Party Ideologies and National Development: A Covariance Structure Analysis

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摘 要

自從第二次世界大戰以來,在國家發展的相關研究領域裏,社會科學家時常低估政治因素的重要性;本研究企圖探討政黨理念對國家發展的三個主要面向——經濟發展、社會不平等與政治民主——之影響,期間涵蓋西元一九五〇年至一九五六年,以及一九五七年至一九六二年兩個時期。藉用共變數結構分析,本研究先以第一時期的資料檢證理論模型的適用性,而後再以第二時期的資料加以驗證;統計分析結果發現,兩個時期的資料獲得類似的結論。根據分析,政黨理念對於政治民主的確有重要影響,而政黨理念、政黨系統的利益代表性,以及經濟發展的程度,也有助於各國社會不平等的解釋;然而,政黨理念並非決定經濟發展的最重要因素。

ABSTRACT

The importance of political factors has been underemphasized in the study of national development since World War Two. This study investigates the impacts of party ideologies on three aspects of national development – economic development, social inequality, and political democracy – for the years 1950 to 1956 and 1957 to 1962. Using covariance structure analysis, this study applies theoretical model: to data of the first period and then to data from the second period. The statistical test results are similar for both periods. Foremost, they show that party ideologies have important influence on political democracy. Party ideologies, interest representation of party systems, and the level of economic development also contribute to explaining variance in social inequality. However, party ideologies are not the most important determinants of variation in economic development.

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Do Political Parties Matter?

For last three decades, social and economic paradigms have dominated the study of national development in the field of comparative politics. The modernization approach asserts that economic, social and political development are

intimatedly related, and congruent development of these three aspects is the most stable condition of development for both the developed and developing countries (Lerner, 1958; Lipset, 1959; Deutsch, 1961). In criticizing the weakness of the modernization approach, the dependency/world systems theorists redirect the research of social scientists from the intra-national to the inter-national determinants of the economic, social and political characteristics in a country (Frank, 1969; Wallerstein, 1974; Chirot, 1977). However, the proponents of the class analysis approach argue that the forces of social classes are the most important determinant to direct the process of national development (Petras, 1977; Sainz, 1980). Recently, the corporatist approach claims that the interactions among the government, the working class and the capitalist class direct the processes of national development (Schmitter, 1974, 1977; Wilensky, 1976).

Though these above approaches have different focuses, the similarity is that all of them reject political factors as one of the important explanator in the process of national development. In other words, these perspectives declaim the declining importance of political factors or the "end of ideology" (Berger, 1979; Pizzerno, 1981; Offe, 1984).

In addition to these above approaches, there is a strong school of thought that attributes observed variance in public policy outcomes and the characteristics of national development to political-structural (Hollingsworth, 1982) or politicalinstitutional (Lindberg, 1982) factors. In place of a preoccupation with the mechanisms of economic or socio-economic factors, this approach concentrates on the impact of political factors. It rejects the orthodoxy of an "end of ideology," and replaces it with an investigation into the ways in which different political ideas, expressed through political institutions, interact with social and economic structures to produce diversity of national development (Castles, 1982). The proponents of this perspective claim that party systems set historical boundaries on the political workings of interest groups and their interactions with the state. Parties are, moreover, frequently active participants in the process of building bridges of cooperation between interest associations and state actors. This approach therefore brings back "politics" into the field of political science for studying the similarities and differences of national development among different countries.

Do political parties have important influence in determining the various characteristics of national development? Using a cross-national approach and employing covariance structure analysis, this study is trying to explore the following puzzle: To what extent is the role of political parties in the political

system an important variable which accounts for significant differences in aspects of national development?

Conceptual Framework: Linking Party Ideologies to National Development

As an intermediate linkage between the citizenry and the government, political parties among which the electorate chooses have diverse patterns of ideological leanings. In order to implement their public policy agenda, moreover, political parties intend to control over the government. These diverse ideologies of political parties are therefore translated into diverse patterns of policy implementation, which in turn leads to the variations in the characteristics or processes of national development in a given society.

Social scientists often oversimplify complex characteristics of their theoretical concepts. Dealing with the relationships between party ideologies and specific aspect of public policy or national development, most studies only characterized party ideologies in terms of the left-right polarization scale (Taylor and Herman, 1971; Dodd, 1974; Thomas, 1975; Sigelman and Yough, 1978; Gross and Sigelman, 1984). However, research shows that party ideologies do not fit well on a simple left-right continuum. Scholars who have analyzed party positions on issues more clearly have detected at least two distinct dimensions in party ideologies. Janda's (1980a) analysis of party positions on thirteen issues identifies "economic leftism" and "political liberalism" as two distinct components of party ideologies.

Since development usually includes economic, social and political characteristics in a given society, national development by definition refers to economic development, social equality (inequality), and political democracy in this study. Concerning with the conception of economic development, moreover, there are two distinct aspects should be taken into account in our formulation of theoretical framework: the relative change (rate) of economic development and the absolute level of economic development. Accepting Janda's distinction as an improvement over simple left-right dimension, in sum, we will deal with the impacts of economic leftism and political liberalism of party systems on economic development (both rate and level), social inequality, and political democracy.

Economic Leftism and Economic Development

Though some scholars reported constradictory findings (Payne, 1978;

Schmidt, 1982a, 1982b; Alt, 1985), several of the most influential studies of economic development have argued explicitly that the partisan composition of government is among the more important factors accounting for differences in economic policy and macroeconomic outcomes in the Western democracies (Hibbs, 1977; Tufte, 1978; Cameron, 1978; Whiteley, 1986). They claimed that social democratic parties and their allies are both more willing and more able to control economic imbalances in a way that favors the core class base among the organized working-class movement. In spite of the concomitant risk of higher inflation, social democratic governments put a far higher priority on full employment. Bourgeois administrations on the whole were much more reluctant to take positive measures against unemployment, however, since their primary objective was the containment of prices. Upon these discussion, variations in party stsyems does seem to affect the rate of economic development.

Economic leftism as an ideology emphasizes the pursuit of social equality over the rate of economic development in the process of public policy-making. Because the rate of economic development can vary from the level of economic development, the influence of economic leftism of party systems on these two aspects of economic development may be totally different. Since economic leftism of party systems does not necessarily connect with the changes of economic structure, it may not have any impact on the level of economic development in the short run. While economic leftism may have some impacts on the level of economic development in the long run, moreover, the debate over the question whether economic leftism has positive or negative effects on the level of economic development is still arguable. Therefore, this study does not assume any relationship between economic leftism of party systems and the level of economic development. We then hypothesize that:

Proposition 1: The higher the degree of economic leftism of party systems, the lower the rate of economic development in a given country.

Economic Leftism and Social Inequality

Debate over the effects of organized politics on social structure is central to the study of comparative politics. In particular, a good deal of attention has been paid to the impact of political movements with egalitarian ideologies on the actual distribution of rewards (Jackman, 1980). These ideologies emphasize the importance of economic leftism which commit to creating a more equalitarian

social structure generally, and a more equalitarian income distribution specifically (Kirschen, et al., 1964). More precisely, leftist parties have sought to increase the share of income received by those groups located in the bottom half of the income distribution.

Thus, Lipset (1963) characterizes elections as the "expression of the democratic class struggle," according to which leftist parties in democratic societies receive the majority of their support from the "more deprived strata." And Lenski (1966) attributes the differences in income inequality among western democracies to differences in the success of socialist parties, that is, to differences in the strength of working class political organization. Though admitting the importance of social structures, Shalev (1983a, 1983b) argues that partisan composition of government is the most decisive and influential factor in explaining the expansion of welfare state in specific or income distribution in general for a given society. In this study, we therefore assume that:

Proposition 2: The greater the extent of economic leftism of party systems, the lower the level of social inequality in a given country.

Economic Leftism and Political Democracy

In this study, political democracy refers to the extent of political liberties and the effectiveness of electoral franchise in a given society. Since capitalism is required for political freedom and political freedom entails the freedom to attempt to influence government policy, as Friedman (1962) has argued, economic leftism may have negative effects on political democracy. And Blondel (1969) also looks to capitalism as promoting the pluralism associated with liberal democracies.

According to Therborn (1977), capitalism provides the road to democracy in two ways: (a) inclusion of the masses in part of the political process, (b) under conditions of representative government and electoral competition. On the one hand, legal emancipation of labor and the creation of a free labor market, industrialization, concentration of capital are all intrinsic tendencies which simultaneously lay the basis for a working-class. And the labor movement has itself played a vital role in the struggle for democracy. On the other hand, capitalist relations of production tend to create an internally competing, peacefully disunited ruling class. In the absence of a single center, some kind of elective, deliberative and representative political machinery became necessary. All these

forces inherent in the developmental process of capitalism contribute to the emergence of democracy in a given society. Based on the above arguments, we hypothesize that:

Proposition 3: The higher the degree of economic leftism of party systems, the less the extent of political democracy in a given country.

Political Liberalism and Economic Development

Generally speaking, political liberalism implies the importance of electoral participation and the protection of civil rights and civil liberties. From the perspectives of classical economics, liberalism and capitalism go together to contribute to the high rate of economic development. But Olson (1983) doubted the validity of this argument. He claimed that the growing influence of interest groups retards the rate of economic development, citing the case of Great Britain. Because political liberalism of party systems is highly correlated with the emergence of various interest groups and associations, it may have negative impacts on the rate of economic development. We therefore contend that political liberalism of party systems does not have a direct influence on the rate of economic development.

Though political liberalism of party systems may not have any influence on the rate of economic development, it may have positive impacts on the level of economic development. In the history of Western philosophy, liberalism goes together with individualism. One of the most relevant aspects of individualism is the scope for individual choice and decentralized decision-making in the economic sphere (Eckstein, 1958). According to the neoclassical theory of economic development, individuals as decision makers maximize their own welfare in situations in which they are motivated by benefits and constrained by costs associated with any given action (Herrick and Kindleberger, 1983). Thus, individualism and its companion, political liberalism of party systems, will contribute to higher levels of economic development.

Political liberalism of party systems also contributes to higher levels of economic development in another way. As we known, a higher level of economic development needs changes in technical and institutional innovation of the economy. The rigidity of the institutional framework may retard the capability of the economic system to generate, absorb, and adapt to economic change. Since the high degree of political and civil liberties provides the people an

environment for developing and creating new technology and adequate institution in a given society, it can contribute to higher levels of economic development. Moreover, a higher extent of political and civil liberties results in a higher degree of social differentiation and social mobility. This in turn gives the economic structure and economic institution a higher degree of flexibility to adapt to greater challenge from both the domestic and international systems. Within this concern, it is quite reasonable to assume that:

Proposition 4: The higher the degree of political liberalism of party systems, the higher the level of economic development in a given country.

Political Liberalism and Social Inequality

From the basic theory of liberal democracy, political liberalism of party systems should have negative impacts on social inequality. That is, a party system which advocates higher degree of political liberalism should also pursue higher levels of social equality. Development economists have pointed to the impact of regime policies on welfare outcomes or social inequality (e.g., Chenery et al., 1974; World Bank, 1975), and empirical studies have related democratic ideology or practice to income distribution (Jackman, 1975; Hewitt, 1977). These studies reported that increased awareness, itself primarily caused by increased social communication and mobilization which is a by-product of social change, leads to increased participation in the decision-making process through competitive forces such as interest groups and political parties. As more people become aware and involved in the political process, they make increased demands upon the distributive mechanism of that structure (Ward, 1978). In this respect, we propose that:

Proposition 5: The higher the degree of political liberalism of party systems, the lower the level of social inequality in a given country.

Political Liberalism and Political Democracy

It may be true that there is some distance between democratic ideology and democratic practice in a given country. However, it is also quite reasonable that democratic ideology will influence the exhibition of democratic practice. A party system which emphasizes the ideologies of popular participation and

the protection of civil liberties will tend to pursue their goals in terms of democratic practice. As Janda's (1980b) analysis found that political liberalism of party systems in positively correlated with his measure of citizen influence on government. We therefore assume that:

Proposition 6: The higher the degree of political liberalism of party systems, the greater the extent of political democracy in a given country.

Party Ideologies and Interest Representation

Since the advent of mass suffrage, political parties have been intermediaries between the citizenry and the government. They are intermediate spatially, no matter how a society may be divided vertically and hierarchically. Their location in the polity between the general public and the government has fixed attention on two critical brokerage functions they appear to perform. Moreover, parties seem to offer voters a means to make sense out of and organize, which, without their presence, would be a chaotic and incomprehensible choice among competing candidates for public office (Epstein, 1967). In addition, parties specifically seek control over the government and consequently implement their policy agenda (Duverger, 1964; Janda, 1980a). In this study, interest representation of party systems then can be understood as the extent to which a party system reflects various interests within a society.

Though every society has social cleavages, their existence may not be politically important for a society. The political importance of social cleavages is dependent upon whether and how these societal differences are translated into demands on the political system. In other words, the significance of social cleavages depends on their becoming political cleavages (Gillies and Janda, 1975). If social cleavages have political importance, these divisions may be manifested in political parties (Urwin, 1970; Dogan and Rose, 1971). Therefore, the political importance of social cleavages for political parties, and therefore the political system, is determined by the extent to which these cleavages structure the bases of support of the parties (Gillies and Janda, 1975). Based on these arguments, the functions of interest representation for political parties may be an intervening factor in understanding the impacts of economic leftism and political liberalism of party systems on various characteristics of national development.

In the analysis of the relationship between party ideologies and interest

representation of political parties, Gillies and Janda (1975) reported that the positive state scale, which measured by parties' stand on the issues of government ownership of the means of production, government intervention in the economy, redistribution of wealth, and providing for social welfare, has no consistent relationship with three measures of interest representation in both competitive and non-competitive party systems. However, their measure of the positive state scale only dealt with the intensity of the party ideology rather than its direction. In our study, we are focusing on the direction of party ideologies and the party system as a whole. Party systems that emphasize a higher degree of the control of national economy and higher priority of redistributive policies will raise their support from various sections of social cleavages. Hence, we assume that:

Proposition 7: The higher the degree of economic leftism of party systems, the greater the extent of interest representation of party systems in a given country.

We hypothesize a relationship between political liberalism of party systems and interest representation of party systems. Because the ideology of political liberalism emphasizes the importance of electoral participation and the protection of civil liberties, as we have discussed above, political parties seek support from every sectors of society. We therefore hypothesize that:

Proposition 8: The higher the degree of political liberalism of party systems, the greater the extent of interest representation of party systems in a given country.

Interest Representation and National Development

According to the arguments of the class analysis approach, social structures and class relationships have important impacts on national development. A number of scholars have suggested links between the social bases of political parties and the policies and structures of political systems. For example, Rose and Urwin (1969) argued that the structure of popular support for the parties of a society influences the extent of regime strains in that society. As a reflection of social cleavages or social structures or class relationships, therefore, interest representation of party systems may influence the rate of economic growth, the level of economic development, the level of social inequality, and the extent

of political democracy.

For the writers of the modernization approach, modernization is a multifaceted process involving changes in all areas of human thought and activity. Modernization involves the tremendous expansion of man's knowledge about his environment and the diffusion of this knowledge throughout society through increased literacy, mass communications, and education. It means that all groups, old as well as new, traditional as well as modern, become increasingly aware of themselves as groups and of their interest and claims in relation to other groups. One of modernizations's most striking phenomena is the increased consciousness, coherence, organization, and action which it produces in many social forces which existed on a much lower level of conscious identity and organization in traditional society (Huntington, 1968).

As a result, the process of modernization contributes to an expansion of the politically relevant strata of the population and a growing need for new and old government services. A rapid process of modernization hence tends to generate major pressures for economic, social and political performances. Party systems which have broader bases of social cleavages or higher extent of interest representation are more sensitive to the demands of a society as a whole. As more people are involved in the process of governmental decision-making, the demands for a more equal and democratic society become an urgent goal, and economic growth becomes a secondary priority. Though there is no empirical study dealing with this argument, we assume that:

Proposition 9: The greater the extent of interest representation of party systems, the lower the level of social inequality in a given country.

Proposition 10: The greater the extent of interest representation of party systems, the greater the extent of political democracy in a given country.

Proposition 11: The greater the extent of interest representation of party systems, the lower the rate of economic development in a given country.

Though the interest representation of party systems has negative impacts on the rate of economic development, it may have positive influence on the level of economic development. As Almond and Powell (1966) have argued, the major objective of a heterogeneous party usually is the election of its party candidates. In order to achieve this goal, according to Downs' (1957) model of democracy,

the policies of these parties are usually designed to accommodate diverse interests. Therefore, they tend to be broad and flexible. And the policies of homogeneous parties tend to be specialized and rigid (Almond and Powell, 1966). Rose and Urwin (1969) also claimed that homogeneous parties tend to be more "ideological" in nature than do heterogeneous parties. In sum, all these characteristics of party systems will influence the extent of social strains in that society. As we have argued, higher level of economic development is different from rapid economic growth in its need of technical and institutional innovation. Since a heterogeneous party systems is more flexible and adaptive than a homogeneous one, it will provide a better environment for a higher level of economic development in the long run. In our study, we hence argue that:

Proposition 12: The greater the extent of interest representation of party systems, the higher the level of economic development in a given country.

Economic Development and Social Inequality

Although rapid economic growth leads to an increase in average income, it tends to displace economic product in the short-run in such a fashion as to increase the overall inequality. Olson argued that several forces help bring about this outcome. The primary factor, however, lies in the "tendency for wages to become more sticky than prices. Thus, as demand increases with economic growth, businessmen may raise prices pari-passu with the increases in demand, but wages may rise more slowly." (Olson, 1963: 536) And rapid economic growth will also bring about "a situation where some lose part of their incomes, and others, because of the new problem of unemployment, lose all of their incomes." (Olson, 1963: 538) This study then assumes that:

Proposition 13: The higher the rate of economic development, the higher the level of social inequality in a given country.

Most scholars have argued that the stronger and more industrialized the economy, the more equal the distribution of material goods within it. Among them, Kuznets was the first modern social scientist to explore the relationship between the process of economic development and the distribution of wealth. On the basis of both cross-national data on "developed" and "underdeveloped" countries and time-series data for some European countries, Kuznets (1963) concluded that greater income equality seemed to be one of the major products of economic development. The reason for this argument is that industrialization

results in less social inequality because of the new economic surplus it produces. In addition, a higher level of economic development and the concomitant expansion of technology lead to a reduction in the range of material inequality as the proportion of the population falling into the middle range of the distribution of material goods increases (Kerr, et al., 1964). Based on these arguments, we therefore hypothesize that:

Proposition 14: The higher the level of economic development, the lower the level of social inequality in a given country.

Economic Development and Political Democracy

According to Deutsch, social mobilization expands "the politically relevant strata of the population." (1961: 497-8) Rapid economic growth as a part of the processes of social mobilization therefore may lead to higher degree of political participation in a given country. Moreover, rapid economic growth may increase the capacity of a society to satisfy the rising aspirations and therefore should tend to reduce social frustrations and the consequent political instability (Huntington, 1968). Therefore, it seems quite reasonable to argue that a high rate of economic development contributes to the development of political democracy.

However, rapid economic growth may also be a highly destabilizing force in the developmental process of democracy. According to Olson (1963), rapid economic growth disrupts traditional social groupings, produces alienation and political extremism, and widens the gap between the rich and the poor. These phenomena will increase people's dissatisfaction with the existing order and hence tend to enhance the possibility of revolutionary movements. As Kornhauser argued, "the rapid influex of large numbers of people into newly developing urban areas invites mass movements." (Kornhauser, 1959: 145) Therefore, the faster the enlightenment of the population, the more frequent the overthrow of the government (Huntington, 1968). The process of rapid economic growth may lead to a revolutionary situation or authoritarian regime instead of political democracy.

Based on these above arguments, high rate of economic development may or may not contribute to the development of political democracy. In other words, the rate of economic development may not be a good explanator of the extent of political democracy in a given country. In the present study, therefore, we propose that the rate of economic development does not have any impact on the extent of political democracy in a given country.

Since Aristotle, men have argued that only in a wealthy society could a situation exist such that the mass of population could intelligently participate in politics and could develop the self-restraint necessary to avoid succumbing to the appeals of irresponsible demagogues. For the lower strata, economic development permits them to develop longer time perspectives and more complex and gradualist views of politics. Increased wealth and education also serve democracy by increasing the extent to which the lower strata are exposed to cross pressures which will reduce the intensity of their commitment to extremist activities (Lipset, 1959).

Increased wealth also affects the political role of the middle class through changing the shape of the stratification structure. A large middle class plays a mitigating role in moderating conflict since it is able to reward moderate and democratic parties and penalize extremist groups (Lipset, 1959). By increasing the volume and range of demands made upon the government and administration, and widening the scope of politics and the membership of the politically relevant strata, moreover, this process increases the frequency and the critical importance of direct communications between the ruling class and the ruled class which contribute to the development of democracy (Deutsch, 1961).

In addition, scholars have argued that society without a multitude of organizations relatively independent of the central state power has a high dictatorial as well as revolutionary potential (Arendt, 1950). Economic development is usually linked to the presence of such kinds of intermediate organizations and institutions. Since such organizations are the sources of countervailing power and new opinions, they in turn contribute to a nation's receptivity to democratic political tolerance. With this regard, the level of economic development may have positive effects on the development of political democracy. Therefore, we believe that:

Proposition 15: The higher the level of economic development, the greater the extent of political democracy in a given country.

Social Inequality and Political Democracy

Since Aristotle, political philosophers have speculated that social inequality is a fundamental cause of revolution. De Tocqueville (1961: 302) stated that:

Almost all of the revolutions which have changed the aspect of nations have been made to consolidate or to destroy social inequality. Remove the secondary causes which have produced the great convulsions of the world, and you will almost always find that principle of inequality at the bottom.

Moreover, the proponents of relative deprivation arguments (Davies, 1962; Feierabend and Feierabend, 1966, 1972; Galtung, 1964; Gurr, 1968, 1970) also claimed a direct relationship between various kinds of deprivation-induced discontent and revolutions or political insurgency. Based on these above arguments, we propose that:

Proposition 16: The higher the level of social inequality, the less the extent of political democracy in a given country.

A Causal Model

According to the above arguments, we propose a causal model of the relationships between party ideologies and national development, diagrammed in Figure 1. The plus (+) sign indicates a positive relationship, and the minus (-) sign a negative relationship.

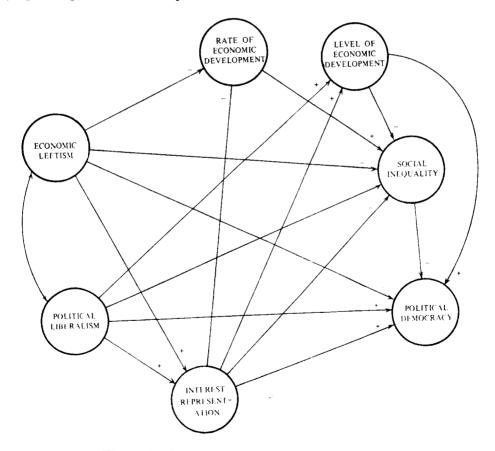


Figure 1: Causal Diagram of Theoretical Model

Methodology: Measurement and Methods

In studying the impacts of party ideologies on the characteristics of national development, we face a problem of data availability for comparative research. There are few studies focusing on the construction of data collection in the study of political parties. Janda's work *Political Parties: A Cross-National Survey* (1980a) is an exception. It covered 158 parties operating during 1950 to 1962 in 53 countries representing all regions of the world. Lacking other alternative datasets in the comparative study of political parties, we used Janda's dataset for our study of the impacts of party ideologies on our measures of national development. In the pages that follow, we present a brief description of the measurement of our theoretical concepts.

Party Ideologies To determine the effects of party ideologies on various characteristics of national development, we decide to choose the party systems rather than the individual party as our units of analysis. Economic leftism of party systems refers to the degree of a party system's preference in governmental control of national economy in a given society. And political liberalism of party systems indicates the extent of a party system's intention to the protection of political liberties and civil rights within a society.

In his study, Janda (1980a) reported a factor analysis of thirteen issue scores for 158 political parties for 53 countries. Four issues tapped an underlying dimension which he called "economic leftism". This factor is comprised of party positions on government ownership of the means of production, government role in economic planning, redistribution of wealth, and social welfare. The other four issues tapped another underlying dimension which he called "political liberalism". This factor consisted of party positions on support of the military, electoral participation, protection of civil rights, and interference with civil liberties. Because of both theoretical and statistical considerations, we only choose electoral participation, protection of civil rights and interference with civil liberties as our indicators of the variable of political liberalism of party systems.³

As we have said, our interest is in the impacts of party systems as a whole on national development. We assume that the influence of an individual party depends on its strength in political system. In Janda's (1980a) study, the measurement of "governmental status" refers to our theoretical concept of the party's strength in political system. We hence choose the variables of government discrimination, governmental leadership, cabinet participation, legislative strength

and electoral strength to construct a composite index of the concept of governmental status.

The structure of data on these indicators is divided into two periods of 1950-1956 and 1957-1962. At first, we standardize the raw scores of these four indicators of governmental status into T-scores and average them to construct a composite index for the measurement of governmental status for each party. We then multiply the score of each indicator of economic leftism and political liberalism by each party's governmental status scores separately for each period. Finally, compute the score for each indicator for each party system, we average the scores of all parties in each country for the periods of 1950-1956 and 1957-1962. The data for the indicators of economic leftism, political liberalism, and governmental status for each party are available from Janda's Political Parties: A Cross-National Survey (1980a).

Interest Representation Every society has social cleavages. According to Janda (1980a), there are six dimensions that seem especially relevant to a crossnational comparative analysis of party support. These are (1) economic status, (2) religion, (3) ethnicity (including language and race), (4) region, (5) urbanization, and (6) education. Interest representation is a concept for measuring the extent of how well the party systems reflect the interest of these social cleavages within a society. Respectively, the concepts of social attraction, social diversity, and social reflection address this question. In this study, therefore, we choose social attraction, social diversity and social reflection as our indicators of interest representation of party systems.

The measurement of interest representation of party systems is about the same as the measurement of economic leftism and political liberalism of party systems. Since Janda used the concept of social concentration instead of social diversity, we first subtract the values of each dimension of this variable from 1 for measuring our concept of social diversity. Secondly, we multiply the score of each dimension of three indicators by the individual party's scores of governmental status for two periods of 1950-1956 and 1957-1962. Then, we average the scores for each dimension of three indicators for each country. To compute the scores of each indicator for each party systems, finally, we sum up the scores of six dimensions and then averaging them to get the scores for social attraction, social diversity, and social reflection for each period. The data for six dimensions of social attraction, social concentration, and social reflection are also available from Janda's *Political Parties: A Cross-National Survey* (1980a).

Economic Development In general, most studies do not deal with the

lagged effects of party ideologies on various characteristics of national development. We argue that the impacts of party ideologies on the national system may delay in a specific time period. Therefore, we will look at the lagged effects of party ideologies and interest representation of party systems on economic development, social inequality, and political democracy. In measuring the level of economic development, we choose GNP per capita, energy consumption per capita, the Physical Quality of Life Index and industrial GDP as indicators. For the measurement of the rate of economic development, we choose only GNP per capita, energy consumption and industrial GDP as indicators.⁴ The indicators of data sources of these two distinct aspects of economic development will be presented in the following.

- (1) GNP per capita By measuring the rate of economic development, we compute the average growth rates of Gross National Products (GNP) per capita for the periods of 1955-1965 and 1960-1970. For the level of economic development, we use the values of GNP per capita in 1960 for the period of 1955-1965, and the values of GNP per capita in 1965 for the period of 1960-1970. The figures of GNP per capita for the years of 1955, 1960, 1965 and 1970 for each country are available from Banks' Cross-Polity Time Series Data (1971).
- (2) Energy Consumption per capita In the measurement of the rate of economic development, we compute the annual change of energy consumption per capita for the periods of 1955-1965 and 1960-1970. To measure the level of economic development for the periods of 1955-1965 and 1960-1970, we use the values of energy consumption per capita in the years of 1960 and 1970 prospectively. These values of energy consumption per capita for the years of 1955, 1960, 1965 and 1970 for each country are also available from Banks' Cross-Polity Time Series Data (1971).
- (3) Physical Quality of Life Index According to Morris (1979), infant mortality, life expectancy, and literacy rates are three basic components of the composite Physical Quality of Life Index (PQLI). To compute the score of the PQLI for each country, we first transform the raw values of theses three indicators into standardized Z-scores for the years of 1960 (the period of 1955-1965) and 1965 (the period of 1960-1970). Since the measure of infant mortality is in opposition to other indicators, we take the inverse of the Z-scores of infant mortality for further computation. Finally, we compute the average scores of these three indicators which in turn become our composite measures of the level of economic development for the periods of 1955-1965 and 1960-1970. The raw values of infant mortality, life expectancy, and literacy rates for the years

of 1960 and 1965 are collected from Taylor and Hudson's World Handbook of Political and Social Indicators, II (1972), and Taylor and Jodice's World Handbook of Political and Social Indicators, III (1983).

(4) Industrial GDP By the rate of economic development, we refer to the annual change of the Gross Domestic Products (GDP) of industrial sectors as a percentage of the total GDP. We compute the average growth rate of industrial GDP from 1955 to 1965 and from 1960 to 1970 for each country. In measuring the level of economic development, we refer to the absolute level of the GDP of industrial sectors as a percentage of the total GDP. We choose the year of 1960 to represent the level of industrial GDP for the period of 1955-1965, and the year of 1965 for the period of 1960-1970 for each country. The raw values for this indicator are available from Banks' Cross-Polity Time Series Data (1971).

Social Inequality In measuring the level of social inequality, we will choose four indicators.

- (1) Gini Index of Individual Income There are two distinct types of measure based on the concept of the Gini Index; they are the Gini Index of individual income and the Gini Index of sectoral income. In our study, the Gini Index of individual income was computed from information given in Chenery and others (1974) and Taylor and Jodice's dataset World Handbook of Political and Social Indicators, III (1983). The year for the data is around the period of between 1950 and 1970. Since there are no other data sources available, we use this indicator for both the periods of 1955-1965 and 1960-1970.
- (2) Gini Index of Sectoral Income The Gini Index of sectoral income for 1960 (the period of 1955-1965) was adapted from Taylor and Jodice's dataset World Handbook of Political and Social Indicators, III (1983). For 1965 (the period of 1960-1970), it is computed from data on sector contribution to GDP given in the United Nations' Yearbook of National Accounts Statistics (1966). Sector work force data for 1965 are taken from the International Labor Organization's Handbook of Labor Statistics (1967).
- (3) Health Pattern In measuring the conditions of social inequality, Hibbs (1973) suggested to construct a summated standardized Z-scores index using physicians per million inhabitants, infant mortality, caloric consumption per capita, and protein consumption per capita. To construct an index of social inequality using this technique, we transform the raw scores of each indicator into Z-scores at first. We then take the inversed values of physicians per million inhabitants, caloric consumption per capita, and protein consumption per capita.

Finally, we average the scores of these four indicators to get an index of social inequality. The values of these four indicators for the periods of 1955-1965 and 1960-1970 are collected from Taylor and Hudson's World Handbook of Political and Social Indicators, II (1972), and Taylor and Jodice's World Handbook of Political and Social Indicators, III (1983).

(4) Social Immobility The data for the extent of social immobility in 1960 is directly adapted from Gurr and Gillies' dataset *Conflict and Society* (1978). Lacking other alternative sources, moreover, we choose this indicator for both the periods of 1955-1965 and 1960-1970.

Political Democracy A variety of indicators appears in the measurement of political democracy. Many of these indicators closely correspond to the theoretical definitions of political democracy. Others, however, are of questionable validity. Following Bollen's (1980) definition, we argue that political liberties and popular sovereignty are the most important dimensions of the theoretical concept of political democracy. We present the conceptualization and operationalization of the extent of political democracy in the pages that follow.

(1) Political Liberties In measuring the concept of political liberties, we choose three indicators: freedom of the press, freedom of group opposition, and internal security forces per 1,000 working age population. Freedom of the press is ranked on a nine-point scale that measures the degree of control normally exercised by any official agency which has the power to interfere with the dissemination and discussion of the news (Nixon, 1960: 17). The values of this indicator for 1960 (the period of 1955-1965) and 1965 (the period of 1960-1970) are available in Nixon (1960, 1965).

Freedom of group opposition measures the degree to which organized opposition is allowed. Since we are interested in the impacts of party ideologies on national characteristics, we must choose an indicator which is logically independent of party existence and behavior. Within this concern, we choose the variable of freedom of group opposition from Banks and Textor's A Cross-Polity Survey (1963). The figures of this indicator are also represent for both periods of 1955-1965 and 1960-1970.

The third indicator of political liberties we choose to measure the extent of civill liberties is the internal security forces per 1,000 working age population.⁷ Though the amount of internal security forces is not a direct measure of civil liberties, it is a measure of the capacity of governmental repression. We can assume that the higher the scores of this indicator, the more the potential for the govern-

mental coercion. Since this indicator originally is a conceptual measure of the extent of political authoritarianism, we take the inverse values of the standardized Z-scores in consistent with our measurement of political democracy. The figures for this indicator are adapted from Taylor and Hudson's dataset World Handbook of Political and Social Indicators, II (1971).

(2) Popular Sovereignty The three measures of popular sovereignty are: fairness of elections, executive selection, and legislative selection. Fairness of elections scales the degree to which elections are relatively free from corruption and coercion. The scoring of this indicator is based on whether or not alternative choices exist, and on whether or not the elections are administered by a non-partisan administration. Also considered are whether or not the elections are rigged and if the results of the elections are binding on all parties. The three-point scale ranges from a low of no elections are rigged and if the results of the elections are binding on all parties. The three-point scale ranges from a low of no elections, to a high of relatively free and competitive elections. The figures of this indicator for the period of 1955-1965 and 1960-1970 are directly adapted from Taylor and Hudson's World Handbook of Political and Social Indicators, II (1971, 1972).

The executive selection variable indicates whether the chief executive of a country is elected, or not on the one hand, and the types of regime in a given country on the other hand. The elective dimension of chief executive is a two-point scale. And the types of regime is a three-point scale which ranging from a low of military regime, to a high of civilian regime. We then multiply the values of the elections of chief executive by the values of the types of regime to get the scores for the indicator of executive selection for each country. Therefore, the lowest score is given to the countries that have both no elections or a nonelective chief executive and military regime, while the highest score is given to the executives that are both elected and civilian regime.

The legislative selection variable considers whether the legislative body is fully elected and the effectiveness of the legislative body. The elective dimension of the legislative body is a three-point scale which ranging from a low of no elections, to a high of full elections. This is then multiplied by the effectiveness of the legislative body. Therefore, the lowest score is given to countries with no elections or a nonelective legislative body, while the highest score is given to legislative bodies that are both elected and an effective power in determining national policies.

The figures for the elections of chief executive and the types of regime,

and both dimensions of the legislative selection are available in Banks' Cross-Polity Time Series Data (1971). For measuring these two indicators, we compute the average scores for the periods of 1955-1965 and 1960-1970 instead of choosing specific time points. For a clear understanding of measurement procedure, we summarize our variables and their indicators in Table 1.

For some countries, especially the developing nations, not all indicators of our independent and dependent variables were available. In those cases where half or less than half of the indicators were missing, the values of those missing cases were substituted by the mean Z-scores of other available indicators of that latent variable. Finally, there are 50 cases for the period of 1950-1956 and 52 cases for the period of 1957-1962 in our study of the impacts of party ideologies on national development.⁸

As we have discussed, we are using multiple-indicators technique for measuring our theoretical concepts. To construct the conceptual framework, moreover, we formulated causal model dealing with the impacts of party ideologies on national development. Since we are using both path analysis and confirmatory factor analysis in the same model, therefore, the adoption of the Covariance Structure Model (Long, 1983) or LISREL Model (Joreskog and Sorbom, 1984) would be the most adequate statistical technique for our cross-national research.

In addition, the testing procedure of our research design should be elaborated. In our study, we will look at the lagged effects of the independent variables on the dependent variables. Because all of our independent and dependent variables are systemic characteristics of a given country, we think that the effect or changing of these attributes will not easy to detect in a short time. We argue that the effects of party ideologies on economic development, social inequality, and political democracy may appear after a specific time period only. In this study, therefore, we are formulating our model in theoretical lags between the independent and dependent variables. In testing our theoretical model, moreover, we will build our theoretical model using the data of the first period. Thereafter, we will use the data of the second period to test the adequateness or fitness of the model.

Substantive Results: Estimation and Extension

For the study of impacts of party ideologies on economic development, social inequality and political democracy, we have discussed the relationships among our theoretical variables and their measurement in the last section. We

Table 1: Operationalization of Exogenous and Endogenous Variables

VARIABLES	INDICATORS	PERIOD I	PERIOD II
	Government Ownership of Means		
	of Production	1950-56	1957-62
ECONOMIC	Government Role in		
LEFTISM	Economic Planning	1950-56	1957-62
	Redistribution of Wealth	1950-56	1957-62
	Social Welfare	1950-56	1957-62
POLITICAL	Electoral Participation	1950-56	1957-62
LIBERALISM	Protection of Civil Rights	1950-56	1957-62
	Protection of Civil Liberties	1950-56	1957-62
INTEREST	Social Attraction	1950-56	1957-62
REPRESENTATION	Social Diversity	1950-56	1957-62
	Social Reflection	1950-62	1957-62
	Growth Rate of GNP per capita	1955-65	1960-70
RATE OF ECONOMIC	Growth Rate of Energy	1055.65	10/0.70
DEVELOPMENT	Consumption per capita Growth Rate of Industrial	1955-65	1960-70
DEVELOT MENT	GDP as % of Total GDP	1955-65	1960-70
	I and of CND and a size		
LEVEL OF	Level of GNP per capita Level of Energy Consumption	1960	1965
ECONOMIC	per capita	1960	1965
DEVELOPMENT	Level of the POLI	1960	1965
	Level of Industrial GDP	1700	1703
	as % of Total GDP	1960	1965
	Gini Index of Individual		
	Income Inequality	1960	1960
SOCIAL	Gini Index of Sectoral	-	
INEQUALITY	Income Inequality	1960	1965
	Health Pattern as a Measure		
	of Social Inequality	1960	1965
	Social Immobility	1960	1960
	Freedom of Press	1960	1965
	Freedom of Group Opposition	1963	1963
POLITICAL	Civil Liberties	1960	1965
DEMOCRACY	Fairness of Elections	1955-65	1960-70
	Executive Selection	1955-65	1960-70
	Legislative Selection	1955-65	1960-70

specify a causal model with latent variables measured by multiple indicators. Since government ownership of the means of production is a way of redistribution of wealth for a society, the measurement errors of these two indicators may be correlated. In addition, both social attraction and social reflection refer to the extent to which the political party attracts or reflects its supporters in a given society. Therefore, we can also assume that the measurement errors of these two indicators of the concept of interest representation of party systems are correlated. With this regard, the causal diagram of our model can be redrawn as follows:

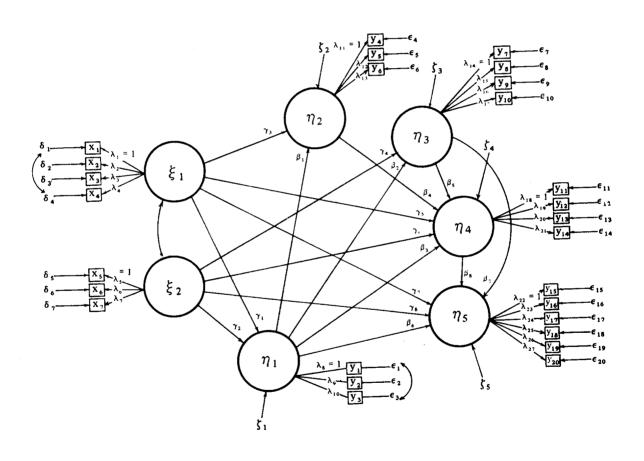


Figure 2: Path Diagram of Theoretical Model with Measurement Errors

where,

- ξ_1 : Economic Leftism of Party Systems ξ_2 : Political Liberalism of Party Systems
- η_1 : Interest Representation of Party Systems
- η_2 : The Rate of Economic Development
- η_3 : The Level of Social Inequality
- η_{\bullet} : The Extent of Political Democracy
- x₁: Government Ownership of Means of Production (GOVOWN)
- x₂: Government Role in Economic Planning (ECOPLN)
- x_3 : Redistribution of Wealth (REDIST)
- x₄: Social Welfare (SOCWEL)
- x_5 : Electoral Participation (ELEPAR)
- x₆: Protection of Civil Rights (CIVRIG)
- x₇: Protection of Civil Liberties (CIVLIB)
- y_1 : Social Attraction (SOCATT)
- y₂: Social Diversity (SOCDIV)
- y₃: Social Reflection (SOCREF)
- y₄: Growth Rate of GNP per capita (GNPCAP)
- y₅: Growth Rate of Energy Consumption per capita (ENERGY)
- y₆: Growth Rate of Industrialization (INDUST)
- y_7 : The Level of GNP per capita (PERGNP)
- y₈: The Level of Energy Consumption per capita (ENGCON)
- y_9 : The Level of the PQLI (PQLI)
- y_{10} : The Level of Industrialization (INDGDP)
- y_{11} : Gini Index of Individual Income (GININD)
- y₁₂: Gini Index of Sectoral Income (GINSEC)
- y_{13} : The Level of Social Immobility (SOCIMM)
- y₁₄: Health Pattern as a Measure of Inequality (HEALTH)
- y_{15} : Press Freedom (PRESS)
- y_{16} : Group Opposition Freedom (FREGRP)
- y₁₇: Civil liberties (LIBERT)
- y_{18} : Executive Selection (EXESEL)
- y₁₉: Legislative Selection (LEGSEL)
- y₂₀: Fairness of Elections (ELECTN)

Estimation

Assuming the distribution of observed variables are multivariate normal, we obtain the maximum-likelihood estimates of parameters of our model using Joreskog's (1984) 'general method for the analysis of covariance structure'.

The estimates of our model will be computed from pairwise correlation matrices. The correlations among our observed variables for period one are given in Table 2. Using the LISREL program, we report the results for period one in Table 3. At first, let us look at the statistics of the measurement models. For the exogenous variables, all, λ 's are significant at 0.05 level. And the R^2 of all indicators for both economic leftism and political liberalism of party systems are above 0.55. In addition, as a support of our assumption, the measurement errors of government ownership of the means of production and redistribution of wealth (δ_1, δ_3) are significantly correlated at 0.05 level. Moreover, the total coefficient of determination (TCD) for the exogenous measurement model is very high at 0.982.

In the case of the endogenous variables, we also found that all λ 's are significant at 0.05 level. Except for interest representation of party systems' indicator, social reflection; the level of economic development's indicator, the PQLI; social inequality's indicator, Gini Index of individual income; and political democracy's indicator, executive selection, the R_2 of the indicators for all endogenous variables are higher than 0.45. As we expected, the measurement errors of social attraction and social reflection of party systems (ϵ_1, ϵ_3) are correlated and is significant at 0.05 level. In general, the TCD of the endogenous measurement model is also very high; it is 0.996.

Based on the above findings, we can conclude that the fit of the measurement models for both the exogenous and the endogenous variables are very good. In other words, the indicators we selected for all latent variables represent good measures of these concepts.

Contrasting with the measurement models, the statistical results for the path analysis of latent variables model are more complicated. As we expected, both economic leftism and political liberalism of party systems have significantly positive effects on interest representation of party systems (γ_1 , γ_2). Though it is not significant at 0.05 level, economic leftism of party systems has positive impacts on the rate of economic development (γ_3) which is opposed to our hypothesis. In conformation of our hypothesis, political liberalism of party systems has significantly positive influence on the level of economic development (γ_4). Economic leftism and political liberalism of party systems have expectedly negative impacts on the level of social inequality (γ_5) while they are not significant at 0.05 level. Though it is not significant at 0.05 level, political liberalism of party systems has negative effects on the level of social inequality (γ_6). For the extent of political democracy, we found that economic leftism of party systems has a negatively insignificant influence on it (γ_7). Finally, political liberalism of

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11 CIVLIB1	-																										1.00
CIVE																										1.000	.713
1 ELEPAR																									1.000	.735	.751
SOCWEL																								1.000	.403	.394	622
REDIST																							1.000	969	.506	. 531	. 585
ECOPLN1																						1.000	999	.820	484	465	663
GOVOWN1																					1.000	.810	834	742	404	.437	.647
ELECTN1																				1.000	.331	.390	.412	.358	719	.548	.660
LEGSEL 1																			1.000	.799	.262	.329	.283	.225	848	.487	.674
EXESET.1																		1.000	.291	181	.526	.532	.547	570	343	.436	484
GINSECT WEALTHT SOCIMMI PRESST FREGRPT LIBERTT EXESELT LEGSELT ELECTRI GOVOWNT ECOPLIT REDISTY SOCWELT ELEPART CIVRIGT																	1.000	365	.577	.659	.427	.536	044	.485	.648	.566	.685
REGRP1																1.000	.662	388	788	757	.512	.521	.427	424	.624	.482	.653
HESS1 F															1.000	786	764	393	.839	.821	.437	.585	.435	505	.709	588	.716
CIMINA														1.000	.438	338	.244	649	929	436	.093	181	. 176	. 010.	.280	-,117	-166
S THIN													1.000	1 778.	.386	.349	. 189	880	.635	.433	064	029	110	.215	.252	44	44
SEC.) WE												1.000	.661	. 717.	292	138	. 239	980	.389	.246	.168	.125	.120	. 181	. 233	-163	187
											0001	.1 633.	.542		000	18	201	.302	138		101	.346	384	423	301	780	102
LONING LAGSON										1.000	.502 1.0	6865	.742	, 108	.486(.338	.320	600	587		710-	.135	080.	.026	. 283	. 691.	219
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ENGC							۰	1.000			Ċ	7670	5687	3733	1 .457	315. 0	2 .300	410. 7	7 .573	396	.021	190'. 6	8 .073	.084	3 .273	137	.200
- PERG						۰	1.000	3 .961	.465	3 .956	9 495	1667	3755	8 .773	11.6.	370	.342	7.037	7.827	1451	900:	680.	810.	990.	313	181.	7224
						1.000	.159	.163	6.00	3143	640	.061	9.00-	910.	. 156	-106	.190	.323	072	.040	.010		.00	900	.256	.278	107
ENERG				_	1.000	.615	.202	237	080	183	.168	7.71.	074	.032	.392	309	470	.345	224	- 260	.145	197	.108	.147	.382	.358	.302
5				1.000	.488	.588	.137	.110	.107	.212	121	077	.369	283	090	600	.219	.152	.207	.122	4	980	057	649	.033	.013	.016
200			1.000	.037	-368	-336	398	.336	.252	.311	070	-202	474.	288	.291	479	196	.208	528	424	.027	.092	080	316.	.247	.158	8
SOCALLI SOCUIVI SOCHEPI GNPCAPI ENERGYI		1.000	.396	.168	.033	.158	ž,	304	.298	.299	.363	.302	.461	.241	028	8	.163	-134	772.	.032	.391	405	.338	.377	075	031	.129
800	1.000	.576	948	.024	.287	.327	372	.313	.234	772.	095	.170	15	-228	184	382	.102	690	.480	332	135	722.	.185	148	131	.107	-016
	SOCATF1	\$0CDIV1	SOCREF1	GNPCAP1	ENERGY1	INDUST1	PERGNP1	ENGCON1	Politi	INDGDP1	GININD	GINSECT	WEALTHI	SOCIMM1	PRESS1	FREGRP1	LIBERT	EXESELI	LEGSEL1	ELECTN1	GOVOWNI	ECOPLNI	REDIST1	SOCWEL1	ELEPAR1	CIVRIG1	CIVILIB1
													40														

Table 3: Parameter Estimates of Period One (N = 50)

Parameter	ML Estimates (standard error)	Parameter	ML Estimates (standard error)
λ	1.00c	$cov(\delta_1,\delta_3)$	0.200(0.069)**
λ_2	1.102(0.125)**	$var(\epsilon_1)$	0.502(0.136)**
λ_3	0.881(0.097)**	$var(\epsilon_1)$	
λ4	1.041(0.129)**		0.233(0.121)*
λ4	1.000c	$\operatorname{var}(\epsilon_3)$	0.728(0.163)**
λ_5	,	$var(\epsilon_4)$	0.547(0.137)**
λ_6	0.923(0.136)**	$var(\epsilon_s)$	0.446(0.130)**
λ,	1.047(0.126)**	$var(\epsilon_6)$	0.293(0.131)**
λ	1.000c	$\operatorname{var}(\epsilon_{\tau})$	0.025(0.012)**
λ	1.240(0.273)**	var(€ ₈)	0.057(0.016)**
λ10	0.739(0.086)**	var(€,)	0.777(0.157)**
λ_{11}	1.000c	$var(\epsilon_{10})$	0.057(0.016)**
۸,2	1.106(0.262)**	$var(\epsilon_{11})$	0.666(0.138)**
λ ₁₃	1.249(0.289)**	$var(\epsilon_{12})$	0.446(0.097)**
λ14	1.000c	$\operatorname{var}(\hat{\epsilon}_{13}^{2})$	0.109(0.042)**
λ15	0.984(0.042)**	$var(\epsilon_{14})$	
λ ₁₆	0.479(0.129)**		0.152(0.047)**
λ	0.984(0.042)**	var(ϵ_{15})	0.103(0.034)**
λ_{17}		$\operatorname{var}(\epsilon_{16})$	0.279(0.064)**
λ ₁₈	1.000c	$\operatorname{var}(\epsilon_{17})$	0.404(0.087)**
λ19	1.288(0.313)**	$var(\epsilon_{18})$	0.843(0.172)**
λ20	1.634(0.347)**	$var(\epsilon_{19})$	0.217(0.052)**
λ_{21}	1.594(0.342)**	$var(\epsilon_{20})$	0.242(0.057)**
۸22	1.000c	$cov(\epsilon_1, \epsilon_2)$	0.579(0.144)**
۸23	0.897(0.094)**	$R^2(x_1)$	0.720
λ24	0.815(0.107)**	$R^2(x_2)$	0.874
λ25	0.418(0.143)**	$R^2(x_3^2)$	0.559
λ26	0.935(0.087)**	$R_0^2(x_4)$	
λ27	0.920(0.090)**	$R^{2}(x_{5})$	0.780
	0.665(0.210)**	D2()	0.739
γ_1		$R^2(x_6)$	0.629
γ_2	0.341(0.182)*	$R^2(x_7)$	0.811
γ_3	0.211(0.158)	TCD for x	0.982
γ_4	0.368(0.162)**	$R_2^2(y_1)$	0.498
γ_{5}	-0.059(0.115)	$R^{2}(y_{n})$	0.767
γ_6	-0.098(0.098)	$R^{*}(y_{2})$	0.272
γ_{τ}	-0.212(0.178)	$R^{2}(y_{\star})$	0.453
γ_{6}	0.706(0.166)**	R ² (ν ₋)	0.554
β,	-0.268(0.201)	$R^2(y_6)$	0.707
$egin{array}{ccc} eta_1 & & & & & & & \\ eta_2 & & & & & & & \\ eta_3 & & & & & & \\ eta_4 & & & & & & \\ eta_5 & & & & & & & \\ \end{array}$	0.513(0.216)**	$R^{2}(y_{7})$	0.975
B	-0.096(0.109)	$R^2(y_8)$	
β ³	-0.235(0.102)**		0.943
β 4		$R^2(y_9)$	0.223
ρ ₅	-0.463(0.109)**	$R^{2}(y_{10})$	0.943
β_6	0.149(0.159)	R-(V)	0.334
β_7	0.203(0.145)	R*(v)	0.554
β_8	-0.197(0.258)	$R^{-}(y_{12})$	0.891
ϕ_{11}	0.720(0.198)**	$R^{2}(y_{1A})$	0.848
ϕ_{21}	-0.496(0.146)**	R ² (y ₁₆)	0.897
ϕ_{22}^{21}	0.739(0.201)**	$R_2^2(y_{16})$	0.721
ψ_{11}^{22}	0.320(0.134)**	$R^{2}(y_{17})$	0.596
Ψ aa	0.420(0.175)**	$R^2(y_{17})$	0.157
Ψ 22 Ψ		$R^2(y_{18})$	
Ψ 33	0.772(0.168)**	$R^{2}(y_{19})$	0.783
V 44	0.076(0.038)**	$R^2(y_{20})$	0.758
Ψ 55	0.159(0.054)**	TCD for y	0.996
var(o,)	0.280(0.070)**	$R_2^2(\eta_1)$	0.358
var(δ ₂)	0.126(0.051)**	$R'(n_*)$	0.073
var(δ ₃)	0.441(0.099)**	R*(n.)	0.208
$var(\delta_4)$	0.220(0.061)**	R*(n)	0.778
$var(\delta,)$	0.261(0.071)**	$R^2 (\eta_s^4)$	0.823
$var(\delta_6)$	0.371(0.088)**	TCD for n	0.862
$\operatorname{var}(\delta_{7})$	0.189(0.062)**		
$x^2 (df = 305)$		830.20 (ргор. 1	evel = .000)
GF!		0.588	•

party systems has positive impacts on the extent of political democracy (γ_8), and it is significant at 0.05 level.

From the Table 2, we also found that interest representation of party systems has negative impacts on the rate of economic development (β_1) even though it is not significant at 0.05 level. Supporting our arguments, interest representation of party systems has significantly positive influence on the level of economic development (β_2) . Moreover, interest representation of party systems has negative effects on the level of social inequality (β_3) while it is not significant at 0.05 level. In contrast with our hypothesis, unfortunately, the rate of economic development has significantly negative impacts on the level of social inequality (β_4) . As we hypothesized, the level of economic development has negative effects on the level of social inequality (β_5) , and it is significant at 0.05 level. Additionally, interest representation of party systems and the level of economic development have positively nonsignificant influence on the extent of political democracy (β_6, β_7) . Though it is not significant at 0.05 level, moreover, the level of social inequality has negative impacts on the extent of political democracy (β_8) .

Other than evaluating the parameter estimation, we also need to look at the total effects of the explanatory variables. For interest representation of party systems (η_1), 35.8% of total variance was explained by economic leftism and political liberalism of party systems. In considering the rate of economic development (η_2), we found that the total effects is very low because the R² is 0.073. It means that only 7.3% of total variance was explained by economic leftism, political liberalism and interest representation of party systems. Concerning with the level of economic development, 20.8% of total variance was explained by these three variables (η_3). However, 77.8% of total variance of the level of social inequality (η_4) was explained by the explanatory variables in our model. And, the R² for the extent of political democracy (η_5) is 0.823 which means that 82.3% of total variance was explained by other six variables. In total, the TCD for the latent variables model is quite high; it is 0.862.

Having discussed the parameter estimates, we should turn to evaluate the overall fit of our model. The x^2 statistic is one of the methods to evaluate the statistical significance of the whole model. The null hypothesis, Ho, is that the model as specified is correct. That is, the specification of the fixed, free, and constrained parameters in Λ, Φ , and Θ is valid. From the Table 2, we found that the x^2 value is 830.20, and the significant level is 0.000. Based on the x^2 statistic, therefore, we may conclude that the overall model fit is poor. However, the

measure of model fit by the x^2 test may have its weakness. If the correlation matrix is analyzed, as Bollen (1984) have argued, the calculated x^2 may not be accurate. Moreover, we know our model not to be perfect although we hope it to be adequate while the x^2 tests for a model of perfect fit. Because of these disadvantages, it is therefore necessary to look at other measures of model fit.

Another statistic for evaluating the overall fit of the model is x^2 divided by its degrees of freedom. Although there is no widespread agreement on what represents a "good" fit, Wheaton and others (1977) suggested less than 5, and McIver and Carmines (1981) recommended 3.2 or less. In our case, the x^2/df of the model equals 2.72. In this respect, we arrived at a different conclusion that the overall model fit is good.

The final measure of model fit we want to present is Joreskog and Sorbom's (1984) Goodness of Fit Index (GFI) or Adjusted Goodness of Fit Index (AGFI). Since the statistical distribution of the GFI is unknown and the GFI does not adjust for the degrees of freedom of the model, we will look at both the GFI and the AGFI accompany with the x^2 and the x^2/df to evaluate the fit of our model. In Anderson and Gerbing's (1984) study on the GFI and the AGFI for the maximum-likelihood method, they found that the GFI and the AGFI tend to increase as sample size increases. But these values decrease as the number of indicators per factor or the number of factors increases especially for smaller sample sizes. Based on their work, the small sample size, and the number of indicators in our model the 0.588 seems still low. Once the degrees of freedom and number of variables is taken into account, the AGFI dropped to 0.489. In general, these two fit measures lead to a conclusion that the overall fit of our model is not good.

Base on these three goodness of fit measures, what about the adequacy of our model fit? The x^2 and the GFI and the AGFI indicate that the overall fit of the model is less than adequate. But the TCD's of the measurement models and the latent variables model are very good. And the x^2/df also suggests that the overall fit of our model is good. Within this concern, we rather believe that the fit of our model is not too bad.

Extension

In order to evaluate the adequateness of our model in understanding the impacts of party ideologies on economic development, social inequality and political democracy, we now apply our model to the data of period two. As

above, the estimates of our model will also be computed from pairwise correlation matrices. The correlations among our observed variables are given in Table 4. The results of estimation for the second period were reported in Table 5. The statistics of the measurement models showed a similar findings. For the exogenous variables, all λ 's are significant at 0.05 level. And the R^2 of all indicators for both economic leftism and political liberalism of party systems are above 0.40. Moreover, the measurement errors of government ownership of the means of production and redistribution of wealth (δ_1, δ_3) are significantly correlated at 0.05 level which supports our hypothesis. The TCD for the exogenous measurement model is less than period one, but still very high at 0.970.

Concerning the endogenous variables, we also found that all λ 's are significant at 0.05 level. Except for some indicators (e.g., the growth rate of GNP per capita, the level of PQLI, civil liberties and executive selection), the R^2 of the indicators for all endogenous variables are equal to or higher than 0.38. Opposed to our assumption and the findings from the data of period one, the measurement errors of social attraction and social reflection of party systems (ϵ_1 , ϵ_3) are not significantly correlated. In general, the TCD of the endogenous measurement model is a little higher than period one; it is 1.000.

In spite of few indicators, based on these findings, it seems quite reasonable to conclude that the fit of the measurement models is very good. Generally speaking, all indicators we chose for the latent variables are good measures of these theoretical concepts.

We now look at the statistical results for the structural equations of the latent variables model. Supporting our hypothesis, economic leftism of party systems has significantly positive effects on interest representation of party systems (γ_1). Though it is not significant, political liberalism of party systems also has positive influence on interest representation of party systems (γ_2). Moreover, economic leftism of party systems has insignificantly negative impacts on the rate of economic development (γ_3). And as we expected, political liberalism of party systems has significantly positive effects on the level of economic development (γ_4). Unexpectedly, economic leftism of party systems has a positive influence on the level of social inequality, but it is not significant at 0.05 level (γ_5). And political liberalism of party systems has a positively insignificant impact on the level of social inequality (γ_6). Furthermore, we found that economic leftism of party systems has significantly negative influence on the extent of political democracy (γ_7). Finally, political liberalism of party systems has a positive effect on the extent of political democracy (γ_8), and it

TABLE 4: CORRELATIONS AMONG OBSERVED VARIABLES OF PERIOD TWO (N = 52)

Table 5: Parameter Estimates of Period Two (N = 52)

Parameter	ML Estimates (standard errors)	Parameter	ML Estimates (standard error)
λ	1.000c	$cov(\delta_1, \delta_2)$	0.136(0.057)**
λ1	1.082(0.110)**		0.172(0.176)
λ_2		$var(\epsilon_1)$	
λ3	0.928(0.091)**	$\operatorname{var}(\epsilon_2)$	0.580(0.142)*
λ,	0.964(0.120)**	$var(\epsilon_3)$	0.338(0.175)*
λ_{5}	1.000c	$var(\epsilon_4)$	0.810(0.166)**
λ,6	0.764(0.157)**	$var(\epsilon_5)$	0.424(0.132)**
^ ₇	0.898(0.150)**	$var(\epsilon_6)$	0.093(0.161)
$\lambda_{_{B}}$	1.000c	$var(\epsilon_{\tau})$	0.043(0.015)**
λρ	0.713(0.186)**	$var(\epsilon_8)$	0.082(0.021)**
λ_{10}	0.894(0.051)**	$var(\epsilon_9)$	0.686(0.137)**
λ_{11}	1.000c *	$var(\epsilon_{10})$	0.048(0.016)**
λ ₁₂	1.742(0.572)**	$var(\epsilon_{11})$	0.620(0.126)**
λ ₁₃	2.187(0.746)**	$\operatorname{var}(\epsilon_{12})$	0.298(0.066)**
λ14	1.000c	$var(\epsilon_{13})$	0.100(0.035)**
λ ₁₅	0.980(0.051)**	$var(\epsilon_{14})$	0.123(0.038)**
λ.	0.573(0.121)**	var(e)	0.019(0.017)
λ ₁₆		$var(\epsilon_{15})$	0.178(0.039)**
λ ₁₇	0.997(0.045)**	$var(\epsilon_{16})$	` ,
λ18	1.000c	$var(\epsilon_{17})$	0.772(0.154)**
λ19	1.360(0.279)**	var(e ₁₈)	0.802(0.159)**
λ ₂₀	1.539(0.292)**	$var(\epsilon_{19})$	0.243(0.051)**
A ₂₁	1.520(0.290)**	$var(\epsilon_{20})$	0.193(0.042)**
λ_{22}	1.000c	$cov(\epsilon_1, \epsilon_2)$	0.229(0.173)
λ ₂₃	0.916(0.064)**	$R^{2}(x_{1})$	0.761
λ24	0.482(0.125)**	$R^2(x_2)$	0.891
λ ₂₅	0.449(0.128)**	$R^2(x_3)$	0.655
λ_{26}	0.879(0.073)**	$R^2(x_4)$	0.708
λ ₂₇	0.907(0.066)**	$R^2(x_5)$	0.712
	0.700(0.235)**	$R^2(x_6)$	0.416
γ_1		$R^{2}(x_{7})$	
γ_2	0.361(0.249)		0.574
γ_3	-0.039(0.079)	TCD for x	0.970
γ_4	0.468(0.173)**	$R^2(y_1)$	0.828
γ_{5}	0.012(0.104)	$R^2(y_2)$	0.420
γ_6	0.071(0.108)	$R^2(y_3)$	0.662
γ_{j}	-0.357(0.163)**	$R^2(y_4)$	0.190
γ_8	0.692(0.184)**	$R^2(y_{\varepsilon})$	0.576
	-0.213(0.112)*	$R^2(y_k)$	0.907
β_1 β_2 β_3 β_4	0.211(0.155)	R'(v.,)	0.957
β.	-0.033(0.075)	$R^{2}(y_{8})$	0.918
β3.	-0.077(0.136)	$R_2^2(y_9)$	0.314
β^4	-0.568(0.117)**	$R^2(y_{10})$	0.952
β_5 β_6	0.196(0.110)*	$R^{2}(y_{11})$	
8		R (J ₁₁)	0.380
β_7	0.029(0.176)	$R^{2}(y_{12})$	0.702
β_8	-0.400(0.276)	$R_{2}^{2}(y_{13}^{12})$	0.900
ϕ_{11}	0.761(0.196)**	R*(ν)	0.877
ϕ_{21}	-0.511(0.147)**	R* (ν., ε)	0.981
ϕ_{22}	0.712(0.201)**	R'(y,,)	0.822
Ψ_{11}	0.620(0.227)**	R*(v)	0.228
Ψ ₂₂	0.145(0.094)	R*(v)	0.198
Ψ 33	0.784(0.170)**	R ² (ν ₁₀)	0.757
¥ 44	0.088(0.039)**	$R^2(y_{20})$	0.807
	0.142(0.052)**	TCD for y	1.000
$var(\delta_1)$	0.239(0.061)**	$R^2(n)$	0.251
$var(\delta_1)$	0.109(0.047)**	D 4 (m)	0.235
var(8)		$P^{2}(n)$	
$var(\delta_3)$	0.345(0.080)**	$R^{2}(\eta_{2})$ $R^{2}(\eta_{3})$ $R^{2}(\eta_{4})$	0.181
$var(\delta_4)$	0.292(0.069)**	$\kappa_2^{-}(\eta_4)$	0.768
$var(\delta_5)$	0.288(0.088)**	$R^{-}(\eta_{\underline{s}})$	0.856
$var(\delta_6)$	0.584(0.127)**	TCD for η	0.872
$var(\delta_{\gamma})$	0.426(0.103)**		
$x^2 (df = 305)$		613.54 (prob.	level = 000)
GFI		0.593	10401 - 1000)
AGFI		0.495	

<sup>Constrained estimators.
Significant at .05(.10) level for one-(two)- tailed test.
Significant at .025(.050) level for one-(two-) tailed test.</sup>

is significant at 0.05 level.

In addition to above findings, the statistic also showed that interest representation of party systems has significantly negative impacts on the rate of economic development (β_1) . Moreover, interest representation of party has positive influence on the level of economic development (β_2) even though it is not significant at 0.05 level. And interest representation of party systems has nonsignificantly negative effects on the level of social inequality (β_3) . The rate of economic development unexpectedly has negative impacts on the level of social inequality (β_4) while it is not significant at 0.05 level. Supporting our arguments, the level of economic development has negative effects on the level of social inequality (β_5) , and it is significant at 0.05 level. In addition, interest representation of party systems has a positively significant influence on the extent of political democracy (β_6) . Though it is not significant, the level of economic development has positive effects on the extent of political democracy (β_7) . Finally, the level of social inequality has negative impacts on the extent of political democracy (β_8) while it is also not significant at 0.05 level.

To evaluate the adequacy of our model, we also have to discuss the total effects of the explanatory variables. First of all, the R^2 for interest representation of party systems (η_1) is 0.251. It indicates that economic leftism and political liberalism of party systems together can explain 25.1% of total variance of interest representation of party systems. Referring to the rate of economic development (η_2), 23.5% of its total variance was explained by economic leftism, political liberalism and interest representation of party systems. For the level of economic development, 18.1% of total variance was explained by these same variables (η_3). In addition, the R^2 for the level of social inequality (η_4) is very high at 0.768. It means that about 77% of total variance of the level of social inequality is explained by its explanatory variables in our model. And, the R^2 for the extent of political democracy (η_5) is 0.856 which means that 85.6% of total variance was explained by all six variables. Totally, the TCD for the overall structural equations of the latent variables model is 0.872, which indicates the fit is not bad.

After the evaluation of parameter estimates, we start to examine the overall fit of our model. In the Table 3, the x^2 value is 613.54, and the significant level is 0.000. Based on the x^2 statistic, therefore, we may conclude that the overall fit of our model is poor. However, the x^2/df of our model is equal to 2.01. In opposition to the above conclusion, it is also quite reasonable to conclude that the overall model fit is good. Taking account of the small sample size and

the number of indicators in our model, finally, the values of the GFI (0.593) and the AGFI (0.495) indicate that the overall fit of the model is not good.

Unfortunately, these three measures of model fit can not provide us an affirmative conclusion. In this respect, what about the adequacy of our model fit? On the one hand, the x^2 and the GFI and the AGFI indicate that the overall fit of the model is less than adequate. On the other hand, the x^2/df suggested that the overall fit of our model is good. Above all, the TCD of the measurement models and the latent variable models implied that the fit is very good. Therefore, we conclude that the fit of our model is more than adequate.

Concluding Remarks

Using the covariance structure analysis for both period one and period two, we conducted a statistical test in modeling the impacts of party ideologies on economic development, social inequality and political democracy. A summary of the findings will provide a better understanding of the adequateness of our theoretical models.

At first, the measurement models for both the exogenous and the endogenous variables are very good. All findings for period two are about the same as period one. The assumed correlation of the measurement errors of government ownership of the means of production and the social welfare is supported by our analysis for both periods. Though the hypothesized relationship between the measurement error of the social attraction and the measurement error of the social reflection is confirmed by this study for period one, it is not supported by the data of period two.

Looking at the effects of the exogenous variables on the endogenous variables, the study yields some results in supporting our theoretical arguments. First of all, economic leftism of party systems has significantly positive impacts on interest representation of party systems for both periods. And for period one only, political liberalism of party systems has a negatively significant effect on interest representation of party systems. For both periods, political liberalism of party systems has significantly positive impacts on the level of economic development. In addition, economic leftism of party systems has a negative influence on the extent of political democracy. However, the statistic is significant for only period two but not period one. Finally, political liberalism of party systems has a positively significant effect on the extent of political democracy for both periods. Nonetheless, we got contradictory findings for the impacts of

economic leftism of party systems on the rate of economic development and the level of social inequality on the one hand, and political liberalism of party systems on the level of social inequality on the other hand.

Except for the relationship between the rate of economic development and the level of social inequality, most of findings for the endogenous variables supported our theoretical arguments. Though it is significant only for the second period, interest representation of party systems expectedly has a negative influence on the rate of economic development. And interest representation of party systems also has positive impacts on the level of economic development, which is significant for period one only. However, interest representation of party systems has a negatively insignificant effect on the level of social inequality for both periods. For the second period only, interest representation of party systems has a significantly positive effect on the extent of political democracy. Above all, the level of social inequality has a negative impact on the extent of political democracy while it is significant for period two only. Though supporting our hypotheses, the level of economic development has a nonsignificant influence on the level of social inequality and the extent of political democracy. Strikingly, we found that the rate of economic development has negative impacts on the level of social inequality in our study. Though the statistic is significant for the first period only, this finding seems to reject most of the existing literature and our theoretical arguments.

Finally, let us discuss the overall fit of our theoretical model. The statistics of the measurement models and the three measures of model fit did not provide us a confirmatory conclusion about the adequateness of our model. Some of them asserted that the overall fit of our model is less than adequate or poor. Others reached a conclusion that the overall fit of our model is not bad or more than adequate. Since there is no general agreement on the selection of the statistics for evaluating the overall fit of the model, it is very difficult to provide any decisive conclusion from this study. Based on the relativism or imperfectness of the social sciences theory, we would like to conclude that the overall fit of our model is not too bad. And the statistics also showed that the overall fit of our model for period two is better than period one.

Having recapitulated the major substantive results, we turn to discuss the strength and weakness of this study and its implications in terms of theoretical and methodological considerations. The strength of our analysis lies in the model specification, the analytical strategy, and the selection of samples. Contrary to most other analyses, this study dealt with both economic and

political dimensions of party ideologies. Our concept of national development refers to economic, social and political characteristics in a given society, and all three important aspects of national development were taken into account in our analysis. Instead of using single indicator and index techniques, this study employed multiple indicators in measuring theoretical concepts. To evaluate the fit of our model, we first tested our model using data from the first period, and then applied the model to the data of period two. The samples for this study included both developing countries and advanced industrial societies on the one hand, and both the more democratic nations and the less democratic regimes on the other hand. In sum, the statistical results from this study would provide a better judgment on the fit of theoretical model.

The weakness of this study arises from the problems of model misspecification and data availability. The most important source of model misspecification is the omission of significant causal factors. Recent analyses have proved that economic dependency (Chase-Dunn, 1975; Kaufman, et al., 1975; Bornschier, Chase-Dunn, and Rubinson, 1978; Ray and Webster, 1978; Dolan and Tomlin, 1979; Bornschier, 1980; Jackman, 1982; Bornschier and Chase-Dunn, 1985), world system position (Evans, 1979; Snyder and Kick, 1979; Bollen, 1983), class mobilization (Shalev, 1983a; 1983b) and powers of the working class and the capitalist class (Hicks and Swank, 1984a; 1984b) have significant impacts in explaining variations of public policies or national characteristics in a given society. These factors therefore should be also taken into account in our understanding of the impacts of party ideologies on national development.

The problem of specification error also comes from the misspecification of the forms of causal relationship. In this study, we assumed that the relationship between the level of economic development and the level of social inequality is a linear one. However, some studies have reported that there might be a curvilinear relationship between the level of economic development and social inequality (e.g., Goldthorpe, 1969; Adelman and Morris, 1973; Paukert, 1973; Ahluwalia, 1974, 1976; Weede and Tiefenbach, 1981). In addition, we also proposed a linear relationship between the level of economic development and the extent of political democracy in this study. But the analyses by Neubauer (1967) and Jackman (1973) reported that the relationship between the level of economic development and the extent of political democracy is a curvilinear one. The insignificant relationship between the level of economic development and the extent of political democracy we found in this study might result from this

incorrect assumption.

The problem of data availability is also one of deficiencies for this study. Though our samples included different types of regime, the number of cases in this analysis is too small to generalize the conclusions in a more general sense. Having studied the robustness of the covariance structure analysis against small sample sizes, Boomsma (1982) concluded that a sample size smaller than 100 might lead to improper solutions or a high risk of drawing wrong conclusions. The study of Anderson and Gerbing (1984) indicated that the GFI and the AGFI tend to decrease as the number of indicators per latent variable or the number of latent variables increases, especially for smaller sample sizes. Because the sample of this study is only around 50 cases, it might be too small to reach any generalizable conclusion. Moreover, insufficient data available for measuring some of our theoretical concepts also results in the deficiencies of statistical analysis for this study.

What are the implications of this investigation for future research? The arguments about the impacts of party ideologies on various aspects of national development made in this study are primarily drew from a cross-sectional rather than a time-series analysis. Cross-sectional data are used due to the unavailability of adequate time series data on both exogenous and endogenous variables in our model. However, the fundamental consideration of pursuing this strategy is that we have been primarily concerned with capturing the long-run effects on the endogenous variables which are not subject to very much short-erm fluctuation. Until a real time-series data base is created, the research on the determinants of national development can only be investigated by cross-sectional design or panel analysis at best.

The problem of model misspecification in this study also provides a possible direction for future research on this subject. The implication of specification error is that we can never be sure that the specification of the model is complete in the sense that it incorporates all the relevant variables. As we have argued, some important factors suggested by other scholars have been omitted from our model. In the future, these factors should be taken into account in our formulation of conceptual framework for studying the impacts of party ideologies on national development. Furthermore, all possible forms of relationship existing between variables should be considered.

As we have claimed, the problem of data availability resulted in some deficiencies for this study. It was admitted that parts of problem arise from the unavailability of data in the principal endogenous variables, economic

development, social inequality and political democracy. The insufficiency of data available for several indicators limits our study to a cross-sectional type. Above all, the number of cases being selected in this study was primarily limited by the data available for the exogenous variables, party ideologies. Prospecting for future research in the impacts of party ideologies or party systems as a whole on the characteristics of national development, the only and best way is to create a more comprehensive data base which covers much longer time span for more nations. This is what social scientists lack and need in the future.

Notes

CIVRIG2

CIVLIB2

- 1. For a more detailed discussion of the conception of national development, see Huang (1987), pp. 2-5.
- 2. For a full description of the operational definitions and the indicators of economic leftism and political liberalism, see Janda (1980a), pp. 53-77.
- 3. In theory, we do not think that the support of the military is a good indicator of political liberalism of party systems. And from the correlation statistics showed in the following, we found that the support of the military is not highly and significantly correlated with other indicators of political liberalism of party systems for both period one and period two. The correlation matrices are presented in the following:

Table A: Period One

	Table A. Tellog One								
	MILSUP1	ELEPAR1	CIVRIG1						
ELEPAR1	.272								
	P = .043								
CIVRIG1	.328	.667							
	P = .038	P = .000							
CIVLIB1	.194	.751	.622						
	P = .166	P = .000	P = .000						
	Table E	3: Period Two							
	MILSUP2	ELEPAR2	CIVRIG2						
ELEPAR2	.168								
	P = .136								

.329

.195

P = .027

P = .095

.417

.006

.567

.000

.581

P = .000

P =

P =

- 4. The growth rate of the PQLI is not positively and highly correlated with other three indicators of the rate of economic development. Though the PQLI is a good measure of the level of economic development, it is not an adequate measure of the rate of economic development. The reason may be that the change of the PQLI is so slow for the time being. Therefore, it is quite inadequate to use it in measuring the rate of economic development.
- 5. To compute Gini Index of individual income, we use the following formula:

Gini =
$$\sum_{i=1}^{n} X_i Y_{i+1} - \sum_{i=1}^{n} X_{i+1} Y_i$$

Where X are cumulative percentage of total population and Y are cumulative percentage of family income for population divisions, and n equals the numbers of population division.

6. To compute Gini Index of sectoral income, we use the following formula:

Gini =
$$\sum_{i=1}^{n} X_i Y_{i+1} - \sum_{i=1}^{n} X_{i+1} Y_i$$

where X are cumulative percentage of labor force and Y are cumulative percentage of GDP for economic sectors, and n equals the numbers of sectors.

- 7. By internal security forces, it includes police forces at all levels of government and such paramilitary internal security forces as gendarmeries, active militas, and active national guards. A more complete discussion of the definition of this indicator can be found from Taylor and Hudson, World Handbook of Political and Social Indicators, II (1972), pp. 18-20.
- 8. Since Rhodesia has too many missing data for the endogenous variables, we exclude it from our analysis. It finally comes out 50 cases for the period of 1950-1956 and 52 cases for the period of 1957-1962. A list of country for both periods in this study is presented in Appendix.

Appendix: A List of Country for both Periods

Country Name	Period One	Period Two
Albania	X	Х
Australia	X	X
Austria	X	X
Bulgaria	X	X
Burma	X	X
Cambodia	X	X
Canada	X	X
Central African Rep.	X	X
Chad	X	X
Congo-Brazzaville	X	X
Cuba	X	X
Dahomey (Benin)	X	X
Denmark	X	X
Dominican Rep.	X	X
Ecuador	X	X
	X	X
El Salvador		
France	X	X
Germany, East	X	X
Germany, West	X	X
Ghana	X	X
Greece	X	X
Guatemala	X	X
Guinea	X	X
Hungary	X	X
Iceland	X	X
India	X	X
Indonesdia	X	X
Iran	X	X
Ireland	X	X
Kenya		X
Lebanon	X	X
Luxembourg	X	X
Malaysia	X	X
Netherland	X	X
New Zealand	X	X
Nicaragua Nicaragua	X	X
North Korea	X	X
	X X	
Paraguay		X
Peru	X	X
Portugal	X	X
Sudan	X	X
Sweden	X	X
Togo	X	X
Tunisia	X	X
Turkey	X	X
Uganda		X
United Kingdom	X	X
U.S.S.R.	X	X
U.S.A.	X	X
Upper Volta	X	X
U ruguay	X	X
Venezuela	X	X

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