5) Ethnic Structure—index measuring the share of the population that belongs to certain linguistic group or that adheres to a distinct regional culture.

An effort has been made to choose as similar indicators as possible for each country. There are two problems involved here: (1) a measurement problem—the link between the indicators specified and the ecological property to be measured; and (2) the model specification problem—identifying those ecological variables that result in the best fit. It is difficult to find comparable variables and indicators for a large set of parties in 16 countries. Many other variables and indicators could be considered in an ecological analysis of a single party or the set of political parties in a single country.

There are also problems in defining a "region" in cross-national analysis. We operated on the following considerations: (1) the division into regions should be nation-bound, such that regions are contained within national borders; (2) regional levels should coincide with administrative boundaries; (3) the regional unit should be about equally large in every country studied; and (4) the division into regions must satisfy the requirement that the application of the regression technique is well founded—the number of cases must not be too small. Our conceptual criteria were then compromised by the availability of data for party strength and social structure in the 1970s. Our choices of regional units are given in Table 1.

As shown in Table 1, the combination of data availability, country population, and national differences in region size results in regional units with widely different populations—from 8,930 for Norway to 730,840 for Spain. The effect of region size on ecological analysis is complex. According to Janson (1969: 331-332):

The expected size of the correlation between ecological variables tends to increase with the degree of homogeneity of units and with the size of the units, measured in number of observations. Thus larger homogeneous units will tend to give a higher mean level of correlations than small homogeneous units. In practice, the influence of

Country	Regional Unit	Number	Population*	Mean
Austria	Politischer Bezirk	117	7 522 000	64 290
Belgium	Arr. electoral	30	9 831 000	327 700
Denmark	Kommune	277	5 096 000	18 397
F.R. Germany	Wahlkreis	248	61 520 000	$248\ 065$
Finland	Kommun	496	4 746 000	9 569
France	Departement	95	53 353 000	$561\ 600$
Greece	Nomos	52	9 251 000	177 904
Ireland	County	19	3 199 000	168 368
Italy	Provincia	92	56 722 000	616 543
The Netherlands	Regio	40	13 891 000	347 275
Norway	Kommun	454	4 054 000	8 930
Portugal	Concelho	274	9 830 000	35 876
Spain	Provincia	50	36 542 000	730 840
Sweden	Kommun	275	8 254 000	30 015
Switzerland	Kanton	25	6 307 000	252 280
United Kingdom	Constant Unit	161	55 925 000	347 360

## TABLE 1 Regional Units and Average Size for 16 Countries in the Study

\*Data are for 1978, taken from The Book of World Rankings (Durian, 1979).

homogeneity and size tend to balance each other, as small units are generally more homogeneous than large ones. At any rate, different sets of units will generally produce different matrices of correlations.

Some previous studies within single countries suggest that higher levels of aggregation (i.e., more populous regions) tend to produce higher correlations between social attributes than smaller regions (see Gurr, 1972, p. 34). The effect of region size on this cross-national analysis remains to be determined.

## METHOD OF ANALYSIS

The first step in our analysis is to determine how much regional variation there is to be explained. Among various measures for describing variations in distributions, the variability coefficient (CV) is considered to be simple and handy (Blalock, 1960: 73-74; Allison, 1978: 877). The CV adjusts for different means in different distributions and therefore renders comparisons between groups possible.

The CV is obtained by dividing the standard deviation by the mean value:

$$CV = \frac{s}{\overline{X}}$$
 [1]

The CV measure is sensitive to changes in the number of units, which renders it less attractive to cross-country comparisons than in relation to cross-party comparison within a country. The standardized coefficient of variability takes these difficulties into account. We will employ both measures, in particular a weighted version of the standardized coefficient (SCV<sub>w</sub>; see Martin and Gray, 1971; Smithson, 1982). The SCV<sub>w</sub> is derived by first taking the population size of the regional units into account and then standardizing the scores by means of the square root of the number of units in the country. As there exists no single indicator on the extent of regional variation that meets all requirements, we employ two indicators that balance each other; the CV is biased due to a large number of units.

A special approach may be used to estimate the *stability* of environmental effects on regional voting from one election to the next. If regional factors determined party voting, the percentage of vote cast for party i in a given region would be constant across adjacent elections. However, if candidate and issue factors were determining, the vote for party i would vary idiosyncratically from election t to t + 1. In the aggregate, the amount of variability in the percentage of vote for party i between elections but within the same regions can be computed using the analysis of variance and the associated measure of relationship, *Eta-squared*. The general formula for Eta-squared is:

$$E^{2} = \frac{TSS - WSS}{TSS}$$
[2]

where TSS = total sum of squared deviation and WSS = within group sum of squares.

It is applied to our situation as follows. Consider the percentage vote in for party i in region j in 1972 and again in 1975. Given 30 regions in a country, the total number of election-percentages for party i is 60. Compute the mean percentage vote for party i over all 60 instances.

TSS is the total sum of squared deviations of the election-percentages from the mean party vote. To arrive at WSS, compute the mean party vote in *each* region for 1972 and 1975 and sum the squared deviations of the 1972 and 1975 percentages from their mean. WSS is the sum of all such squared deviations within regions summed over all regions. If there is *no* difference between the percentage vote for party *i* between elections within all regions, WSS will be 0 and E will be 1. The greater the difference between 1972 and 1975, the larger WSS and the smaller  $E^2$ .

In effect, this analysis relies on the identity of the region as a nominal variable predicting to similarity of party voting in adjacent elections. It thus captures the configuration of all environmental variables—social, political, economic, and geographic—in estimating the effect of region on party voting (see Harmel and Janda, 1982: Chap. 2).

The objective of our ecological analysis is to explain why the same party receives differential support in various regions. In ecology models, party votes at some level of aggregation are regressed on environmental properties of the same aggregate unit. How much environmental dependence could theoretically be expected? The finding in the survey tradition is, of course, that party choice depends upon factors other than environmental ones.

In traditional survey research, an individual's voting choice in an election at time t is regarded as a function of the voter's attitude toward a particular candidate of party leader, the voter's opinion on the current election issues, and the voter's party identification:

Attitude toward ca	ndidate —		
Opinion on issues			Voting Choice
Party Identification	1		

Figure A

The first two variables, attitudes toward candidates and opinions on issues, tend to be election-specific and thus are regarded as shortterm forces. The third, party identification, is regarded as a longterm voting predisposition resulting from the process of political socialization.

In ecological research, data are unavailable on the short-term forces associated with voters' views of candidates and issues. In ecological research one also lacks data on voters' party identification, but one can probe the causal structure by studying the structural characteristics of the voters' social environments. Thus the focus of ecological research of electoral behavior tends to be on underlying ecological causes of party preferences rather than on the determinants of candidate choice more generally. Such ecological research assumes that environmental characteristics change relatively slowly. Consequently, the long-term forces that determine party preference will tend to be constant within the same space (the same aggregation of voters) from time t to time t + 1 and will thus tend to exert the same effects in adjacent elections, with equality of effects varying according to the length of time between elections. These considerations give rise to this model:



#### Figure B

According to this model and assuming little change in structural characteristics over time t to t + l, factors SE (1) to SE (n) should have the same effects on party strength in each election year. Ecological analyses of the social environment and party strength over time will never explain all the variance in party strength over regional areas due

to the missing factors: candidates and issues. Not only will the overall explanatory power be less than perfect but the exact effects of the ecological factors in each election will be inaccurately estimated because of the missing factors. In practice, this means that the R-squared values in a regression analysis will be less than unity and the coefficients in the associated equations will vary across elections. The greater the candidate and issue effects, the lower the R-squared value from regressing party strength on structural factors and the greater the variation in coefficients across equations. These observations are not new, but reconsidering them can lead to a different approach to ecological analysis of electoral behavior in order to provide a better estimate of environmental effects on party strength.

Our ecological model introduces into the analysis the differential effects of candidates and issues in adjacent elections to produce alternative estimates of environmental effects on party strength. We will employ a pooled model approach that attempts to remove the differential effects of candidates and issues across elections by using five socioeconomic factors to predict to the percentage vote cast for the same party across three elections (Ersson, Janda, and Lane, 1982). Thus we have

$$\frac{\text{PES}_{T} + \text{PES}_{T+1} + \text{PES}_{T+2}}{3} = f(\text{SE}_{1} + \dots + \text{SE}_{5})$$
[3]

Social structures are not constant, meaning that model 3 has to be applied with care. When the time spans between the election years become large, there is every reason to expect that the environmental impact will be reduced simply due to the fact that the social structure has changed. Our regional ecology analysis covers mainly a single decade. We use the set of social structure variables to predict the average electoral outcome for three consecutive elections in the 1970s.

The estimation of ecology model 3 is based on multiple regression equations, where the model estimation will be done on the basis of tests of the significance of the parameters: parameters that do not meet the restriction of a significance level lower than .05 will not be considered. The significance test is resorted to as a method of sorting out chance results from real relationships, "significant" here meaning "very probably not by chance alone" in a statistical decision approach (Winch and Campbell, 1969).

## COMPARATIVE ECOLOGICAL ANALYSIS BY COUNTRY

Parties or types of parties are said to be dependent on the social structure to the extent that variance in party strength over three consecutive elections can be explained by structural properties in separate regression analyses for each party in each of the 16 countries. The results of these 93 regression analyses appear in 16 tables in Appendix A. The structure of the tables has been devised for the purposes of comparative analysis; a general ecology model is estimated for all the political parties in Western Europe, which gives us a number of values of various parameters to be employed for a comparative meta-analysis. It should be pointed out that wealth and religious orientation have been measured by an index covering several indicators, based on a test procedure in order to arrive at the most suitable ones. Moreover, the partial effects of the different social structure dimensions are measured in terms of standardized coefficients following the advice to look for latent variables in ecological research (Hammond, 1979). It was considered necessary to insert a measure of multicollinearity  $(R^2D)$  as it may be expected that some of the social structure dimensions may not be independent of each other in all countries. This mass of coefficients is difficult to interpret in toto, but patterns emerge when the coefficients are averaged by country and the countries ranked by size of regional effects, as in Table 2.

We see in Table 2 the powerful effects of "region" on party strength in Western Europe as measured by the Eta-squared statistic. The percentages of votes cast for parties in a country tend to vary systematically across regions over multiple elections. Regional factors explained more than half of the variance in party strength in every country except Spain and Greece, where region accounted for only .48 and .40 of the variance, respectively. In 11 of the 16 countries, regional factors explained more than .75 of the parties' electoral strength. Belgium reaches the high point in regional effects with, on average, more than 90% of the vote cast for six Belgian parties associated with voting patterns in Belgium's 30 regions.

Our ecological approach leads us to probe beyond simple regional effects to determine the underlying structural properties affecting party strength. Our attempts at "recapturing" these regional effects with only five structural variables—industry, agriculture, affluence,

Country	Number of Parties	Regional Effects: Eta*	Structural Explanation: R <sup>2**</sup>	Difference E <sup>2</sup> - R <sup>2***</sup>
BELGIUM	6	.91	.71	.20
IRELAND	3	.89	.62	.27
PORTUGAL	3	.89	.49	.40
BRITAIN	5	.87	.52	.35
SWEDEN	6	.86	.42	.44
AUSTRIA	4	.86	.46	.40
FINLAND	9	.84	.42	.42
GERMANY	3	.79	.51	.38
NETHERLANDS	10	.78	.52	.36
FRANCE	5	.75	.23	.52
ITALY	7	.75	.29	.46
NORWAY	8	.73	.29	.44
SWITZERLAND	4	.69	.38	.31
DENMARK	11	.64	.31	.33
SPAIN	5	.48	.21	.27
GREECE	4	.40	.06	.34
Mean =		.75	.40	.35

## TABLE 2 16 European Countries Ordered by Size of Regional Effects on Party Strength in Three Elections

\*The Eta value represents the proportion of variance in party strength over all three elections that can attributed to regional factors, whatever they might be.

\*\*R value represents the proportion of variance in party strength over all three elections that can be "explained" by the four structural factors in our analysis. \*\*The difference between the Eta and R coefficients indicates our inability to "recapture" the regional variance by the structural variables in our ecological anlysis.

religion, and ethnicity—varied in success from country to country. When included in regression equations and run for all 93 parties, these variables produced R-squares that approached the Eta-squares for some parties but fell far short for others. Summarized by country in Table 2, the mean R-square was highest again for Belgium—where our structural factors came close to "reproducing" the regional effects—and lowest in Greece, where structural factors explained almost none of the variance.

Belgium, where the ecological approach appears to have worked best, deserves closer study for insight into the analysis. Examination of the six regression equations for Belgium in Appendix A reveals that religion (percentage Catholic) and ethnicity (percentage speaking French or Dutch) tend to have high coefficients over all six parties. This reflects the strong coincidence of religious and ethnic patterns with regions within Belgium. The difference between the values for Eta-square and R-square in each country measures our success in finding structural factors that explain variations in party strength by region. The difference of .20 for Belgium between Eta-square (.91) and R-square (.71) contrasts sharply with the difference of .53 for France, where region accounts for .75 of the variance in party strength but our five structural factors recapture only .23 of the variance.

On the average, about .75 of the variance in voting for parties in each of the 16 countries can be attributed to "region." On average, about .40 of the variance in party voting can be explained by our five structural factors. On average, the difference between the regional and structural explanations of party strength is .35. Returning to the question concerning the size of the region and its effect on ecological correlations, we find no significant relationship between the population in a region and either Eta-square or R-square for these 16 countries. Differences in region size by country do not appear to bias our ecological analysis.

## COMPARATIVE ECOLOGICAL ANALYSIS BY PARTY TYPES

The findings above (and reported in detail in the Appendices) concerning the regional variation in party strength suggest that an ecological analysis has value. There is enough regional variation in electoral outcomes (the CV and the SCV<sub>w</sub> scores) to warrant the estimation of an ecology model; moreover, the regional pattern in the variation in support for political parties tends to remain rather stable over time. This indicates the relevance of social structure variables as potential determinants of the variation in political party strength at the regional level (the Eta-squared scores). We find that the general social ecology model, specified on the basis of theoretical distinctions in the political sociology literature, performs well in identifying a set of structural properties (industry, agricultural holdings, affluence, religion, and ethnicity). These describe electoral niches that have implications for the electoral outcomes of political parties (the R-squared values). It may be admitted that the general ecology model does not capture all the variation that is left over when the impact of time- and election-specific circumstances have been taken into account (the Eta-squared values), which implies that region and political

Country	CV	SCVw	Type of Party	CV	SCVw
GREAT BRITAIN SWITZERLAND BELGIUM SPAIN NETHERLANDS FINLAND NORWAY PORTUGAL FRANCE AUSTRIA IRELAND ITALY SWEDEN GREECE DENMARK F. R. GERMANY	1.49 .94 .71 .74 .62 .95 .76 .64 .47 .48 .28 .40 .46 .32 .40 .46 .32 .41 .27	1.55 1.10 1.15 .93 .38 .34 .34 .42 .60 .39 .25 .38 .25 .38 .26	ETHNIC COMMUNIST RELIGIOUS AGRARIAN OTHER LIBERAL CONSERVATIVE SOCIALIST	2.20 .81 .62 .64 .61 .46 .40 .35	2.35 .66 .71 .49 .44 .39 .30 .33

TABLE 3 Average Regional Variation by Country and Type of Party

tradition are not empty residuals. More effort in the area of social environment impact analysis would be conducive to the understanding of the cross-sectional variation in electoral outcomes of individual political parties in Western Europe.

The ecological analyses presented in the 16 tables in Appendix A rely on two measures of the variation in the electoral support of the political parties, the CV scores and the  $SCV_w$  values. These measures display a pattern by types of parties as well as countries. We classify the political parties into eight party types: Communist, Socialist, religious, Liberal, Conservative, agrarian, ethnic, and other. Whereas the CV measure is appropriate for the regional variation within a country, the  $SCV_w$  measure reveals the regional variation between political parties in various countries (see Table 3).

It is typical of Western Europe that countries as well as types of political parties differ extensively in terms of the regional variation in party support. Some nations like Great Britain, Belgium, and Switzerland display very high  $SCV_w$  scores due to the presence in these party systems of parties that put up candidates in some but not all constituencies. Among the regionally dispersed party systems we also count the Netherlands and Spain, which have considerably higher  $SCV_w$  scores than regionally homogeneous party systems, as in Germany and Sweden. Not surprisingly, ethnic parties have a regional variation that sets them apart from the other types of parties.

It may be pointed out that Communist parties tend on the average to be more regionally dispersed than the other types of parties.

The European democracies show a stable regional variation in voter alignments for the different types of parties. In Austria, for example, the OVP has an  $E^2$  of .98, which means that region "explained" 98% of the OVP's percentage of vote won in the three elections studied. That is, the OVP won about the *same* percentage of the vote in 1975 as it did in 1971 and even in 1962 in each of Austria's Bezirke. The SPO (Eta<sup>2</sup> = .93) and the FPO (Eta<sup>2</sup> = .90) also showed stable regional variation, but the KPO (Eta<sup>2</sup> = .61) did not. Not surprisingly, parties without programmatic social ties are less stable in their regional outcomes (Liberal and Conservative parties) than political parties that explicitly appeal to particular social groups (religious, ethnic, and Communist parties).

We find that the size of a political party is relevant to regional variation expressed in the SCV<sub>w</sub> scores and the Eta-squared statistics. One may expect that the larger the political party, the less its regional variation. Large parties by their very nature would display a tendency to penetrate every region of a nation. It is surprising that the correlation between party size and extent of regional variation is not pronounced (-.40), although the direction of relationship is as hypothesized. This means that many small parties are characterized by their effort to receive support in most regions. Only the set of ethnic parties show a tendency to focus narrowly upon special regions.

Another hypothesis is that large regional variations are more stable over time than small regional variations, because large regional variations clearly would be the result of structural factors that would be stable over time. Small variations, on the other hand, could be accounted for by means of other factors like issues or candidates. However, the correlation between extent of regional variation and stability over time is weak (.24). Interestingly, small regional variations may be stable over time, reflecting a social niche. Thus, even if the extent of regional variation in Western Europe were small, we would still have to conclude that an ecology analysis may be useful.

# EVALUATION OF THE ECOLOGICAL ANALYSIS

The findings of the model estimations show convincingly that a social structure model is relevant to the explanation of party electoral

outcomes in Western Europe. Predicting to the outcomes of three elections, a general model of properties of the social structure captures roughly 40% of the variation in support for the political parties in Western Europe. Moreover, we find that the social structure implications account for a considerable portion of the variation in electoral outcomes that remains when time-specific circumstances are discounted (mean of  $E^2 = .75$ ). Relating the average value of the R to the overall very high average of the Eta-squared statistic we find that, on the whole, a general structural model explains well.

However, the implications of the social structure for electoral outcomes are not the same in all party systems. The relationship between social structure and party strength is characterized by structural variability. First, consider the country differences: In some political systems like Belgium and Ireland social structure explains about two-thirds of the regional variation, whereas in systems like Greece, Spain, and France the structural properties in our model only explains one-quarter or less. Second, social structure affects political parties differently-ethnic parties being much more dependent upon social structure than Liberal parties or Conservative parties. We also find that religious parties on the average display higher R-squared values than Communist or Socialist parties in our model. Third, we hypothesize that the implications of the social structure for electoral outcomes is stronger the less the regional variation in party support is influenced by time-specific circumstances. Thus, we expect that the more stable the regional variation as measured by the E-squared score, the more relevant social structure is for the determination of electoral outcomes. The data support our expectation as the correlation between the  $E^2$  scores and the R-squared scores is .69. However, the association is not perfect, meaning that factors other than social structure are relevant to the explanation of a regionally stable variation.

We wish to emphasize one major source of regional variation in voter alignments not included in our analysis: political tradition. There is no way to estimate the impact of this factor on the basis of the data reported here. Political traditions remain a residual in our analysis, and it is not possible to separate it from a genuine regional factor. However, the major finding is that structural determination is a fundamental fact of most party systems in Western Europe. Taking into account the impact on electoral outcomes by nonstructural factors (issues, candidates, political tradition, region) we may rank the various party systems in terms of extent of *structural determination* from high to low: Belgium, Ireland, the Netherlands, Great Britain, Federal Republic of Germany, Portugal, Austria, Finland, Sweden, Switzerland, Denmark, Italy, Norway, France, Spain, and Greece. Some types of political parties are structurally determined parties. The following ranking distinguishes between the political parties: ethnic, religious, agrarian, Communist, Socialist, Conservative, and Liberal parties.

The Beta-weights and the t-statistics contained in Appendix A indicate some interesting comparative findings about cleavage structures. Most party systems in Western Europe display the impact of social structure dimensions. Only in the case of Greece is it difficult to establish a structural basis for voter alignments. In France, the Netherlands, and Sweden the social structure implications for the variation in party strength derives in particular from religion; in the case of Finland, however, language constitutes the most salient cleavage dimension. We may say that these nations have a monocausal cleavage basis in contradistinction to the other countries that are characterized by a dual or a three-dimensional cleavage structure. Ireland, Italy, and Norway belong to the latter category; in Italy it is a matter of religion, wealth, and agricultural structure, whereas the cleavage structure of Irish politics consists of language. religion, and industry. Voter alignments in Norway express the cleavage dimensions of industry, religion, and language.

The overall findings indicate that language or ethnicity and religion usually do not constitute cleavage dimensions simultaneously. The pure case of a cleavage structure constituted of religion and language is Belgium. Religion tends to enter together with either industry or agricultural structure as cleavage dimensions in Switzerland, Spain, Portugal, and Austria. Language is combined with class-oriented cleavage dimensions in Great Britain. When ethnicity constitutes a cleavage basis, it is usually of great importance, but ethnicity as a cleavage is typical of only a few countries. However, religion either as confession or religious orientation is present in most West European countries as a cleavage dimension. The same applies to industry.

The cleavage pattern characteristic of the different types of political parties is less complex than the country pattern. Monocausal relationships characterize three types of political parties: ethnic, religious, and agrarian. The electoral strength of Socialist parties tends to vary as a function of two cleavage bases: industry and religion, whereas Communist parties have only one common structural denominator, (no) confession or religious orientation. Most interestingly, the strength of Communist parties is not generally affected by such structural properties as industry, size of agricultural units, or wealth. These structural properties may have considerable impact on the electoral strength of a Communist party in one country, but such relationships are not invariant. Finally, we should mention that Liberal and Conservative parties also lack invariant structural connections.

The amount of explained regional variation tends to be positively related to the size of a party (r = .25). It might have been expected that small parties—which obviously tend to have very special electoral niches— would have penetrated these niches to such an extent that their election returns in these niches would be far more stable, as well as far more clearly determined by ecology than for large parties facing a more even regional distribution. A large variation on the regional level is not a necessary or sufficient condition for a stable variation, and parties that are highly unbalanced on the regional level are not the only ones determined by social ecology. In other words, even the major parties in a party system demonstrate structural links between election results and the social structure.

## CONCLUSION

A basic theme in political sociology focuses on the implications of the social structure for voter alignments. How much do structural properties matter in relation to other factors, and what are the implications of each structural factor? A comparative ecological analysis that estimates the relationships between social structure and electoral outcomes may shed light upon the extent to which structural connections typical of one country or one type of political party indicate invariant causal patterns.

Our comparative analysis is based on the estimation of a general structural model for the average electoral outcomes of two elections for all political parties in Western Europe during the 1970s. Our data are  $SCV_w$  values measuring the regional variation in the dependent variable, Eta-squared measures that capture the regional stability in the dependent variable or the effect of non-time-specific circumstances on party support, R-squared values indicating the total

					ts			
	SCV <sub>w</sub> Values	E <sup>2</sup> Values	R <sup>2</sup> Values	Industry	Agriculture	Wealth	Religion	Language
Country K=16	.35	.35	.36	.26	.45	.15	.37	.31
	(.00)	(.00)	(.00)	(.04)	(.00)	(.51)	(.00)	(.00)
Type of political	.57	.28	.32	.23	.07	.10	.42	.48
party K=8	(.00)	(.00)	(.00)	(.00)	(.52)	(.29)	(.00)	(.00)

TABLE 4

NOTE: The entries in the table are the  $E^2$  values (and significance levels) computed from the raw SCV<sub>W</sub>,  $E^2$ ,  $R^2$  values, and Beta-weights for the 93 parties in Appendix A.

strength of structural connections as well as the Beta-weights measuring the partial effects of each of the structural factors. Do variations in these main parameters vary more by types of political parties or by country? Table 4 contains a one-way analysis of variance of these "meta-data."

Table 4 reports an analysis of the variance in the distribution of  $SCV_w$ , Eta-squared, R-squared values, and Beta-weights for the party data in Appendix A when grouped by *country* and also when grouped by *type of party*. In this table, the observed values of  $SCV_w$ , Eta-squared, R-squared, and Beta-weights for each of the 93 parties are analyzed when the parties are grouped into their 16 countries and again when the parties are grouped into eight types. From this meta-analysis of the original coefficients, we see that the country environment explains more of the regional stability in electoral outcomes (represented by  $E^2$ ) and in ecological effects on party support (represented by  $R^2$  values and Beta-weights) than does the party type. However, the party type explains somewhat more of the variation in regional voting (represented by  $SCV_w$ ).

Our findings disclose considerable structural variability. A social ecology model explains well for the components of each national party system, but the Beta-weights for each of the factors vary cross-nationally.

## APPENDIX A Regression Analyses of 16 Countries

#### AUSTRIA: Regression analysis

Party		Independent variables	r	Beta	t-stat	R <sup>2</sup> D	R <sup>2</sup>	Adj R <sup>2</sup>	E2	cv	scv <sub>w</sub>
ÖVP	1:	Industrial employment	51	49	-15.61	.03	.67	.67	.98	.281	.269
	A:	Small units	.31	.16	4.57	.19					
	W:	Income	28	.00	.07	.22					
	C:	Catholics	.63	.56	17.01	.14					
	RO:	_									
	L:	German	.11	.18	5.66	.09					
SPÖ	1:	Industrial employment	.52	.35	9.76	.14	.63	.62	.93	.256	.224
	A:	Small units	29	00	08	.35					
	W:	Income	.18	13	-3.48	.25					
	C:	-									
	RO:	Secular	.66	.65	14.66	.46					
	L:	German	14	28	8.29	.07					
FPÖ	1:	Industrial employment	04	05	97	.08	.18	.16	.90	.539	.494
	A:	Big units	.21	.21	4.17	.02					
	W:	Income	.32	.43	7.34	.29					
	C:	Evangelicals	.03	16	-2.67	.33					
	RO:	_									
	L:	German	.03	04	72	.07					
KPÖ	1:	Industrial employment	.29	.10	2.14	.14	.36	.35	.61	.826	.692
	A:	Small units	27	.04	.70	.35					
	W:	Income	.17	11	-2.31	.25					
	C:	_									
	RO:	Secular	.58	.63	10.72	.46					
	L:	German	.06	04	93	.07					

#### **BELGIUM:** Regression analysis

DELGI	5 WI. 110	gression analysis						Adj			
Party		Independent variables	r	Beta	't-stat	R <sup>2</sup> D	R <sup>2</sup>	R <sup>2</sup>	E <sup>2</sup>	cv	scvw
PSC	1:	Industrial employment	.27	.09	1.94	.21	.87	.86	.98	.342	.602
	A:	Small units	.44	.03	.57	.25					
	W:	Index	39	.02	.45	.27					
	C:	*									
	RO:	Index	.89	.72	13.42	.47					
	L:	Dutch	.72	.28	5.39	.42					
PSB	1:	Industrial employment	.04	.17	2.50	.18	.67	.65	.94	.281	.504
	A:	Small units		11	-1.57	.26					
	W:	Index	.08	24	-3.31	.28					
	C:	*									
	RO:	Index	71	60	-7.16	.44					
	L:	French	.60	.35	4.44	.38					
PLB	1:	Industrial employment	47	40	3.88	.21	.29	.25	.71	.312	.525
	A:	Small units	.08	.13	1.23	.25					
	W:	Index	.03	05	45	.27					
	C:	•									
	RO:	Index	.01	.13	1.03	.47					
	L:	Dutch	32	29	-2.36	.42					
РСВ	1:	Industrial employment	.08	.21	3.31	.18	.73	.72	.97	1.158	1.740
	A:	Small units	21	.15	2.32	.26					
	W: C:	Index *	.10	18	-2.75	.28					
	RO:	Index	77	77	-10.17	.44					
	L:	French	.57	.32	4.54	.38					

Downloaded from http://cps.sagepub.com by Kenneth Janda on November 12, 2007 © 1985 SAGE Publications. All rights reserved. Not for commercial use or unauthorized distribution.

CVU	j.	Industrial employment	31	08	2 30	21	91	01	90	052	1 446
0.0	A:	Small units	.29	.02	41	25		.51	.55	.552	1.440
	W:	Index	26	05	-1.43	.27					
	C:	*									
	RO:	Index	.48	11	-2.45	.47					
	L:	Dutch	.95	1.02	23.82	.42					
R.W	1.	Industrial amployment	22	02	40	21	77	70	00	1 017	0.005
	۲. A·	Small units	- 46	_ 12	.49	.21	.//	.76	.89	1.217	2.065
	W:	Index	.55	.31	5 11	27					
	C:	*			0.11						
	RO:	Index	61	06	80	.47					
	L:	Dutch	80	66	-9.65	.42					
DENM	ARK: R	egression analysis						A .I:			
Party		Independent variables	r	Reta	t-etat	B <sup>2</sup> D	<sub>B</sub> 2	R2	⊏2	CV	SCV
			•	Dota	( atur	n b			L		30 V w
SD	1:	Industrial employment	.41	.41	13.73	.06	.31	.30	.69	.269	.145
	A:	Small units	.17	.05	1.78	.05					
	W:	Index	00	36	-9.75	.39					
	C:	-									
	RO:	Index	29	44	-11.93	.39					
	. L:	-									
RV	1:	Agricultural employment	.18	.26	4.48	.66	.05	.05	.52	298	171
	A:	Big units	15	13	-3.66	.13	.00	.00	.01	.200	
	<b>W</b> :	Index	12	.08	1.44	.59					
	C:	-									
	RO:	Index	.08	07	1.35	.54					
	L.										
KF	1:	Agricultural employment	38	16	3.05	.66	.17	.16	.44	.421	238
	A:	Big units	.13	.02	.56	.13					
	W:	Index	.39	.23	4.64	.59					
	C:										
	HO:	Index	31	05	-1.15	.54					
	L:	-									
RFB	1:	Agricultural employment	19	16	-2,74	.66	.08	.08	.57	.300	.138
	A:	Small units	04	04	-1.06	.05					
	W:	Index	.24	.25	4,99	.56					
	C:	-									
	HU:	Index	06	.20	4.14	.54					
	с.										
SF	1:	Industrial employment	.33	.19	8.86	.05	.63	.63	.79	.642	.348
	A:	Big units	.15	00	08	.13					
	W:	Index	.64	.27	9.32	.46					
	C:	-									
	RO:	Index	73	54	-19.83	.39					
	L:										
DKP	1:	Industrial employment	.26	.15	5.79	.06	.45	.45	.63	.651	,415
	A:	Small units	.09	02	90	.05					
	W:	Index	.48	.10	3.04	.39					
	C:										
	HO:	Index	65	57	-17.16	.39					
	<b>L</b> .:	-									
vs	I:	Industrial employment	.04	13	-5.95	.06	.62	.62	.84	.605	.369
	A:	Small units	.10	.04	1.71	.05					
	W:	Index	.70	.46	16.95	.39					
	U: PO-		70	40	15 70	20					
	L:	_	70	43	-15.78	.39					

(continued)

KRF	I: A:	Industrial employment Small units	23 26	14 17	4.79 5.81	.06 .05	.29	.29	.75	.639	.380
	W: C:	Index	31	03	56	.39					
	RO: L:	Index	.49	.43	11.34	.39					
VE	1:	Agricultural employment	.71	.68	16.82	.66	.54	.54	.72	.349	.306
	A:	Big units	20	11	-4.37	.13					
	W: C:	Index 	48	.18	4.86	.59					
	RO:	Index	.59	.20	5.79	.54					
	L:	-									
CD	1:	Industrial employment	.06	01	26	.05	.12	.12	.36	.445	.252
	A:	Big units	.15	.05	1.05	.13					
	W: C:	Index 	.34	.32	5.79	.46					
	RO:	Index	22	02	43	.39					
	L:	-									
FRP	1:	Industrial employment	11	10	-2.46	.06	.18	.18	.79	.174	.129
	A:	Small units	19	11	-2.72	.05					
	W:	Index	.02	.33	6.60	.39					
	C:										
	RO:	Index	.31	.47	9.59	.39					
	L:	-									

#### F.R. OF GERMANY: Regression analysis

1.11.01	GERN	ANT: Regression analysis						Adj.			
Party		Independent variables	r	Beta	t-stat	₽²D	R²	R <sup>2</sup>	E2	cv	scvw
SPD	1:	Industrial employment	.25	.26	10.13	.06	.55	.54	.90	.237	.148
	A:	Small units	.30	00	15	.34					
	W:	Index	.48	.40	14.49	.18					
	C:	Protestants	.55	.59	18.86	.38					
	RO:										
	L:	Refugees	.21	16	-4.79	.44					
CDU	1:	Industrial employment	13	14	-7.31	.07	.74	.74	.95	.230	.146
	A:	Small units	37	06	-2.82	.33					
	W:	Index	53	36	-17.38	.18					
	C:	Catholics	.74	.74	30.77	.38					
	RO:	-									
	L:	Refugees	27	.14	5.73	.42					
EDP	1:	Industrial employment	10	12	-2.64	.06	.23	.22	.51	.343	.213
	A:	Small units	.25	.15	3.77	.34					
	W:	Index	.26	.17	4.79	.18					
	C:	Protestants	.38	.37	9.14	.38					
	RO:	_									
	L:	Refugees	.11	08	-1.80	.44					
	D: Rec	pression analysis									
	D. nog	greasion analysis						Adj.			
Party		Independent variables	r	Beta	t-stat	R <sup>2</sup> D	R <sup>2</sup>	R <sup>2</sup>	E2	cv	scvw
SKDL	ł:	Industrial employment	.21	.19	6.82	.36	.26	.26	.93	.588	.206
	A:	Small units	.25	.21	8.83	.11					
	W:	Index	.10	08	-2.63	.39					
	C:										
	RO:	Index	40	28	-10.51	.32					
	L:	Swedish	29	20	-8.65	.09					
FINLAN Party SKDL	h(). L: D: Reg h: A: W: C: RO: L:	Refugees gression analysis Independent variables Industrial employment Small units Index — Index Swedish	.11 r .21 .25 .10 40 29	08 Beta .19 .21 08 28 20	1.80 t-stat 6.82 8.83 2.63 10.51 8.65	.44 R <sup>2</sup> D .36 .11 .39 .32 .09	R <sup>2</sup> .26	Adj. R <sup>2</sup> .26	<b>E<sup>2</sup></b> .93	CV .588	SCV .20

TPSL	1:	Industrial employment	.33	.30	10.03	.36	.15	.15	.75	1.214	.432
	A:	Medium sized units	12	08	-2.97	.14					
	W:	Index	.23	.03	.97	.43					
	BO:	Index	22	04	-1.29	.30					
	L:	Swedish	17	18	-7.30	.09					
			60		20.01	20	40	45	00	530	107
SDP	1:	Small units	.63	.48	20.01	.30	.40	.45	.90	.570	.167
	w:	Index	.53	.25	10.30	.39					
	C:	-									
	RO:	Index	38	05	-2.32	.32					
	L:	Swedish	00	~.09	4.40	.09					
SMP	I:	Industrial employment	35	24	-8.31	.36	22	.21	.42	.585	.333
	A:	Small units	.13	.02	.63	.11					
	W:	Index	32	16	-5.47	.39					
	RO:	Index	.12	.01	.36	.32					
	L:	Swedish	29	27	-11.10	.09					
KESK	1.	Industrial employment	- 57	_ 33	19 46	36	73	73	95	597	427
KESK	A:	Medium sized units	.35	.19	13.33	.14		.75	.00		.427
	W:	Index	60	28	-15.80	.43					
	C:	~	07		F 00	20					
	HU:	Swedish	.27	.08	-36.68	.30					
	-	<b>U</b> IIU		.02	00.00						
LKP	1:	Industrial employment	.27	01	47	.36	.46	.46	.88	.787	.279
	A:	Medium sized units	37	21	-10.40	.14					
	C:	-	.04	.40	10.99	.43					
	RO:	Index	37	05	-2.05	.30					
	L:	Swedish	32	35	-17.32	.09					
кок	1:	Industrial employment	.30	.11	4.71	.36	.47	.47	.94	.617	.211
	A:	Medium sized units	08	.04	2.09	.14					
	W:	Index	.46	.52	20.83	.43					
	RO:		20	.17	7.62	.30					
	L:	Swedish	44	52	-26.29	.09					
SKI		Induction encolor and	00		2.01	20	10	00	70	001	070
SKL	Π: Δ·	Medium sized units	.08	.11 - Ò4	2.91	.36	.10	.09	.70	.831	.272
	W:	Index	.06	.05	1.35	.43					
	C:	<b>T</b> .									
	RO:	Index	02	.12	3.38	.30					
	L.	Swedisit	21	51	-3.00	.05					
RKP	1:	Commercial employment	05	.01	1.12	.60	.96	.96	.99	2.767	1.105
	A:	Small units	15	.01	2.40	.11					
	C:	-	.05	00	17	.02					
	RO:	Index	.25	.05	8.19	.30					
	L:	Swedish	.98	.97	184.43	.09					
FRANCI	E: Reg	ression analysis						A.J:			
Party		Independent variables	r	Beta	t-stat	R <sup>2</sup> D	R <sup>2</sup>	R <sup>2</sup>	E2	cv	scv
											vv
PCF	1:	Industrial employment	.11	03	53	.23	.48	.47	.96	.371	.369
	A: W∙	Snarecroppers Index	.21	.09	3.78	.14					
	C:	Protestants	.01	.16	3.55	.08					
	RO:	Index	64	60	12.21	.24					
	L:	-									

(continued)

PS	l: A: W: C: RO: L:	Industrial employment Small units Index Protestants Index *	13 19 25 .02 23	10 17 20 .11 35	-1.67 -2.48 -2.75 1.91 -5.96	.20 .35 .42 .09 .13	.18	.16	.83	.385	.404
PSU	l: A: W: C: RO: L:	Industrial employment Small units Index Protestants Index *	.21 .09 .34 –.09 .06	.09 07 .38 10 .17	1.43 -1.04 5.27 -1.69 2.91	.20 .35 .42 .09 .13	.16	.15	.65	.913	.803
REF	l: A: W: C: RO: L:	Industrial employment Small units Index Protestants Index *	01 .04 .06 00 .25	01 .05 .10 07 .30	13 .65 1.38 -1.22 4.94	.20 .35 .42 .09 .13	.08	.07	.66	.502	.458
UDR	l: A: W: C: RO: L:	Industrial employment Sharecroppers Index Protestants Index *	.02 32 16 .00 .45	.05 23 09 07 .41	.85 -4.23 -1.63 -1.30 7.33	.23 .14 .17 .08 .17	.27	.26	.64	.192	.183
GREAT	BRIT	AIN: Regression analysis						Adi.			
Party		Independent variables	r	Beta	t-stat	R <sup>2</sup> D	R <sup>2</sup>	R <sup>2</sup>	E2	cv	scvw
CONS	l: A: W: C: RO: L:	Employers & Managers Employment Car density Anglicans — Englishspeaking	.61 03 .49 .21	.46 23 .28 .15 .43	12.09 6.98 6.71 4.24 14.03	.48 .30 .56 .37 .20	.63	.63	.89	.293	.146
LAB	l: A: W: C: RO: L:	Employers & Managers Employment Car density Anglicans  Englishspeaking	76 50 66 41 01	51 26 20 08 17	-14.32 -8.37 -5.27 -2.60 -6.04	.48 .30 .56 .37 .20	.69	.68	.87	.298	.195
LIB	l: A: W: C: RO: L:	Employers & Managers Employment Car density Anglicans – Englishspeaking	.41 .46 .42 .34 –.10	.17 .32 .13 .11	3.22 6.95 2.22 2.34 1.81	.48 .30 .56 .37 .20	.30	.29	.63	.748	.426
SCOT	l: A: W: C: RO: L:	Prof. Workers Employment Car density Anglicans – Englishspeaking	14 .37 12 19 .11	.04 .65 21 28 .19	.77 11.40 3.19 4.85 3.82	.31 .35 .53 .38 .17	.33	.32	.97	2.647	2.560
WELSH	l: A: W: C:	Unskilled Workers Employment Car density Non-Conformists	00 .21 .03 .49	11 .06 14 39	-2.23 1.50 -2.42 -5.61	.55 .29 .64 .76	.63	.62	.98	3.484	4.416

#### GREECE: Regression analysis

,	Independent variables	r	Beta	t-stat	R <sup>2</sup> D	R <sup>2</sup>	Adj. R <sup>2</sup>	E2	cv	scvw
ND I: A: W: C: RC L:	Industrial employment Size of units Index • O:	.03 11 17	.09 10 21	1.05 -1.26 -2.46	.18 .04 .15	.05	.03	.46	.174	.227
PASOK I: A: W: C: R( L:	Industrial employment Number of Index • O:	.02 .00 .06	00 .01 .07	05 .17 .77	.15 .02 .17	.0	.0	.10	.175	.200
EDHIK I: A: W: C: R( L:	Industrial employment Number of Index • O:	07 .17 01	08 .17 .05	93 2.14 .52	.15 .02 .17	.04	.02	.16	.346	.675
KKE I: A: W: C: R( L:	Industrial employment Size of units Index • O: — —	.10 .26 .27	.06 .27 .26	.67 3.61 3.22	.18 .04 .15	.15	.13	.90	.583	.429
IRELAND: F	Regression analysis						Adj.			
Party	Independent variables	r	Beta	t-stat	R <sup>2</sup> D	R <sup>2</sup>	R <sup>2</sup>	E2	cv	scvw
										264
FF I: A: W	Service employment . – . –	37	18	-1.43	.11	.53	.49	.89	.104	.204
FF I: A: W: C: R(	Service employment : – : – : Catholics O: – Irish	37 .48 70	18 .15 56	-1.43 1.08 3.71	.32	.53	.49	.89	.104	.204
FF I: A: W: C: R( L: FG I:	Service employment  Catholics O: - Irish Service employment	37 .48 .70 67	18 .15 .56 68	-1.43 1.08 3.71 -5.84	.32 .38 .11	.53	.49	.89	.104	.340
FF I: A: WW C: R( L: FG I: A: WW C: R	Service employment           -           -           Catholics           O:           -           Service employment           :	37 .48 .70 67 31	18 .15 .56 68 42	-1.43 1.08 3.71 -5.84 -3.18	.32 .38 .11	.53	.49 .55	.89 .88	.104 .167	.340
FF I: A: W: C: Rf L: FG I: A: W: C: Rf L:	Service employment  Catholics Catholics  Irish Service employment  Catholics 0 - Irish	37 .48 .70 67 31 .06	18 .15 .56 68 42 .08	-1.43 1.08 3.71 -5.84 -3.18 .58	.11 .32 .38 .11 .32 .38	.53	.49 .55	.89 .88	.104 .167	.340
FF I: A: W C: R FG I: A: K W C: C: R L L LAB I: A: W W	Service employment  Catholics  Irish Service employment  Catholics O: - Catholics O: - Irish Service employment  	37 .48 .70 67 31 .06 .77	18 .15 .56 68 42 .08 .69	-1.43 1.08 3.71 5.84 -3.18 .58 7.47	.11 .32 .38 .11 .32 .38 .11	.59	.49 .55 .72	.89 .88	.104 .167 .582	.340
FF I: A: WW C: RR L: FG I: A: A: WW C: RR L: LAB I: A: WW C: RR C: RR C: C: C: RR C: C: C: RR C: C: RR C: C: RR C: C: C: C: RR C: C: C: RR C: C: C: C: C: C: C: C: C: C: C: C: C:	Service employment   Catholics O: - Irish Service employment  Catholics O: - - Catholics Service employment  Service employment  - - - - - - - - - - - - -	37 .48 .70 67 31 .06 .77 .16	18 .15 .56 68 42 .08 .69 .44	-1.43 1.08 3.71 -5.84 -3.18 58 7.47 4.14	.11 .32 .38 .11 .32 .38 .11 .32 .38 .11	.53	.49 .55	.89 .88	.104 .167 .582	.340
FF I: A: WW C: RR L: FG I: A: WW C: RR L: LAB I: A: XW WC C: RR L: LAB I: LAB I: C: RR C: RC C: RC RC C: C: RC C: C: RC C: RC C: C: C: C: RC C: C: RC C: C: C: C: C: C: C: C: C: C: C: C: C:	Service employment  Catholics Catholics  Irish Service employment  Catholics 0 - Irish Service employment  Catholics 0 - Catholics  Catholics  Catholics        -	37 .48 .70 67 31 .06 .77 .16 35	18 .15 .56 68 42 .08 .69 .44 38	-1.43 1.08 3.71 -5.84 -3.18 .58 7.47 4.14 -3.43	.11 .32 .38 .11 .32 .38 .11 .32 .38	.53	.49 .55 .72	.89 .88	.104	.340
FF I: A: WW C: RfG I: FG I: A: WC C: RfG L: LAB I: A: WW C: TALY: Reg	Service employment  - Catholics O: - Irish Service employment  Catholics O: - Irish Service employment  Irish Service employment   Irish Service employment  Irish Service employment  Irish Service employment  Irish  Irish Service employment  Irish  Irish  Irish  Irish  Irish  Irish  Irish  Irish  Irish  Irish  Irish  Irish  Irish        -	37 .48 .70 67 31 .06 .77 .16 35	18 .15 .56 68 .68 .69 .44 38	-1.43 1.08 3.71 -5.84 -3.18 58 7.47 4.14 -3.43	.11 .32 .38 .11 .32 .38 .11 .32 .38 .38	.53 .59 .74	.49 .55 .72 Adj.	.89 .88 .90	.104	.340
FF I: A: WW C: FG I: FG I: A: WC C: Rf L: LAB I: LAB I: A: A: WW C: C: Rf L: LAB I: L: LAB I: L: A: Party	Service employment        -	37 .48 .70 67 31 .06 .77 .16 35	18 .15 .56 68 42 .08 .69 .44 38 Beta	-1.43 1.08 3.71 -5.84 -3.18 .58 7.47 4.14 -3.43 t-stat	.11 .32 .38 .11 .32 .38 .11 .32 .38 .38 <b>R<sup>2</sup>D</b>	.53 .74 R <sup>2</sup>	.49 .55 .72 Adj. R <sup>2</sup>	.89 .88 .90 E <sup>2</sup>	.104 .167 .582	.340 1.204 SCV <sub>w</sub>
FF I: A: WW C: FG I: FG I: A: WW C: C: RR L: LAB I: R A: A: WW C: C: RT L: LAB I: C: RT L: LAB I: C: RT L: C: RT C: C: C: RT C: C: C: RT C: C: C: C: RT C: C: C: RT C: C: C: C: C: C: C: C: C: C: C: C: C:	Service employment        -	37 .48 .70 67 31 .06 .77 .16 35 r 04 .39 20	18 .15 .56 68 42 .08 .69 .44 38 Beta 10 .41 .44	-1.43 1.08 3.71 -5.84 -3.18 58 7.47 4.14 -3.43 <b>t-stat</b> -1.72 8.97 6.13	.11 .32 .38 .11 .32 .38 .11 .32 .38 .11 .32 .38 <b>R<sup>2</sup>D</b> .48 .17 .66	.53 .74 R <sup>2</sup> .54	.49 .55 .72 Adj. R <sup>2</sup> .54	.89 .88 .90 E <sup>2</sup> .98	.104 .167 .582 CV .230	.340 1.204 SCV <sub>w</sub> .243

(continued)

PCI	1:	Industrial employment	.12	.15	2.37	.47	.45	.44	.89	.344	.340
	A:	Sharecroppers	.55	.60	12.43	.12					
	W:	Index	.17	39	-5.12	.64					
	C:	_									
	RO:	Index	35	47	-8.35	.35					
	L:	•									
PSI	1:	Industrial employment	.29	.25	3.18	.47	.11	.10	.53	.299	.255
	A:	Sharecroppers	06	15	-2.40	.12					
	W:	Index	.21	.14	1.41	.64					
	C:					05					
	RO:	Index	04	.08	1.14	.35					
	L:										
PSDI	11	Industrial employment	29	12	1 51	48	18	17	62	346	311
1001	Δ.	Big units	- 22	- 25	-4 43	03			.02	.010	
	W:	Index	.32	.22	2.40	.62					
	C:	•									
	RO:	Index	24	11	-1.57	.34					
	L:	•									
PLI	1:	Industrial employment	.27	.18	2.35	.48	.16	.15	.63	.418	.407
	A:	Big units	18	19	3.39	.03					
	W:	Index	.27	.04	.41	.62					
	C:										
	RO:	Index	30	24	-3.54	.34					
	L:	-									
PRI	1.	Commercial employment	16	26	2 75	64	13	12	86	681	598
	A:	Sharecroppers	20	27	4 48	12			.00	.001	.500
	W:	Index	00	37	-4.39	.55					
	C:	*									
	RO:	Index	18	17	-2.15	.51					
	L:	•									
MSI	1:	Industrial employment	48	18	2.84	.48	.45	.44	.72	.516	.563
	A:	Small units	.44	.27	5.50	.17					
	W:	Index	59	45	-5.79	.66					
	C:	-									
	RO:	Index	.18	16	-2.85	.34					
	L:										
THE NE	THER	LANDS: Regression analysis									
								<b>۲ ۸</b>			

Party		Independent variables	r	Beta	t-stat	R <sup>2</sup> D	R <sup>2</sup>	R <sup>2</sup>	E2	сv	scvw
ARP	ł:	Agricultural employment	.42	04	-1.09	.24	.90	.90	.98	.561	.881
	A:	Freeholders	28	00	01	.12					
	W:	Index	16	04	-1.26	.07					
	C:	Gereformed	.95	.96	27.01	.30					
	RO:	_									
	L:	*									
сни	1:	Agricultural employment	.43	.20	3.09	.13	.61	.60	.88	.668	1.082
	A:	Freeholders	09	07	-1.22	.02					
	W:	Index	19	13	-2.09	.06					
	C:	Hervormed	.74	.67	10.87	.09					
	RO:										
	L:	*									
KVP	1:	Industrial employment	.27	02	52	.25	.92	.91	.94	.791	1.166
	A:	Freeholders	.32	.08	2.63	.16					
	W:	Index	20	07	-2,30	.14					
	C:	Catholics	.95	.93	32.22	.10					
	RO:										
	L:	*									

SGP	1:	Agricultural employment	.23	.08	.81	.24	20	.17	.99	1.419	1.980
	A:	Freeholders	.00	.16	1.76	.12					
	W:	Index	.12	.21	2.37	.07					
	C:	Gereformed	.38	.42	4.15	.30					
	RO:	-									
	L:	*									
PVDA	t:	Industrial employment	04	.19	3.12	.25	.68	.67	.94	.304	.479
	A:	Freeholders	25	11	-1.81	.16					
	W:	Index	.00	05	95	.14					
	C:	No affiliation	80	83	-14.72	.10					
	RO:	-									
	L:	•									
CPN	1:	Agricultural employment	18	11	-1.93	.05	.64	.63	.96	.970	1.486
	A:	Freeholders	14	.13	2.07	.13					
	W:	Index	.13	27	-4.26	.22					
	C:	No affiliation	.75	.90	13.48	.28					
	RO:	- -									
	L:										
PSP	1:	Commercial employment	.36	.07	.73	.34	.39	.37	.50	.460	.687
	A:	Freeholders	21	.01	.08	.12					
	W:	Index	.36	.08	.87	.32					
	C:	No affiliation	.62	.56	6.16	.33					
	RO:	-									
	L:	•									
VVD	1:	Commercial employment	.41	.12	1.35	.34	.38	.36	.69	.277	.432
	A:	Freeholders	14	05	61	.12					
	W:	Index	.61	.53	5.95	.32					
	C:	No affiliation	.32	.01	.08	.33					
	RO:	*									
	L.										
D′66	1:	Commercial employment	.43	.19	1.96	.34	.33	.31	.58	.325	.460
	A:	Freeholders	11	01	14	.12					
	W:	Index	.55	.45	4.80	.32					
	C:	No affiliation	.30	.01	.12	.33					
	HU:	*									
		·									
BP	1:	Agricultural employment	12	16	-1.83	.05	.14	.11	.29	.386	.653
	A:	Freenoiders	.20	.09	.91	.13					
	νν. C·	No affiliation	17	00	2.00	.22					
	BO:	-	.00	20	2.00	.20					
	L:	*									
NORWA	AY: Re	gression analysis									
						_	_	Adj.			
Party		Independent variables	r	Beta	t-stat	R <sup>2</sup> D	R <sup>2</sup>	R <sup>2</sup>	E2	cv	scvw
DNA	Į.	Industrial employment	.21	.22	8.30	.35	.45	.45	.87	.330	.131
2.11	A:	Forest land	.33	.22	9.51	.08					
	W:	Index	.01	22	~8.47	.34					
	C:	-									
	RO:	Anti-abortion	53	34	-13.77	.23					
	L:	New Norwegian	50	31	-12.89	.19					

(continued)

sv	1:	Industrial employment	.21	.18	5.51	.35	.19	.19	.45	.622	.218
	A:	Forest land	.13	.05	1.69	.08					
	W: C:	-	.08	10	-3.06	34					
	RO:	Anti-abortion	38	28	-9.19	.23					
	L:	New Norwegian	31	-16	-5.60	.19					
NKP	1:	Industrial employment	.16	.20	6.13	.35	.21	.21	.73	1.853	.617
	A:	Forest land	.29	.22	8.28	.08					
	W:	Index	.01	17	5.39	.34					
	RO:	- Anti-abortion	36	24	-8.11	.23					
	L:	New Norwegian	27	12	-4.15	.19					
VE	1.	Industrial employment	00	02	55	33	10	10	61	733	340
•-	A:	Big units	22	17	-5.14	.12					
	<b>W</b> :	Index	01	.07	1.76	.36					
	C:	-	17	07	1.01	21					
	HU:	New Norwegian	.17	20	5.64	.21					
	<b>_</b> .	the the the second		.20	0.01						
SP	l:	Agricultural employment	.68	.85	21.37	.67	.53	.53	.92	.699	.514
	A:	Small units	42	02	.45	.55					
	C:		30	.55	9.07	.55					
	RO:	Anti-abortion	.33	.03	1.10	.23					
	L:	New Norwegian	.36	.11	4.15	.22					
KRF	ł:	Industrial employment	- 12	09	3 33	35	52	52	94	758	395
	A:	Forest land	30	12	-5.02	.08					
	W:	Index	20	12	-4.22	.34					
	C:	- Anti-shortion	64	47	19.71	22					
	L:	New Norwegian	.54	.32	13.08	.19					
HOE	1:	Industrial employment	.20	16	-4.77	.43	.26	.26	.79	.578	.266
	W:	Index	.30	.16	4.21	.54					
	C:	-				100					
	RO:	Anti-abortion	15	.02	.58	.22					
	L:	New Norwegian	25	21	-/.45	.20					
FRP	1:	Industrial employment	.14	04	87	.44	.09	.08	.54	.547	.232
	A:	Small units	.22	.11	2.13	.54					
	W:	Index	.26	.22	4.63	.49					
	RO:	Anti-abortion	.06	.15	3.97	.20					
	L:	New Norwegian	06	09	-2.36	.19					
PORTUG	AL: F	Regression analysis									
•						P2D	D2	Adj. p2	<b>F</b> 2	<u></u>	001/
Party		Independent variables	r	Beta	t-stat	R-D	H-	н-	E~	CV	scvw
PSP	1:	_					.16	.16	.80	.339	.164
	A:	Number of	33	22	-6.16	.19					
	W:	Emigration rate	21	12	3.55	.07					
	C: BO	Index	- 32	- 21	-5 92	18					
	L:	*	.02		3.02						
DCD	1.						CA.	64	07	1 100	FEO
FGP	A:	Small units	58	28		.25	.04	.04	.97	1.109	.556
	W:	Emigration rate	29	10	-4.44	.08					
	C:	*		50	24.07	22					
	н0: L:	*	/4	59	24.87	.22					

AD	1:	-				05	.66	.66	.90	.477	.250
	A:	Small units	.58	,26	11.00	.25					
	W:	Emigration rate	.36	.17	8.18	.08					
		Index	75	60	26.00	22					
	1.	*	.75	.00	20.00	.22					
	<b>L</b> .,										
CD A INI.	Desses	de e e e e la cris									
SPAIN:	regres	sion analysis						A 41:			
Party		Independent variables		Boto	* ****	n2n	<b>D</b> 2	Auj. D2	F2	<b>C</b> 1/	801/
raity		independent variables	r	Deta	t-stat	R-D	R-	н~	E	CV	SUVw
REOF		Industrial ampleument	07	27	2.01	60	15	10	40	054	205
FOUE	ι. Λ·	Latifundias	07	.27	2.01	.00	.15	.12	.42	.254	.335
		Index		.30	1 50	.01					
	C.	*	.10	.2.5	-1.00	.,,					
	RO:	Index	12	04	36	.59					
	L:	Unitarian orientation	.18	.14	1.41	.39					
UCD	1:	Industrial employment	36	35	-2.65	.69	.20	.17	.28	.319	.540
	A:	Latifundias	22	26	-3.43	.02					
	W:	Index	30	.02	.14	.76					
	C:	*									
	RO:	Index	.14	.01	.15	.38					
	L:	Unitarian orientation	.25	.09	.94	.40					
A D	1.		21	10	00	00	4.0	07			
AF	1:	Agricultural employment	.21	.19	.99	.82	.10	.07	.21	.362	.522
	M.	Index	22	~.21	-2.54	.11					
	C:	*		.02	.09	.00					
	BO:	Index	07	05	49	57					
	L:	Unitarian orientation	.14	.11	1.04	.43					
PCE	1:	Industrial employment	.10	.13	1.01	.69	.23	.20	.69	.634	.727
	A:	Latifundias	.45	.47	6.37	.02					
	W:	Index	.10	.00	01	.76					
	C:	•									
	RO:	Index	07	09	99	.38					
	L:	Unitarian orientation	06	.03	.28	.40					
ETN		Industrial ampleument	67	41	2.52	<u></u>	20	07			0.540
ETIN	1:	Pig upite	.57	.41	3.53	.08	.39	.37	.82	2.124	2.516
	M/-	Index	15	.06	1.09	.23					
	с.	*	.52	.05	.59	.//					
	BO:	Index	.37	- 06	- 57	60					
	L:	Unitarian orientation	51	33	-3.64	48					
SWEDE	N: Reg	ression analysis									
						_		Adj.			
Party		Independent variables	r	Beta	t-stat	R <sup>2</sup> D	R <sup>2</sup>	R <sup>2</sup>	E2	CV	scv
											.,
MOD	1:	Industrial employment	30	18	-6.00	.08	.33	.32	.83	.423	.221
	A:	Big units	.29	.23	7.51	.16					
	W:	Tax capacity	.41	.50	13.84	.38					
	C:	Non-Conformists	17	00	32	.11					
	RO:	Church attendance	01	.35	9.76	.37					
	L:	÷									
CP	1.	Agricultural employment	67	22	0.25	56			01	240	241
51	Δ:	Small units	20	.33	9.35 00	.58	.00	.55	.01	.349	.241
	W:	Tax capacity	- 56	- 12	-3.63	48					
	C:	Non-Conformists	.23	.08	3.33	.08					
	RO:	Church attendance	.67	.37	11,45	.49					
	L:	*									

(continued)

FP	t:	Industrial employment	18	16	-4.84	.08	.14	.14	.66	.363	.179
	A:	Big units	.12	.11	3.18	.16					
	W:	Tax capacity	.21	.28	6.91	.38					
	C:	Non-Conformists	.16	.27	8.02	.11					
	RO:	Church attendance	03	.12	2.90	.37					
	L:	*									
SAP	1:	Industrial employment	.38	.35	13,50	.08	.49	.48	.98	.231	.114
	A:	Small units	.13	.21	7.94	.10					
	W:	Tax capacity	.05	25	-7.70	.39					
	C:	Non-Conformists	17	24	-9.10	.10					
	RO:	Church attendance		62	-20.17	.34					
	L:	•									
VPK	1:	Industrial employment	15	14	-4.62	.08	.31	.31	.97	.624	.309
	A:	Small units	.19	.35	11.44	.10					
	W:	Tax capacity	.31	.12	3.23	.39					
	C:	Non-Conformists	22	16	-5.25	.10					
	RO:	Church attendance	40	39	-10.82	.34					
	L:	*									
KDS	1:	Industrial employment	.10	06	-3.01	.08	70	70	92	796	422
	A:	Small units	24	.10	5.03	10			.02		
	W:	Tax capacity	- 29	- 04	-1.51	39					
	C:	Non-Conformists	.83	.81	40.30	.10					
	RO:	Church attendance	.20	.03	1.18	.34					
	L:	*			1.10						

#### SWITZERLAND: Regression analysis

SWITZE	RLAN	D: Regression analysis						Adi			
Party		Independent variables	r	Beta	t-stat	R <sup>2</sup> D	R <sup>2</sup>	R <sup>2</sup>	E <sup>2</sup>	cv	scvw
FDP	I: A: W:	Agricultural employment Small units	19 .17	28 .12	-1.92 .93	.38 .17	.08	.02	.79	.811	.852
	C: RO:	Protestants 	04	18	-1.28	.33					
	L:	German	04	.07	.58	.16					
CDV	1:	Agricultural employment	.71	.48	5.32	.43	.68	.66	.94	.981	1.776
	A: W:	Big units	24	.10	2.11	.37					
	C: RO:	Protestants —	72	48	5.84	.30					
	L:	German	.19	.10	1.16	.28					
SPS	1:	Industrial employment	.49	.31	3.17	.28	.52	.49	.67	.726	.644
	A: W:	Big units	.13	.01	.94	.35					
	C: RO:	Protestants 	.66	.52	5.43	.25					
	L:	French	.14	.18	1.79	.33					
SVP:	1:	Commercial employment	.11	07	53	.25	.22	.17	.35	1.256	1.114
	A: W:	Small units	03	.01	.13	.14					
	C: RO:	Protestants 	.46	.48	4.23	.14					
	L:	German	00	00	03	.21					

NOTE: 1, industry; A, size or type of agricultural units; W, wealth; C, confession; RO, religious orientation; L, language or regional/cultural orientation;\*, variable is not relevant for the country studied; -, data not available for the variable.

#### APPENDIX B

### AUSTRIA

Elections: 1962, 1971, 1975

Data on the independent variables: 1970's; German-speaking from the 1950's
Parties: Sozialistische Partei Osterreichs (SPO): 48.1%
Osterreichische Volkspartei (OVP): 43.8%
Freiheitliche Partei Osterreich (FPO): 6.0%
Kommunistische Partei Österreichs (KPO): 1.9%
BELGIUM
Elections: 1968, 1971, 1974
Data on the independent variables: 1970's; linguistic data from 1947
Parties: Parti Social Chretien (PSC): 31.4%
Parti Socialiste Belge (PSB): 27.3%
Parti de la Liberté et du Progrés (PLB): 19.4%
Parti de Belgique (PCB): 3.1%
Volksunie (CVU): 10.4%
Rassemblement Wallon-Front Democratique des Francophones Bruxellois (RW-FDF): 7.4%

#### DENMARK

Elections: 1971, 1973, 1975

Data on the independent variables: 1970's Parties: Socialdemokratiet (SD): 30.9% Radikale Venstre (RV): 10.9% Det Konservative Folkeparti (KF): 10.5% Retsforbundet (RFB): 2.1% Socialistisk Folkeparti (SF): 6.7% Danmarks Kommunistiske Parti (DKP): 3.1% Kristeligt Folkeparti (KRF): 3.8% Venstre (VE): 17.1% Venstresocialister (VS): 1.7% Centrum-Demokraterne (CD): 5.0% Fremskridtspartiet (FRP): 14.7%

#### F R GERMANY

Elections: 1961, 1965, 1969

Data on the independent variables: 1960's

Parties: Sozialdemokratische Partei Deutschlands (SPD): 39.4% Christlich-Demokratische Union (CDU): 46.3% Freie Demokratische Partei (FDP): 9.4%

#### FINLAND

Elections: 1966, 1970, 1972 Data on the independent variables: 1970's Parties: Suomen Kansan Demokraattinen Liitto (SKDL): 18.3% Työväen ja Pienviljelijäin Sosialdemokraattinen Liitto (TPSL): 1.7% Suomen Sosialdemokraattinen Puolue (SDP): 25.5% Suomen Maaseudun Puolue (SMP): 6.9% Suomen Kristillinen Liitto (SKL): 1.8% Keskustapuolue (KESK): 18.2% Liberaalinen Kansanpuolue (LKP): 5.9% Kansallinen Kokoomus (KOK): 16.5% Svenska Folkpartiet (RKP): 5.7%

(continued)

#### NORWAY

Elections: 1969, 1973, 1977 Data on the independent variables: 1970's Parties: Det Norske Arbeiderparti (DNA): 41.4% Hoeyre (HOE): 20.6% Kristeligt Folkeparti (KRF): 11.0% Norges Kommunistiske Parti (NKP): 0.9% Senterpartiet (SP): 10.0% Socialistisk Venstreparti (SV): 6.3% Venstre (VE): 5.4% Fremskrittspartiet (FRP): 3.4%

PORTUGAL

Elections: 1975, 1976, 1980

Data on the independent variables: 1970's; agrarian census from 1968 Parties: Partido Socialista Portuges (PSP): 35,4% Partido Communista Portuges (PCP): 15,4% Aliança Democrática (AD): 42,6%

#### SPAIN

Elections: 1977, 1979, 1982

Data on the independent variables: 1970's

Parties: Partido Socialista Obrero Espanol (PSOE): 35.6% Unidn de Centro Democrático (UCD): 25.7% Partido Communista de Espana (PCE): 8.0% Alianza Popular (AP): 13.4% Ethnic Parties (ETHNIC): 5.0%

#### SWEDEN

Elections: 1976, 1979, 1982

Data on the independent variables: mid-1970's Parties: Moderata Samlingspartiet (MOD): 19.8% Centerpartiet (CP): 19.2% Folkpartiet (FP): 9.2% Socialdemokratiska Arbetarpartiet (SAP): 43.8% Vänsterpartiet Kommunisterna (VPK): 5.3% Kristen Demokratisk Samling (KDS): 1.6%

#### SWITZERLAND

Elections: 1967, 1971, 1975 Data on the independent variables: 1970's Parties: Freisinnig-Demokratische Partei der Schweiz (FDP): 22,4% Christlich-Demokratische Volkspartei der Schweiz (CDV): 21.2% Sozialdemokratische Partei der Schweiz (SPS): 23.8% Schweizerische Volkspartei (SVP): 10.6%

#### FRANCE

Elections: 1967, 1968, 1973 Data on the independent variables: 1970's Parties: Parti Communiste Français (PCF): 21.3% Parti Socialiste (PS): 18.6% Parti Socialiste Unifié (PSU): 3.2% Réformateurs (REF): 11.8% Union des Démocrates Pour la République (UDR): 38.6%

GREAT BRITAIN

Elections: 1966, 1970, 1974F Data on the independent variables: mid-1960's; cultural data from the 1950's and the 1930's Parties: Conservative Party (CONS): 42.1% Labour Party (LAB): 42.8% Liberal Party (LAB): 11.8% Scottish National Party (SCOT): 1.2% Plaid Cymru (WELSH): 0.4%

#### GREECE

Elections: 1974, 1977, 1981 Data on the independent variables. 1970's Parties: New Democracy (ND): 44.0% Union of the Democratic Center (EDHIK): 11.3% Panhellenic Socialist Movement (PASOK): 29.0% Communist Party of Greece (KKE): 11.2%

#### IRELAND

Elections: 1969, 1973 Data on the independent variables: 1970's Parties: Fianna Fáll (FF): 45.9% Fine Gael (FG): 34.6% Labour Party (LAB): 15.3%

#### ITALY

Elections: 1968, 1972, 1976 Data on the independent variables: 1970's Parties: Democrazia Cristiana (DCI): 38.8% Partito Communista Italiano (PCI): 29.5% Partito Socialista Italiano (PSI): 11.0% Partito Socialista Democratico Italiano (PSDI): 4.9% Movimento Sociale Italiano (PLI): 3.7% Partito Liberale Italiano (PLI): 3.7%

#### THE NETHERLANDS

Elections: 1967, 1971, 1972 Data on the independent variables: 1970's; religious data from 1960. Parties: Boerenpartij (BP): 2.6% Anti-Revolutionaire Partij (ARP): 9.1% Christelijk-Historische Unie (CHU): 6.4% Katholieke Volkspartij (KVP): 22.0% Volkspartij voor Vrijheid en Demokratie (VVD): 11.8% Partij van de Arbeid (PVDA): 25.2% Communistische Partij Nederland (CPN): 4.0% Demokraten'66 (D'66): 4.8% Staatkundig Gereformeerde Partij (SGP): 2.2% Pasifistisch-Socialistische Partij (PSP): 1.9%

## REFERENCES

- ALLISON, P. D. (1978) "Measures of inequality." Amer. Soc. Rev. 43: 865-880.
- BENDIX, R. and S. M. LIPSET (1957) "Political sociology." Current Sociology 6: 79-105.
- BLALOCK, H. M. (1960) Social Statistics. New York: McGraw-Hill.
- ERSSON, S., K. JANDA, and J.-E. LANE (1983) "The logic of political ecology analysis," pp. 211-263 in D. Anckar et al. (eds.) Partier, Ideologier, Valjare: En Antologi. Åbo Finland: Åbo Akademi.
- ERSSON, S. and J.-E. LANE (1983) "The ecological approach versus the survey approach." European Pol. Data Newsletter No. 47, pp. 11-24.
- GURR, T. R. (1972) Politimetrics: An Introduction to Quantitative Macropolitics. Englewood Cliffs, NJ: Prentice-Hall.
- HAMMOND, J.L. (1979) "New approaches to aggregate electoral data." J. of Interdisciplinary History 9: 473-492.
- HARMEL, R. and K. JANDA (1982) Parties and Their Environments: Limits to Reform? New York: Longman.
- JANOWITZ, M. (1968) "Political sociology," pp. 298-307 in International Encyclopedia of the Social Sciences (vol. 12). New York: Macmillan.
- JANSON, C.-G. (1969) "Some problems of ecological factor analysis," pp. 301-341 in M. Dogan and S. Rokkan (eds.) Quantitative Ecological Analysis in the Social Sciences. Cambridge: M.I.T. Press.
- KURIAN, G.T. [ed.] (1979) The Book of World Rankings. New York: Facts on File.
- LIPSET, S. M. and S. ROKKAN (1967) "Cleavage structures, party systems, and voter alignment: an introduction," pp. 1-64 in S. M. Lipset and S. Rokkan (eds.) Party Systems and Social Alignments. New York: Free Press.
- McRAE, K. [ed.] (1974) Consociational Democracy: Political Accommodation in Segmented Societies. Toronto: McClelland & Stewart.
- MARTIN, J. D. and L. N. GRAY (1971) "Measurement of relative variation: sociological examples." Amer. Soc. Rev. 36: 496-502.
- PRZEWORSKI, A. and J. TEUNE (1970) The Logic of Comparative Social Inquiry. New York: John Wiley.
- ROSE, R. [ed.] (1974) Electoral Behavior: A Comparative Handbook. New York: Free Press.
- ROSE, R. and D. URWIN (1969) "Social cohesion, political parties and strains in regimes." Comparative Pol. Studies 2: 7-67.
- ROSE, R. and D. URWIN (1975) Regional Differentiation and Political Unity in Western Nations. Sage Professional Papers in Contemporary Political Sociology. London: Sage.
- SARTORI, G. (1969) "From the sociology of politics to political sociology," pp. 65-100 in S. M. Lipset (ed.) Politics and the Social Sciences. New York: Oxford Univ. Press.
- SMITHSON, M. (1982) "On relative dispersion: a new solution for some old problems." Quality and Quantity 16: 261-271.

WESTLUND, A. and J.-E. LANE (1983) "The relevance of the concept of structural variability to the social sciences." Quality and Quantity 17: 189-201.

WINCH, R.F. and D.T. CAMPBELL (1969) "Proof? No. Evidence? Yes. The significance of tests of significance." Amer. Sociologist 4: 140-143.

Svante Ersson is affiliated with the Department of Political Science at the University of Umeå. He has published in the field of comparative politics and political parties, and is currently writing a study of Communist parties in Western Europe.

Kenneth Janda is Professor of Political Science at Northwestern University. His major substantive interests are in the study of political parties, especially in cross-national context. His current methodological interest is in micromainframe computer applications to social research.

Jan-Erik Lane holds a research position in public administration at the Swedish Council for Research in the Humanities and Social Sciences and is connected with the Department of Political Science at Umeå University. He is chairman of COCTA and has published within the fields of political theory, comparative politics, public administration, and local government.