THE EFFECTS OF POLITICIZED MILITARIES ON THE SOCIO-ECONOMIC RATES OF DEVELOPMENT OF "THIRD WORLD" COUNTRIES

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by

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CHAPTER I

INTRODUCTION

A large segment of the world, the so called "Third World", is desperately striving to achieve levels of development or modernization, economically and socially, which are normally associated with the advanced industrial western nations of the North Atlantic area. Implicity, the leaders of the non-communist "more developed" countries assume that the "Third World", in their drive for modernization, will develop political systems allowing equal mass participation, routinized legitimate transfer of power and, in general, representative democratic governments.[1] A cursory look at the countries of Africa, Asia, Latin America and the Middle East --the "Third World"-- reveals that trends toward modernization are being achieved economically and socially, albeit, at widely different rates; yet, political "development", as characterized by representative, democratic forms of competitive-party government has not evolved. A frequent consequence of progress found throughout the "Third World" has been the overt participation of the military within the political process, to the extent that it acquires a significant degree of political power. Achieving various levels of political power, militaries directly and indirectly influence the continuous drive toward modernization.

Militaries have historically participated in the development of countries. Mosca (1939) and Vagts (1959) claim the militaries of the

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[1]This view was dominate throughout the decade of the 1960's; however, recently there are indications that such is no longer strongly held. There seems to be a growing realization that other systems of government may emerge.

European states played a significant role during their development in the seventeenth, eighteenth, and nineteenth centuries. The United States' military actively participated in the development of the west. Militaries of most of the more developed countries continue even today, in varying degrees, to participate in the developmental process, e. g., the construction of reservoirs, and dams. Similarly, many of the "Third World" nations can identify areas in which their militaries have assisted in the process of development, such as communication systems and the construction of educational and medical facilities, both areas which have commonly been classified as 'civic' action. Hans Daadder lists several civic action efforts of militaries which have "benefited social and economic life generally" (1962: 18-20). Others have made similar claims.[2]

Countries, both more and less developed, which have established militaries, find that in varying degrees they influence the decision-making processes of their respective countries. In those countries

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[2]See for similar claims: Morris Janowitz, The Military in the Political Development of New Nations (Chicago: Univ. of Chicago Press, 1964), pp. 75-83; M. J. V. Bell, "The Militaries in the New States of Africa" Armed Forces and Society, ed Jacques Van Doorn, (The Hague; 1968) pp. 263-264; Lyle N. McAlister. "The Military", Continuity and Change in Latin America, ed. John J. Johnson,(Stanford, 1964) pp. 145-160; Raymond A. Moore, "The Army as a Vehicle for Social Change in Pakistan", Journal of Developing Areas, 2: 1, Oct. 1967, pp. 57-74; Leslie L. Ross Jr. and George W. Angell Jr., "New Teachers for Turkish Villages: A Military Sponsored Education Program" Journal of Developing Areas, July 1968, pp. 519-532.

with developed political systems[3] the militaries, though influential, neither control the decision-making process nor the legitimate, routinized system for the transfer of power. Conversely, in many of the "Third World" countries lacking well developed political systems, the militaries often either indirectly, "behind the scenes," control the civilian governments or directly capture and overtly control the government (Tullis, 1973: 85). In the past decade, thirty-three "Third World" countries have been or still are under the direct rule of their militaries.[4] In 1971 alone, 25 attempts were made by the militaries of "Third World" countries to overthrow the existing governments (Survey, 1971: 75). During the short span of time in which Sub Sahara African countries have enjoyed independence, most have experienced at least two waves of direct military intervention

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[3]A definition for "well developed political systems" is extracted from Samuel P. Huntington's Political Order in Changing Societies (New Haven, Yale University Press, 1968). A precise definition is not given; however, the meaning involves these notions: a system in which the government governs; a country which possesses a political community with an overwhelming consensus among the people on the legitimacy of the political system. Countries possessing systems with strong, adaptable, coherent political institutions; effective bureaucracies, well-organized political parties, a high degree of popular participation in public affairs, working systems of civilian control over the military, extensive activity by the government in the economy, and reasonably effective procedures for regulating succession and controlling political conflict. Such governments have the loyalties of their citizens and thus have the capacity to tax resources, to conscript manpower, and to innovate and to execute policy.

[4]Argentina, Brazil, Bolivia, Burma, Congo (Leopoldville), Congo (Brazzaville), Dahomey, Dominican Republic, Ecuador, Egypt, El Salvador, Gavon, Ghana, Greece, Guatemala, Honduras, Indonesia, Iraq, Korea, Libya, Mali, Nicaragua, Nigeria, Panama, Pakistan, Paraguay, Peru, Sudan, Syria, Thailand, Togo, Turkey, Vietnam.

in the political process (Bell, 1968: 271). Latin American countries have experienced long histories of military involvement in the political process. During the nineteenth century, in all independent countries except Chile and Costa Rica, the military dominated the politics. Military intervention declined during the first quarter of the twentieth century but was soon followed by a rapid increase. From the second quarter of this century, the military has exercised significant influence in all the Latin American countries except Mexico, Costa Rica, Uruguay, and Chile (Lieuwen, 1961: Chpt. 5).

The universality of the tendency for the military to intervene in the political systems of "Third World" countries warrants study in three specific areas: (1) What are the factors or causes for the military to intervene in, rather than to support, the constitutionally elected governments; (2) what are the effects of military intervention upon the rate of social and economic development of the countries concerned; and (3) what are the long term political consequences of military intervention?

A logical sequence of study is indicated by these three areas of concern. The first area seeks an explanation of military intervention, while the other two seek to explain the consequences of military participation within the respective political systems of the "Third World" countries. Social scientists have concentrated primarily on developing theoretical concepts which would explain military intervention in the political systems of these countries. Perhaps the

emphasis on this area is a result of what Nettl refers to as an "obcession" among western theorists of the development process, which presupposes that the normal process of political systems involves the use of electoral procedures in changing regimes (1969: 26). Lipset (1960: 198-221) argues that "the various aspects of economic development--industrialization, urbanization, wealth, and education--are so closely interrelated as to form one major factor which has the political correlate of democracy." Yet the countries of the "Third World", many of which are experiencing some economic development, are not necessarily attaining democratic forms of governments, characterized by routinized transfer of power, mass participation, etc. The military intervention into political activity in the "Third World" is not an exception. Instead it is frequent and widespread. According to Finer, "Of the 51 states existing in or before 1917, all but 19 have experienced such [military] coups since 1917; while of the 28 created between 1917 and 1955, all but 15 have done so" (1962:3).

As Finer has said, "Consider that the armed forces have intervened in the politics of many and widely diverse countries; that they have done so continually in the past, and are doing so today; that their intervention is usually politically decisive; and that, above all, they tend to intervene persistently over and over again in the same countries. None of this suggests that we are observing a mere set of ephemeral, exceptional and isolated adventures. On the contrary it does emphatically suggest that we are in the presence of a peculiar

political phenomenon: one that is abiding, deep seated, and distinctive" (1962: 4). Is military intervention within the "Third World" modernizing type countries an 'abnormal' procedure or is it, as Nettl suggests, a 'normal' procedure? Nettl argues that the representative electoral procedure, as a means of replacing political regimes, may not be a necessary component of development; but rather, military intervention may be a component of development (Nettl, 1969: 26-28). The assumption that military intervention is 'normal' and will continue among the "Third World" nations as they move toward modernization implicity suggests that the consequences of such intervention, as it relates to the social and economical development process, need to be analyzed.

Consider that India, with a developed political system free of overt military intervention, has not achieved as high a level of economic development, as indicated by per capita national income, as that of neighboring Pakistan, which has experienced military intervention and control of the government.[5] Or, within the Latin American area, Costa Rica, free of military intervention since 1920, has not achieved as high a level of economic development as Argentina, which has continuously experienced military intervention in the political system.[6]

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[5]Estimates of Per Capita National Income for India and Pakistan in 1968 were respectively in U.S. dollars, $73 and $122. UN Statistical Yearbook 1970, New York, 1971, Table 184, pp. 598-602. This does not imply that Pakistan is overall more developed than India. Most studies using several indices show India to be ahead of Pakistan in total development.

[6]Estimates of Per Capita National Income for Costa Rica and Argentina in 1969 were, respectively, in U. S. dollars $412 and $682. U.N. Statistical Yearbook, 1970, New York, 1971, Table 184, pp. 598-602. The level of per capita national income at 1920 is not known, thus statements concerning rates of growth can not be made. The intent is to show, using this gross indicator, that actual levels of attainment are considerably different.

What are the consequences of military intervention? Does it enhance economic and social development at the cost of limiting the development of participatory political systems, or is it inhibiting in all three areas, economic, social and political? The "Third World's" desire to achieve rapid modernization, compressing into a decade or two that which has taken the more developed countries one or two centuries to achieve, may implicitly suggest military control as a feasible alternative to participatory politics. A ranking western diplomat said of the recent military coup in Afghanistan, "Of course I would prefer a democracy but what this country needs is an enlightened tough guy, [General] Daud's it" (Kansas City Star, 12 August 1973, p. 13A). Daud's expressed plans call for tight control and the limiting of basic freedoms while fostering economic development, insuring justice, raising the standards of living and introducing basic social reforms (Ibid.).

The derivation of the hypothesis from which analysis of the consequence of military intervention may be studied rests upon the conceptionalization of development and modernization and the theoretical explanations of military intervention in "Third World" countries. Henry Bienen argues, "When we understand the reasons for military interventions and as we explore the links between the military and other political institutions and social groups, we can better assess the prospects for the future evolution of the armed forces in society and we can better judge their capacities to deal with specific problems" (1971: 4).

THEORETICAL CONSIDERATIONS OF DEVELOPMENT AND MODERNIZATION

The concept of development eludes precise definition or application. Economically, development commonly refers to the "growth of output per head of population" (Lewis, 1955: 1). This allows easy measurement of the rate of development using a gross indicator such as the rate of growth of Per Capita Gross National Product (GNP/population). Politically, development often means the process of imitation of the political structures typical to the western democracies (Jaquaribe, 1973: 203).

Horowitz notes that at least three terms are sometimes used interchangeably--"modernization", "industrialization", and "development"--about which he argues, "[They] not only mean entirely different things but are often at odds with one another" (1959: 15-16). He views development as involving both modernization, which is related to the urban style of life but is essentially a posture for the consumption of ideas and commodities, and industrialization, which involves not only the technology of mechanized production but also the decisions concerning the regimes of saving and investment that support mechanized production (Ibid.). Hagen (1968: 29) makes the distinction between "economic growth" and "economic development." The former term refers to rise in per capita income, the latter to rise in income, plus changes in economic and social structure.

Modernization, in contrast to development, is used as a more inclusive term describing total transformation of a society (Moore,

1963: 89). Eisenstadt sees modernization as "changing the basic contours of the societal center. . . a far reaching, complete transformation of the center's contents, both social and cultural with correspondingly drastic changes in the patterns of participation in and access to the centers and in the relationships between the center and the periphery" (1971: 123).

The concept of social mobilization formulated by Karl Deutsch (1961: 494) involving a process "[by] which major clusters of old social, economic and psychological commitments are eroded or broken and people become available for new patterns of socialization and behavior. . ." is an important aspect of modernization. Social mobilization does not explain modernization, but rather reveals the consequences which, once they occur on a substantial scale, influence the further process of modernization. Modernization is thus a multidimensional concept involving changes in all areas of human thought and activity. It involves a fundamental change in values, attitudes and expectations (Lerner, 1958). Sociologically, modernization involves a process of structural differentiation, integration, and social disturbance (Smelser, 1964: 258-274). Economically, it involves the specialization of economic activities and occupational roles, development of market oriented production, a widening scope and complexity of the markets, and a change of emphasis from the primary sector to the secondary and tertiary sectors of production (Eisenstadt, 1971: 125-126). In the political sphere,Huntington identifies three areas of change: the rationalization of authority; the differentiation

of new political functions along with the development of specialized structures to perform those functions; and finally, increased participation in politics by social groups (1968: 34-35). To this Eisenstadt adds the weakening of traditional elites and traditional forms of legitimation for the rulers (1971: 127). Wiener (1965: 53) interprets political development as the process which brings about (1) the expansion of the functions of the political system, (2) the new level of political integration required of this expansion, and (3) the new capacity of the political system to cope with the new problems of integration.

Implicit in the theory of the modernization process is the notion that a stable form of government will evolve, a government which governs the people. Countries would develop "strong, adaptable, coherent political institutions: effective bureaucracies, well-organized political parties, a high degree of popular participation in public affairs, working systems of civilian control over the military, extensive activity by the government in the economy, and reasonably effective procedures for regulating succession and controlling political conflict" (Huntington, 1968: 1).

Empirical characteristics of the modernization process can be traced within the economic and social spheres of development. Shifts in the sectors of economic activity are observable as development progresses.[7] The proportion of output generated by each of the sectors

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[7]The three major sectors are: agriculture, together with such activities as mining, fishing, forestry and trapping (extractive industries); industry proper (manufacturing industries); and services not generating tangible products (service industries). These sectors are often designated as primary, secondary, and tertiary, respectively.

and the composition of the labor force within each sector changes substantially. A decline in the proportion of total production created by extractive industries (at least agriculture), along with growth in the other two sectors, is observable (Kuznets, 1966: 86-159). The labor force declines in the primary sectors and expands in the other two sectors (Hagen, 1968: 46-49). Modernization can be observed in the social sphere in increased urbanization (McKee, 1969: 213) and the whole process of structural differentiation of family activities (Smelser, 1964: 258-274). Labor specialization, both as individual role differentiation and in the organization of enterprises around highly particularized functions, is characteristic of development (Moore, 1963: 108-109). The transformations which actually occur within the economic and social areans have proceeded generally as theorized about the modernization process. Within the political sphere, changes accompanying the modernization process are alsc observable; however, empirically observable characteristics suggest that to use Huntington's terminology, "political decay" rather than "political development" has occurred. In contrast to developing politically, as has been theorized they should, the "Third World" countries' political development may be characterized as suffering from these maladies:

> . . .Increasing ethnic conflict, recurring rioting and mob violence, frequent military coups d' etat, the dominance of unstable politics, widespread and blatant corruption among cabinet ministers and civil servants, arbitrary infringement of the rights and liberties of citizens, declining standards of bureaucratic efficiency and performance, the pervasive alienation of urban political groups, the loss of authority by legislatures and courts, and the fragmentation and at times complete disintegration of broadly based political parties. (Huntington, 1968: 3)

The process of modernization has in the past few years come to be viewed as a disjointed one, wherein development within the social and economic areas need not be simultaneously accompanied by political development. Eisenstadt (1966), Huntington (1966), Almond (1966), and Organski (1965) have all noted that rapid social and economic changes have disrupted the stages of political development, which ultimately has led to the deterioration of old political institutions without a corresponding development of new institutions; thus, chaos results. Emerson argues that an inverse relationship exists: as economic and social development occurs, political instability increases (1960: Chpt. 5). Similarly, Conroe found that "....the higher the rate of change toward modernity, the greater the political instability, measured statically or dynamically" (1965: 65-87). "Modernization breeds instability" is now a famous dictum (Tullis, 1973: 52). As Huntington says, "Economic development and political stability are two independent goals and progress towards one is not necessarily related with progress towards the other" (1968: 2).

The inability of "Third World" countries to develop politically and the resulting instability of their political system have been attributed to the slow development of political institutions, according to Huntington (1968: 4). Institutionalization is the process by which organizations and procedures acquire value, stability and recurring patterns of behavior. The level of political institutionalization is determined by adaptability, complexity, structural opposition, and coherence of organizations and procedures (Huntington, 1968: 12-24).

In a cross cultural study, low levels of institutionalization explained 70 percent of the occurrance of political violence (Schnider, 1971: 69-89). Low levels of institutionalization reflect a weak government incapable of dealing with the pervasive effects of rapid economic and social change. The inability of many less developed countries to establish an effective political system, able to deal with modernization, results in the continuation of a pattern of instability. Lucian Pye has said, "Problems of development and modernization are rooted in the need to create more effective, more adaptive, more complex, and more rational organizations. . ." (1962: 228).

The inability among "Third World" countries to develop effective political institutions, and the resulting political instability, open the avenues for domination of the political system by one or more of the following: charismatic leaders, military control or intervention, socialist ideologies, and political religions (Tullis, 1973: 52).

CAUSES OF MILITARY INTERVENTION

Explanatory variables of military intervention have been sought in two areas: causal factors among military variables, and causal relationships among societal variables. The consensus emerging in recent years is that explanations are not to be found in the social origin of the officers, the nature of foreign military training

missions, the source of external military aid, or the lack of a tradition of separation of civil and military power.[8] Military intervention occurs as a result of the uneven development characterized by the modernization process. The disequilibrium associated with the modernization process and the failure of existing political systems to cope with its problems present situations which allow the military to intervene in political systems.[9] Perlmutter argues, "The army intervenes because other elites are absent, impotent or indifferent; it improvises and expands its role to carry the burden created by a modernization crisis" (1968: 606).[10] Tullis describes these conditions

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[8]These studies argue that military intervention is explained by military variables: John J. Johnson (ed.), The Role of the Military in Underdeveloped Countries (New Jersey: Princeton, 1962): John Johnson (ed.), Continuity and Change in Latin America (New York: Stanford, 1964); Manfred Halpren, The Politics of Social Change in the Middle East and North Africa (New Jersey: Princeton, 1963); Morris Janowitz, The Military in the Political Development of New Nations (Chicago: University of Chicago Press, 1964); John D. Powell, "Military Assistance and Militarism in Latin America" The Western Political Quarterly, XVIII; 2, Part 1 (June 1965).

[9]Studies emphasizing societal variables as the causes for military intervention include: Samuel P. Huntington, Changing Patterns of Military Politics, (Glenco, Illinois: The Free Press, 1962); Samuel P. Huntington, Political Order in Changing Societies, Chpts. 1 and 4, (New Haven, Yale University Press, 1968); Jacques Van Doorn, "Armed Forces and Society: Patterns and Trends" in Armed Forces and Society, ed. Jacques Van Doorn, (The Hague: Mouton and Co., N. V.,1968); Samuel E. Finer, The Man on Horseback: The Role of the Military in Politics (New York: Praeger, 1962).

[10]Also see: Amos Perlmutter, "The Arab Military Elite" World Politics, XXII, 2 (Jan. 1970); Guy J. Pauker "Southeast Asia as a Problem Area in the Next Decade," World Politics, XI, 3 (April 1959), pp. 325-345.

for military intervention as:

> The military intervenes in that twilight period when social mobilization has far outstripped political development. There is nothing to stop it. The society is amoral and corrupt. Its modern institutions are weak and relatively underdeveloped. Every mobilized group is in the arena pitching with its own particular forte. The students are striking and rioting; the clerics are reading pastoral letters and leading their flocks into verbal if not physical battle; the intellectuals are hatching plots and maybe even attempting to stage revolutions; the peasants are invading the lands and expelling the landlords. (1973: 86)

As Huntington concludes, "The most important causes of military intervention in politics are not military but political and reflect not the social and organizational characteristics of the military establishment but the political and institutional structure of the society" (1968: 194).[11]

THEORETICAL CONSEQUENCE OF MILITARY INTERVENTION

Two opposing theories prevail concerning the social and economic consequences of military intervention into the political process. These will be referred to as the "traditional" and "revisionist" theories. The traditionalists perceive the military in politics as a threat to the democratic process and to national economic development. The revisionists, with a more recently developed concept evolving from the magnitude of problems faced by the developing nations and the weakness of civilian institutions and leadership in

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[11] For general review of the literature see; Lyle N. McAlister, "Recent Research and Writings on the Role of the Military in Latin America," Latin American Research Review, II, 1 (1966); and Martin C. Needler, "Political Development and Military Intervention in Latin America," The American Political Science Review, LX, 3 (Sept. 1966), pp. 616-625.

coping with these problems, advocate that the military's technical and organizational features make it a power instrument in the process of economic development (Stepan, 1971: 213).

Spencer (1897: 568-641), in tracing the evolution of societies, makes the distinction between the 'Militant' and the 'Industrial' societies, which represent the extreme polar positions on a continuum.[12] He theorizes that the orientation of the society becomes the controlling factor affecting political, economic, and social development. Accordingly, if all societies could be ranked according to their degree of militant orientation, their developmental process could be predicted. Tocqueville similarly warned that the military was a force potentially destructive of democracy and industrial development (1900: 317-329). Lieuwen (1962: 131-163) assesses the role of the military in politics as being both progressive and predatory, depending upon the characteristics of the society. A society having extreme social stratification, backward economics, and great political apathy may use force as the only alternative. However, in addressing Latin America specifically, he argues that the military rulers have shown little evidence of the ability to effectively run their countries. Military training, he argues, does very little to prepare an officer to run a modern state, especially in the area of economic development. Lieuwen states,

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[12]Spencer's describes the 'Militant' type society as follows: represses individual initiative, fosters unlimited confidence in governmental agencies, lacks private enterprise, generates the mental state of passive acceptance and expectancies, represses intellectual achievements, inhibits scientific development, and discourages development of industrial progress. Conversely, he describes the 'Industrial' society as one which fosters progressive attitudes and industrial development.

"...even reform minded military rulers showed little competence in dealing with national economic problems. They were particularly inclined toward ruinous financial policies" (1962: 156). Finer (1962) similarly perceives the politicized military as being potentially progressive; however, its dominant characteristic is to be conservative. In the final analysis he states, "By any world standards military regimes have shown less than average capacity for statesmanship or economics" (Ibid.: 408).

The revisionist school, exemplified by Pauker (1959) in discussing South East Asia, argues that the only viable group capable of unifying and leading these countries is found within the military's officers corps. The military provides the organizational strength for unification and the impetus for economic development. Johnson (1962: 91-129) argues that the military no longer can be considered a conservative, anti-progressive force. When in control of the government, it is likely to strive for economic development, advocating economic nationalism. "Politically, the militarist who seeks power in the forseeable future may be expected to bid for popular support from the same socio-economic groups--ranging from the urban workers through the bureaucracy and professions to the owners and managers of commercial enterprises. . ." (Johnson, 1962: 127). Pye (1964: 69-89) further argues that the modern, westernized features of an army of a less-developed country make it aware of the need for modernization and technological advancements. Halpern (1962: 295) adds that the officers in the Middle East and North Africa are acutely aware of the need for

economic development, are closely identified with the middle class, and thus, when occupying a political function, will become effective agents of socio-economic change. Shils (1962: 17-31) argues that when officers achieve political influence, they are not sympathetic to business and conservative politicians. Thus, by implication, they are favorably disposed toward the redistribution of wealth.

Huntington argues that in praetorian societies in which participation of the military and other social forces, such as clergies, universities, labor unions, bureaucracies and corporations, exists, the military's intervention in politics varies with the level of praetorianism. At the oligarchial level, the political struggle is one among personal and family cliques; in a radical praetorian society the struggle becomes one among institutional and occupational groups; in the mass praetorian society the struggle becomes one among social classes and social movements.[13] Praetorian societies in general move

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[13]A praetorian Society is one in which mobilized social forces are politicized but strong rational-legal political institutions have not yet developed. Social forces includes not only the military but other social forces as well: clergies, universities, (faculty and students), bureaucracies, labor unions, and corporations. Social forces in Praetorian societies confront each other nakedly; no political institutions, no corps of professional political leaders are recognized or accepted as the legitimate intermediaries to moderate group conflict. Power in such societies is fragmented. In oligarchial praetorianism the dominant social forces are the landowners, leading clergy and the militaries; within Latin America it exists in Central American countries and Paraguay. Radical praetorian societies are characterized by the emergence of the middle class into the political system as an additional social force. The introduction of the middle class into the political scene is usually led by the militaries. Most South American countries are either at this level or at the mass Praetorian level, in which the lower classes enter into the political system. The distinction between radical and mass praetorian societies is difficult to distinguish, since many of the characteristics of the social forces remain the same. Argentina may be classified as in the mass praetorian phase. Of the "Third World" countries without developed effective political institutions, i.e., praetorian societies, would be classified as either oligarchical or radical, with the majority falling into the latter category. Sammuel P. Huntington, Political Order In Changing Societies (New Haven: Yale University Press, 1968), pp. 192-263.

through each level from oligarchy to mass praetorianism. In the oligarchy praetorian society, the militaries' intervention involves what Huntington refers to as "palace revolution," wherein one member of the oligarchy is replaced by another but no change occurs in the social structure or in the groups and institutions participating in politics (1962: 32). The military's role is one of maintenance of the status quo. The radical and mass praetorian societies, according to Huntington, evolve in direct relationship to the degree of political mobilization occurring within the society. At the early stages of mobilization as the middle class begins to develop politically, the military and other forces found among the middle class coalesce to overthrow the ruling oligarchy. In these interventions, the militaries play a highly modernizing and progressive role, promoting social and economic reform and national integration. In the mass praetorian society the military continues to intervene in politics; however, the role it assumes may be either reformist or conservative. Huntington argues that the role of the military, as a society moves into the mass level,

> . . .is a function of the expansion of political participation in the society: Societies are able to move from the radical to the mass participation with relatively well-established political institutions; thus, the militaries assume non-political institutions, the militaries' intervention, economically and socially, may be of a reformist nature, while it continues to limit expansionary political participation" (Huntington, 1968: 194-225).

In the oligarchy praetorian society, militaries dominate, directly or indirectly, the political system. Their main concern is to maintain the status quo; thus, they are conservative politically, economically, and socially. In such a society modernization would occur at a relatively slow rate. Within the radical and mass praetorian society the militaries' intervention in the political process becomes intermittent, intervening initially to topple the oligarchy and thereafter to promote reformist or conservative actions.

The coup d' etat is the prevailing means by which militaries intervene in politics; however, its use implies that the military is already a participant in the existing political system and has an institutional base of power. A coup is not simply a military activity. A relationship is established between the military actors and the civilian politicians supporting the overthrow. It is not uncommon for the idea to originate with the civilian politicians (Needler, 1966: 618-619).

Huntington (1962: 32-33) classifies coups into three types:

(1) "Governmental coup" or "palace revolutions" characteristic of nineteenth century Latin America; it involves a change in leadership of the government without changing the structure of the government.

(2) "Revolutionary coup" institutes fundamental structural changes of the political system and basic social and economic changes.

(3) "Reform coup" is characteristic of most modern coups. It involves a combination of military and civilian groups

seizing power, intent upon instituting reforms in the political, economic and social structure.

The "reform coup" is characteristic of the type used by militaries which intervene occasionally in the political system. It becomes the type of military intervention found within both the radical and mass praetorian society. "Revolutionary coup" may also occur within the mass praetorian society; however, historically, this type has not frequently occurred. The "governmental coup" is the characteristic type of military intervention in the oligarchy praetorian society. When military intervention is absent, at least overtly, in such societies, military domination of the political system is covertly expressed through its maintenance of the existing oligarchy.

"Reform coups," according to Huntington, "tend to follow a dialectical process resembling the swings in the political pendulum in a constitutional democracy. Radical reform coups are followed in a few years by conservative reform coups" (1962: 33 [italics mine]). In a coup, formed by a coalition of both civilian and military goups, the kind of civilian determines whether they will institute radical or conservative reforms. The 'radical reform' coalition is made up by middle class civilians, leaders of reformist political parties, and labor leaders joining the military. The 'conservative reform' coalition is composed of the military and the upper middle class or oligarchical elements (Ibid.: 32-42).

Once the traditional political institutions have been overthrown and before modern ones have achieved legitimacy, the recurring cycle

of coups and counter-coups is set in motion (Rapaport, 1962: 71-101). Regardless of whether it is a radical or a conservative reform coup which achieves power through its successful overthrow of the existing government, its future is limited. Initially, the coup regime enjoys a brief "honeymoon" period characterized by widespread popular support. The coup regime soon arouses expectations which cannot be satisfied; thus dissent and conflict among the elements which initially supported the coup begin to a rise. If the reform coup is of the radical type, it may counter the growing opposition by broadening its base of support through its appeal to lower classes within the society, and the assumption of more revolutionary measures in social and economic development. Such action allows the radical 'reform coup' longer tenure; however, it seldom is capable of maintaining its position. Eventually, a conservative coup occurs, and a new regime assumes control of the country. The conservative coups which acceed to power are also dedicated to reform. They emphasize reform in the areas of legitimacy, fiscal responsibility, order, civil liberties, and democracy, while the radical reformers emphasize nationalism, land reform, and social welfare. The conservative coup regime likewise enjoys the "honeymoon" period, but it is soon beset with dissatisfaction originating among progressive military officers and civilians who begin to favor reform and development rather than fiscal integrity and stability. Forces are set in motion which eventually lead to the overthrow of the conservative regime by a more radically led reform coup (Huntington, 1962: 32-40).

Lieuwen's historical descriptive analysis of Latin America's military intervention suggests that this dialectical process has occurred in those countries wherein the militaries did not dominate the political process. Frequently, a reform coup led by the military occurs wherein the military assumes the regime of the government for only a short period and then relinguishes power to civilian leaders who support the coup's *reformist* attitudes (Lieuwen, 1961: Chpts. 2 and 5).

Military intervention in those countries characterized as either radical or mass praetorian societies can be expected to have the following traits: (1) intermittent intervention; (2) reformatory policies; (3) cyclic nature, alternating between conservative and radical regimes; and (4) allowing civilian control of the government for varying periods of time, depending upon the degree of dissatisfaction among military officers and civilians, which determines the rate of their eventual coalescence into an opposite reform coup. Huntington distinguishes from military domination the "prolonged military participation in politics [which] inevitably means that the military reflect the divisions, stresses, and weaknesses of politics. Modernization is not the product of any one particular group however 'modernized' that group may be in comparison with the rest of society. Rather, it is the product of coup and counter-coup in which military elements play important roles in inaugrating both conservative and radical elements" (1962: 36).

Huntington draws an analogy between the cyclic reform military coups and democratic systems of government, suggesting that the similarity is the tendency for alternating patterns between reform (liberal) and conservative regimes to prevail (Ibid.: 32-40). When democracy exists, the swing of the pendulum between conservatism and liberalism is controlled by electoral processes and political institutions which bring pressure upon the existing regime, preventing gross deviations from the center or 'norm.' Thus, in radical or mass praetorian societies where political institutions have not adequately developed to achieve the normalizing effect upon constitutionally elected governments, coups initiated by both military officers and civilians become the mechanism for normalization. "Third World" countries which have a radical or mass praetorian type of society, and which have been unable to develop powerful political institutions, will move towards modernization through a procession of alternating 'reform coups;' whereas "Third World" countries which have developed powerful political institutions and electoral processes will move toward modernization through periodic changes between liberal and conservative control of the government, brought about by the electoral process. In those "Third World" countries where the traditional political institutions have not been reduced, the oligarchy retains control and maintenance of the status quo through its direct and indirect utilization of the military in a dominating role in the political system.

Reform coups provide "Third World" countries a means whereby movement towards modernization can be achieved in the social and

economic areas while the political development lags behind. The preferable or ideal method for "Third World" countries to achieve modernization advocated by most western policy makers is through democratic means. However, if "political decay," as Huntington contends, results from rapid social and economic change, coups and counter-coups (military intervention) is likely to prevail among "Third World" countries. The perplexing question remains: whether military intervention should be viewed as a stagnating influence in the modernization process or an an alternative means of achieving social and economic development. Huntington's theoretical conception of the 'reform coup' suggests that social and economic achievements can be attained by "Third World" countries through either a succession of 'reform coups' or electoral proceedings. "Frequent reform coups d 'etat," he states, "should be viewed not as pathological, but rather as a healthy mechanism of gradual change, the nonconstitutional equivalent of periodic changes in party control through the electoral process" (1962: 40).

The following hypotheses emerge from the above discussion of the social and economic consequences of military regimes:

(1) In those "Third World" countries characterized as oligarchical praetorian societies, when the military dominates the political process, social and economic achievements will be inhibited or stagnated.

(2) In those "Third World" countries characterized as radical or mass praetorian societies, when the militaries intermittently intervene

in the political process, development, socially and economically, will proceed at a rate equal to that found in "Third World" countries which have developed political institutions and are free of military intervention.

CHAPTER II

DETERMINATION OF THE DEGREE OF POLITICIZATION OF LATIN AMERICAN MILITARIES

The cyclic model of continuous military intervention, with its constant movement toward modernization, proposed in the foregoing chapter, suggests that a longitudinal analysis would be required either to support or disprove the hypothesis. With in the "Third World" nations participation by the military in the political system is nearly a 'universal phenomena', however, the degree of participation varies. In some cases it may be supportive while in others it may be interventive. As used by Banks (1963: 113-114), "supportive" participation refers to performance of para-political roles in support of traditionalist or modernizing regimes. He refers to as "interventive" participation those militaries either presently exercising or recently exercising direct power. However, these terms do not reflect whether the intervention is oppressive or constructive. In constructing an appropriate method of analysis; one must consider that ideological affiliations, geographic locations, and religious practices are not universal determinants of whether the military will intervene within a country; rather, the degree of economic development, as indicated by per capita income, and the lack of governmental stability are common characteristics of nations in which the military intervenes in political activities (Banks, 1963: Item 184). Ideally, the test of the hypothesis should utilize a large sample, inclusive of all the geographical areas considered to be "less developed" economically, politically, and socially, including the regions of Africa, Asia, Latin America, and the Middle East.

If military intervention occurs as previously indicated, any evaluation of the process must encompass a relatively long period of time, thus allowing it to be operative. A test incorporating nations which may not have worked out the cyclic process upon which this thesis is based would distort the analysis. The nations of Sub-Saharan Africa, most of which gained their independence subsequent to 1960, conceivably may not have established such a process. Thus, the military intervention to date may be either conservative or reformist but not both. Zolberg's analysis of the intervention in Sub-Saharan Africa which first occurred in the mid-sixties suggests wide variations have followed (1969: 175-201). Ghana's military, having returned control to the civilian government in 1966, attempted to slow down the extravagant development schemes of Nkrumah's regime, using a more conservative approach. Nigeria's military continues to orient its governing of the country toward economic development and social reform. Countries located in the geographical regions of Asia and the Middle East have experienced external wars and internal conflicts, often supported by external forces, both of which would tend to distort the analysis. This latter distortion is magnified by the lack of statistical data encompassing a relatively long period of time, and by the fact that the available data includes all of the war years, in which money, normally available for promoting development, was directed toward the war effort. Latin American countries with long histories of independence, politicized militaries, similarities of Hispanic cultures, commonalities of geographical regionalism, relative freedom from external aggression,

and differing degrees of military intervention, provide a near 'laboratory environment,' allowing an empirical test of this thesis.[1]

Classification of militaries into categories indicative of their role in the political system suggests that the span of time considered must be adequate to distinguish patterns. Those nations which recently achieved independence cannot clearly be categorized according to the role of the military within the political systems. Ghana and Pakistan, both having experienced a period of military control of the government and subsequent return of control to civilian regimes, may be considered as countries with militaries which will occasionally interfere in the political system. However, it is feasible that in neither case will the military re-intervene; thus they will become apolitical.[2] Patterns of recurrent behavior are necessary to allow adequate categorization of the militaries. Latin American countries provide established patterns, representative of the militaries' roles in the political systems, which allows for the derivation of a classificatory scheme.

Fitzgibbon (1956 and 1961) ranked Latin American countries according to their degree of democratic development based upon polls utilizing a small number of 'specialists' of the area. The specialists

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[1]Latin America has not been entirely free of external intervention; for example, the US intervention in the Dominican Republic, 1965. However, as a group of nations, they have not been confronted with long protracted wars. It may be argued even today, that external forces to some degree influence internal conflict.

[2]Ghana's military has re-intervened in the political system, after having returned it to civilian control in 1966.

independently ranked the countries using fifteen different criteria, of which civilian supremacy over the military was one. Such ranking was done at four different time intervals. The results of this study are shown in TABLE II-1. Three countries were consistently ranked very high (Chile, Costa Rica, Uruguay), and six countries were ranked very low (Bolivia, Dominican Republic, Haiti, Honduras, Nicaragua, Paraguay) on the level-of-democracy scale. The methodological procedures used by Fitzgibbon are subject to criticism. However, the widely fluctuating evaluations appearing during the fifteen year time span could result in improper classification of countries. Kling (1956: 21-35), in attempting to develop a theory of power in Latin America, cites the "irregular" methods used to displace presidents and other governmental officials. Cutright (1963: 255-264) argues that sixty-five percent of the measurements of the degree of political development can be accounted for by the level of communications systems. His analysis, based upon a twenty-year time span (1940-1960), used as an index of political development the frequency of turnover within the executive and legislative branches of government. Accordingly, military intervention was not directly considered as a variable for his scale of political development. Degrees of political stability of countries have been measured using the level of violence as the criteria (Nesvold et. al., 1971: 345-352); however, the degree of military intervention was not measured. El Salvador received a relatively high score on the stability scale even though a military president governed the country.

TABLE II-1

Measure of Democracy

1945	1950		1955	1960
		100%		URUGUAY
URUGUAY	URUGUAY	90%	URUGUAY	COSTA RICA
COSTA RICA	CHILE	80%	COSTA RICA	CHILE
CHILE	COSTA RICA		CHILE	ARGENTINA
COLOMBIA				MEXICO
		70%	MEXICO	COLOMBIA
ARGENTINA	BRAZIL		BRAZIL	BRAZIL
	COLOMBIA	60%		VENEZUELA
	MEXICO			ECUADOR
MEXICO	ARGENTINA			PERU
PANAMA		50%	COLOMBIA	PANAMA
VENEZUELA			ARGENTINA	EL SALVADOR
PERU			ECUADOR	
BRAZIL	ECUADOR		PANAMA	GUATEMALA
	GUATEMALA			
	PANAMA		EL SALVADOR	HONDURAS
	VENEZUELA	40%		BOLIVIA
	EL SALVADOR			
GUATEMALA	PERU		HONDURAS	
EL SALVADOR			VENEZUELA	
		30%	GUATEMALA	
ECUADOR	HONDURAS		BOLIVIA	NICARAGUA
			PERU	
NICARAGUA	NICARAGUA		NICARAGUA	
HAITI	BOLIVIA, HAITI		HAITI	
(1) HONDURAS	DOM REPUBLIC	20%		DOM REPUBLIC
BOLIVIA			DOM REPUBLIC	HAITI
DOM REPUBLIC				
PARAGUAY	PARAGUAY		PARAGUAY	PARAGUAY
		10%		

Source: Fitzgibbon: "Measurements of Latin America Political Change" The American Political Science Quarterly, 1961.

(1) HONDURAS: Is among the bottom six countries 3 out of 4 time periods.

Neither political development nor political stability analysis directly correlate with the degree of military involvement. From a review of such analyses, it can only be concluded that those Latin American countries with well-developed political systems and with a relatively low violence rate have had no military participation in the political process. Several studies have categorized militaries according to their level of political involvement. Wyckoff used as an indicator the number of presidents with military affiliation since 1900, using these classifications: "military always plays a role," "military occasionally plays a role," and "military never or almost never plays a role" (1960: 745). Lieuwien (1961, 1966), two studies, classifies the militaries of Latin America according to their political involvement. His historical analysis of the countries serves as his basis for classification. Optimistically, his earliest study classifies the countries in three groups: those in which the armed forces dominate politics, those in which the armed forces are in transition from political to non-political bodies, and those in which the armed forces are non-political. His later analysis classifies the countries as follows: countries in which armed forces are so politically powerful that civilian groups are unable to seriously compete with them; countries in which struggle continues between civilian and military rivals for political control; and, finally, countries in which the armed forces are not politically inclined. Aldelman and Morris (1967: 74-76) categorized 84 countries, including all Latin American countries, into 3 categories based upon the level

of military involvement between 1957 and 1962. The categories used were "military in direct control," "military as an important political influence, but not in direct political control," and "the military had little or no political influence." Powell (1965: 384) developed a continuum ranging from "always dominates" through "occasionally dominates" to "never participates," based upon political events evolving within the countries during the period between 1950 to 1960.

TABLE II-2 summarizes the classifications of each of these studies. Agreement on the proper classification of countries depends upon both the specific time at which the analysis is made and the period of time considered. As shown by Lieuwien's classifications, a period of five years causes a re-categorization of the countries. Lieuwien's optimism in the early sixties, shared by Adelman, who relied heavily on Lieuwien's observations, is reflected in the large number of countries in which the militaries were considered to be non-political.

Categorization of the militaries for the purpose of this thesis are indicated in TABLE II-2: politically "dominant," politically "powerful," and "non involved." Countries with asterisks are considered in this thesis, to fall within the designated category. Initially, the countries were classified based upon the results of the studies shown in TABLE II-2. Countries which were similarly classified at least four times within a particular category were considered

TABLE II-2

Role of the Military in LA Countries

Wyckoff 1960	Lieuwien 1961	Adelman 1967	Powell 1965	Lieuwien 1966
POLITICALLY DOMINATE				
* Dom Republic	Dom Republic	Dom Republic	Dom Republic	
*	El Salvador	El Salvador	El Salvador	El Salvador
* Guatemala		Guatemala	Guatemala	
* Haiti	Haiti	Haiti	Haiti	Haiti
* Honduras	Honduras	Honduras	Honduras	
* Nicaragua	Nicaragua	Nicaragua	Nicaragua	Nicaragua
* Paraguay	Paraguay	Paraguay	Paraguay	Paraguay
	Panama			
POLITICALLY POWERFUL				
* Argentina	Argentina	Argentina	Argentina	Argentina
* Bolivia			Bolivia	Bolivia
* Brazil	Brazil	Brazil	Brazil	Brazil
Chile			Chile	
* Colombia			Colombia	Colombia
				Dom Republic
* Ecuador	Ecuador	Ecuador	Ecuador	Ecuador
El Salvador				
	Guatemala			Guatemala
				Honduras
Mexico				
* Panama			Panama	Panama
* Peru	Peru	Peru	Peru	Peru
* Venezuela	Venezuela	Venezuela	Venezuela	Venezuela
POLITICALLY NON-INVOLVED				
	Bolivia	Bolivia		
*	Chile	Chile		Chile
	Colombia	Colombia		
*Costa Rica	Costa Rica	Costa Rica	Costa Rica	Costa Rica
*	Mexico	Mexico	Mexico	Mexico
		Panama		
* Uruguay	Uruguay	Uruguay	Uruguay	Uruguay

* Indicates Final Evaluation and Categorization

Total 19 Countries

properly classified. Countries classified three times in one category and also placed once in each of the other two categories were considered properly classified in the category receiving the three placements; Panama was the only country so rated. Boliva, Colombia, and Chile are the only countries which cannot be classified using the above criteria. The final classification of these countries was determined by reviewing the military affiliations of the presidents during the past twenty years. Bolivia and Colombia had seven and five years, respectively, during which the presidents were military officers; Chile's presidents were all civilians (Paxton: 1971). The fact that a military officer did not occupy the highest political office during this period is indicative that the military is either "non-involved" or, if participating in the political system, extremely weak. The militaries of both Bolivia and Colombia were considered to have had sufficient involvement in the political system to be classified in the category of politically "powerful." However, the *militaries of* both may become "non-involved" and then warrant re-classification, if the militaries remain inactive for the next ten years. Two factors were determinants for placing Chile in the "non-involved" category. First, the lack of a military officer's occupying the office of the President since 1940 (Paxton; 1971: 805), and, secondly, the fact that recent political elections (1968), during which a communist regime was elected without military intervention, are considered sufficient indicators to allow designation of Chile's military as "non-involved" (Petras, 1969).

The final re-classification of the countries is based upon a review of the military affiliations of the presidents during the period from 1901 to 1970, as shown in TABLE II-3. The countries are categorized into the groupings designated in the initial classificatory scheme. Those countries designated as having a military which dominates the political system, with the exception of Haiti, have had military officers serving as presidents for at least thirty of these years. Including Haiti, in the samples, military officers served as presidents in those countries on the average of forty-three years. When Haiti is not considered, the average rises to 46.5 years during the 70-year period. During the last 30 years (1940-1970), over fifty percent of the presidents have been military, except in Haiti. Haiti initially appears to be improperly classified in this category. This high incidence of military presidents is indicative of the dominant role they hold within the political systems. According to Lieuwien's historical analysis, "[Haiti's] armed forces are so politically powerful that civilian political groups are unable to seriously compete with them" (1966: 69). Needler's analysis of Haiti's political system describes the role of the military:

> The pattern of politics in Haiti before Duvalier exhibited a cyclical quality. A president would be elected who might devote himself more or less to small-scale programs of economic and social betterment, but who would be concerned **principally** with keeping himself in power and controlling the opposition; he would attempt to extend his term of office beyond the constitutional limit of one term, or would begin maneuvers preparatory to doing so, such as initiating the process of constitutional revision; this would catalyze a movement to overthrow him, either by the population of Port-au-Prince, led by rivals themselves desirous of coming to power, or by

TABLE II-3

Years By Decade of Civilian (C) and Military (M) Presideces

Country	1901-10	1911-20	1921-30	1931-40	1941-50	1951-60	1961-70	TOTAL
POLITICALLY DOMINATE								
Dom Republic	1c,9m	2c,4m(a)	6m(a)	10m	10m	10m	9c,1m	12c,50m
El Salvador	10m	10c	10c	1c,9m	10m	10m	10m	21c,49m
Guatemala	10m	10m	10m	10m	6c,4m	10m	4c,6m	10c,60m
Haiti	10m	5c,5m	10c	10c	8c,2m	3c,7m	10c	46c,24m
Honduras	10m	8c,2m	6c,4m	3c,7m	2c,8m	9c,1m	3c,7m	31c,39m
Nicaragua	10m	5c,5m	7c,3m	4c,6m	10m	10m	3c,7m	19c,51m
Paraguay	6c,4m	10c	10c	7c,3m	3c,7m	4c,6m	10m	40c,30m
							AVG(a)	25.6,43.3
POLITICALLY POWERFUL								
Argentina	6c,4m	10c	10c	3c,7m	2c,8m	3c,7m	5c,5m	39c,31m
Bolivia	9c,1m	6c,4m	10c	5c,5m	4c,6m	9c,1m	4c,6m	47c,23m
Brazil	10c	6c,4m	10c	10c	5c,5m	10c	3c,7m	54c,16m
Colombia	6c,4m	10c	5c,5m	10c	10c	5c,5m	10c	56c,14m
Ecuador	10m	4c,6m	10c	9c,1m	10c	10c	8c,2m	51c,19m
Panama	7c(b)	10c	10c	10c	10c	8c,2m	9c,1m	64c,3 m
Peru	10c	8c,2m	10c	2c,8m	8c,2m	4c,6m	7c,3m	49c,21m
Venezuela	10m	10m	10m	10m	3c,7m	2c,8m	10c	15c,55m
							AVG	41.9c,22.5m
NON POLITICAL								
Chile	10c	10c	6c,4m	9c,1m	10c	10c	10c	65c,5 m
Costa Rica	10c	7c,3m	10c	10c	10c	10c	10c	67c,3 m
Mexico	10m	2c,8m	2c,8m	2c,8m	4c,6m	10c	10c	30c,40m
Uruaguay	10c	10c	10c	5c,5m	10c	10c	10c	65c,5 m

Source: Statesman Yearbook, Annual Issues

(a) Average does not total to 70 years due to period Dom Republic was under US control.

> the leadership of the Garde d' Haite; a period of chaos would ensue, which would terminate in the election and inauguration of a new president whose election and assumption of power was guaranteed by his being the choice of the commanders of the Garde. And the cycle would resume. (1964: 157).

Since President Duvalier assumed power in 1958, Haiti has become "as much of a totalitarian state as the underdeveloped technology at his disposal made possible. The militia (which formally replaced the Army, Grand d' Haiti, in 1959) formed his storm troopers. . ." (Ibid: 159). The indications of civilian rule in the years 1960-1970 have been possible only because the militia is in full agreement with Duvalier's regime. In 1964 Duvalier declared himself president for life, with his militia supporting his activities and insuring his regime (Ibid: 159). Thus, Haiti is properly classed in this category. The militia dominates the political system, allowing a civilian president whose policies are identifiable with their own desires. In the second category, where the military is politically "powerful," all the countries except Argentina and Venzuela were under military direction for less than twenty-four of the last seventy years. The average number of years for military presidents, excluding Venezuela, is 15.9 years. Argentina is a borderline case, having spent thirty-one of the past seventy years ruled by military officers. In twenty of the past thirty years it has been led by military presidents. Lieuwien's description (1966: 70-71) of the role of the Argentine military acknowledges that it possesses considerable political power; however, that power is

held in conjunction with civilian factions. Political control is perpetuated by opposing factions within the military, based upon their willingness or unwillingness to acknowledge the Peronist political party. Fernandez (1973: 85) says, "It is well-known that the Argentina military has practically controlled the government since 1930, and has effectively made its presence known and its opinions heard in the political system. Now, the military appears to be willing to delegate the conduct of the affairs of state to the civilian sector through a process of constitutional normalization." Justification for placing Argentina in either classification could be generated and supported. However, based on the continual fluctuation between military and civilian rule, and the consistency of previous rankings as shown at TABLE II-2, Argentina will be left in the "powerful" category. This placement of Argentina is also consistent with Fitzgibbon's rankings, in TABLE II-1. Venezuela is also a deviate within this category, having been in fifty-five of the past seventy years presided over by military officers. Categorization based upon that criterion would place Venezuela in the "dominant" category. Since 1940, the role of the military in Venezuela has changed significantly: a moving away from their "dominant" position to one of being politically "powerful" among other strong operative political forces. According to Lieuwien, "Though they [military officers] are far more conservative than his [President Leoni] moderate-leftist, reform-minded government, the officers are hesitant to intervene, if for no other reason than that there is no political organization in

existence in Venezuela to the right of the present one to whom they might conceivably transfer power" (1964: 91). The military remains a powerful political force capable of intervention at any time; however, their ability to completely dominate the political arena, as they had historically, is doubtful. Thus, Venezuela is classified in the "powerful" category. The future holds the data allowing the proper classifications of both Argentina and Venezuela. If they continue their trends of the past fifteen years, their classifications are correct. However, a reversal is possible wherein the military would exercise complete control. Panama's classification in this category also appears misplaced, having as justification only three years in which military officers presided as the president. Panama does not have an active military force, but rather a national guard which operates similarly to the United States' National Guard, called into active service only during national and/or state crises. The police serve as the real force. "The police," according to Lieuwien, "remain the key force behind the scenes and the nation's ultimate political arbiter" (1964: 162). The low incidence of military officers serving as president is not indicative of the powerful position held by the police. The national guard supplements the police force during periods of crises; thus, together they assume a powerful political role. Such an organizational structure would tend to limit the number of presidents with military titles; therefore, the number of military officers presiding as president is not an adequate indicator.

The last category, "non-involved", is characterized by the information that military officers have served as president for only five or less years of the past seventy, except in Mexico. In the other three countries of this category, the militaries have exercised their power infrequently, and there are relatively long periods during which the military has been "non-involved" as indicated by the consistency of civilian presidencies for the last twenty years. Set in motion by a major social revolution, the Mexican Military has been transformed from a "dominant" political force to a highly professional, disciplined force which avoids political activities. Lieuwien's summary of the military in Mexico describes their political role. He says, "... Mexico has been able to rid itself of the plague of militarism. A quarter of a century ago no Latin American army was more political than the Mexican; today the armed forces are virtually out of politics. Mexico has moved from one extreme to the other" (1961: 101). Thus, Mexico is properly classified in this category.

The categorization described above of the Latin American countries allows statistical comparisons to be made which will test the hypothesis outlined in CHAPTER I. Political decisions designed to institute modernizing programs which will lead to economic growth and social reforms require a certain length of time, perhaps several years, before their impact can be assessed. Nordlinger recognizes this as a weakness of his study of politicized militaries and their effect upon economic growth (1970: 1140). His study was based upon a five-year time period (1957-1962) for both classifying the countries and evaluating economic achievements. However, if economic and

social change occur over time, it is possible that a government could have made efforts for movement toward economic growth. The results, however, may not be realized for some years hence. The longitudinal basis used for categorizing the countries set forth in this chapter minimizes this weakness. Nordlinger (1970) used the categories established by Adelman and Morris, (1967) shown in TABLE II-2, which are considerably different from the ones arrived at for use in this thesis. The categorization of the Latin American countries used in this thesis considers any changes in the roles of the military, especially within the decades of the fifties and sixties.

This thesis is not concerned with the current level of economic or social achievements but with the amount of change which has occurred over a period of time. Ideally, such a comparison would measure change which has occurred within each country from 1900 to the present. Statistical information is not available which would allow such a comparative analysis to be conducted. Thus, the base year for measuring the level of change is established by availability of comparative data. The amount of change which has occurred during a given period may be shown by determining the absolute or relative variance. This thesis does not attempt to establish a ranking of countries by economic development or degree of social reform. Rather, it argues that the amount of change, economically and socially, achieved by countries in which the militaries are politically "powerful" will be equal to that of countries having "non-involved" militaries, and that countries with dominating militaries will enjoy a significantly

smaller amount of change. Accordingly, absolute measurements are not suitable indicators. A country such as Haiti, with a gross national product (GNP/Capita) of $100, may over a 5 year period achieve a GNP/Capita of $110, a $10 increase; whereas, Argentina, with a much higher GNP/Capita (for simplicity, assume $1,000), over the same period, also rose $10. In such a case the absolute change would be the same; however, the relative change for Haiti would be ten percent, whereas for Argentina it would be one percent. In terms of advancement, the relative change is a more accurate indicator of movement toward economic growth and increased social welfare. Relative change, then, shall be the measurement used in this thesis.

The methodological procedure used by C. Wright Mills and Melville J. Ulmer (1970) in a similar analysis, measuring the effects of the concentration of economic power on general civic welfare, provides the model to be used in the comparative analysis of this thesis.[3] Mills and Ulmer categorized cities based upon the size of business activity and compared the differences observed using several variables which indicated the level of civic welfare. This thesis, having categorized countries by degree of military influence, will utilize

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[3]Also for a similar study which provides insight into the methodology see: Walter Goldschmidt, Small Business and The Community: A Study in Central Valley of California on Effects of Scale of Farm Operations. Report of the Special Committee to Study Problems of American Small Business, United States Senate. Seventy-ninth Congress, Dec. 23, 1946. A similar study, which provided insight into the methodological procedures.

the methodological model of Mills and Ulmer, indicating the relative change occurring among several indicators of economic development and social reform. Mills and Ulmer's study was first published in 1946 in a Report to Special Committee to Study the Problems of American Small Business, US Senate.

CHAPTER III

ECONOMIC, SOCIAL, AND MILITARY RELATED CONSEQUENCES OF POLITICALIZED MILITARIES

As a quantitative comparative analysis, this thesis is subject to the limitations of available statistical data and, therefore, requires cautious interpretation of the results.[1] Variations in the individual countries' methods of collecting information and the biased reporting of data are but two of the constant problems which must be considered in cross-national analysis. Since this study is restricted geographically to Latin America and is concerned basically with changes over time within countries, not a comparison of countries, it is assumed that these variations will have been minimized.

Indicators

In the absence of a clear, agreed-upon definition of socio-economic development and of a simple, objective criterion from which it can be measured, the selection of quantitative indicators is based upon the following criteria: (1) a selective choice of indicators from those which have been frequently used in other developmental studies, (2) availability of data, both cross-national (data on different countries at the same time) and cross-temporal (data on the same countries over time), and (3) the extent to which their inclusion may be justified in the available literature.

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[1] For statements recommending caution in the use of statistical data: see: Everett E. Hagen, The Economics of Development (Homewood, Illinois: 1968, Richard D. Irwin, Inc.) pp. 8-15; Simon Kuznets "Measurement of Economic Growth" supplemental issue, Journal of Economic History, VII, 1947; U.N., United Nations Statistical Yearbook 1972, Statistical Office of the United Nations, New York 1973, p. xii.

Data Limitations

Quantitative data is available for only a limited number of indicators from 1950 to the present and is generally unavailable for any indicators in the years prior to 1950. Thus, the quantitative data is restricted to the general time period from 1960 to 1970. This places some limitations on its use in a cross-temporal/cross-national analysis. Factors which are uncontrollable (e.g.; droughts, floods, and epidemics) may produce wide fluctuations among some indicators (e.g., food production and death rate) within some countries and not others, thus distorting the analysis. Policy implementation may influence other factors. For example, an emphasis on educational development at the known and acceptable cost of development in some other area, such as transportation facilities, may create distortions over the limited time period covered. These limitations, it is assumed, are minimized by the geographic regionality of Latin American countries, and further, and more importantly, by the categorization of countries outlined in the preceding chapter, and will not be dealt with.

Consideration of Indicators

Whether the concept of development emphasizes, on the one hand, a process of achieving certain goals or values or, on the other hand, the commonly distinguishable features of the more developed "industrialized" countries in contrast to the less developed countries suggests the use of many different indicators of development. The

first concept suggests a subjective approach and implies a priori selection of variables which may or may not be good indicators of development. The second concept from which indicators may be derived is limited, in that negative features may be distinguished, such as pollution, urban crime rate, etc. Though these features may occur as a result of development, they are not the intended results of developmental programs. The compilation of a list of indicators of development involves a combination of the two concepts. McGranahan and associates have identified 73 social and economic indicators of development using the combination of these two concepts (1972: 11-46).[2] Adelman and Morris (1967) compiled a listing of economic, social, and political indicators which are correlated with and distinguishable in the developmental process.

The availability of a wide variety of indicators[3] may be misleading, "since what is available is often not relevant, and what is

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[2]See also: Simon Kuznets. Modern Economic Growth Rate Structure and Spread (New Haven, Conn: Yale University Press, 1966) for a discussion of developmental indicators, both economic and non-economic: Hagen, E. E. The Economics of Development, op. cit.

[3]Such as found in: B. M. Russett, H. R. Allen Jr., K. W. Deutsch, and H. D. Lasswell, World Handbook of Political and Social Indicators (New Haven, Yale University Press, 1964); Arthur S. Banks, and Robert B. Textor, A Cross-Polity Survey (Cambridge, M.I.T. Press, 1963); Charles Lewis Taylor and Michael C. Hudson, World Handbook of Political and Social Indicators, (New Haven, Conn: Yale University Press, 1972); U.N., Compendium of Social Statistics, 1967, United Nations, (New York: 1967); U.N., United Nations Statistical Yearbooks.

relevant is often not available" (McGranahan, 1972: 33). Selectivity in choosing indicators which are confined to the most significant and widespread aspects of economic and social progress is essential. The United Nations' study of the World Economic Survey - 1969-1970 argues that the most appropriate indicators are those which demonstrate accomplished "performances" in physical rather than financial terms. "In the welfare area, for example, a decline in infant mortality rates is likely to prove a better indicator of development than would an increase in the amount or proportion of resources devoted to health services" (UN, World Economic Survey, 1971: 1).

Selection of Indicators

McGranahan, et.al (1972), through a process of eliminating indicators which were duplicative and/or peripheral to the development process, derived 18 "core" indicators which, they argue, are descriptive of socio-economic development. The indicators represent nine different socio-economic areas:

1. Economy and Demography
2. Nutrition
3. Education
4. Housing
5. Communications
6. Transportation and Services
7. Agriculture
8. Industry
9. Trade

These "core" indicators served as a basis for the selection of the indicators to be used in this analysis. When quantitative cross-temporal data was available from all the Latin American countries for

a specific "core" indicator, that indicator was selected for inclusion in this analysis. When such data was not available, a "second choice indicator" from the McGranahan "reservoir" was selected (1972: 74-75). At least one indicator for eight of the nine socio-economic areas was obtainable by this method. To the resulting list were added other indicators, including those which have been frequently used as important components of the development process, such as sectoral distribution of labor,[4] and those which have been shown to be highly correlated with development in other studies[5] or are peculiar to the argument of the consequences of military intervention. Further, accomplishment or "performance" indicators were selected over financial indicators, as much as possible. TABLE III-1 lists the selection of indicators.

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[4]Used in Simon Kuznets Modern Economic Growth-Rate Structure and Spread, loc.cit. and his articles published in Economic Development and Cultural Change.

[5]Irma Adelman and Cynthia Taft Morris, Society, Politics and Economic Development: A Quantitative Approach, Baltimore, Maryland: John Hopkins Press, (1967).

TABLE III-1

Socio-Economic Indicators

ECONOMIC

Agriculture:
1. Per Capita Agricultural Production
2. Sectoral Production As Share of Total Production
3. Sectoral Employment As Share of Total Employment
4. Agricultural Production Growth Rate

Industry:
1. Industrial Production
2. Sectoral Production As Share of Total Production Including the Service Sector
3. Sectoral Employment As Share of Total Employment Including the Service Sector
4. Energy Consumption (Kg of Coal Equ. Per Capita)

Trade:
1. Relationship of Imports and Exports

General:
1. Gross Domestic Product (Total)
2. Per Capita Gross National Product
3. Per Capita Gross Domestic Product

SOCIAL

Health:
1. Expectation of Life at Birth
2. Government Expenditure As % GNP[1]

Nutrition:
1. Calorie Consumption Per Capita Per Day
2. Protein Consumption Per Capita Per Day
3. Adequacy of Diet

Education:
1. Literate As % of Total Population (Age Group 15 and over)
2. % of Population (Age Group 5-14) Enrolled in Primary Education
3. Number of 5-14 Year Olds Per Primary Educational Facility
4. Education Expenses As % of GNP[1]
5. Expansion of School Facilities

TABLE III-1 Cont.

Housing:
1. Dwellings with Piped Water As % of Total Dwellings
2. Average Number of Persons Per Room
3. Average Number of Rooms Per Dwellings

Communications:
1. Newspaper Circulation Per 1,000 Population
2. Radio Receivers Per 1,000 Population
3. Telephones Per 1,000 Population

General:
1. Per Capita Consumption
2. Inflation
3. Equality of Distribution

MILITARY RELATED[2]

1. Military Expenditures As % of GNP 1961-1970
2. Conventional Weapon Imports
3. Manpower Ratio (1965), Percentage of Working Age Male Population in the Military
4. Number of Protest Demonstrations (Avg 1950 to 1959 and 1960 to 1967)
5. Number of Riots (Avg 1950 to 1959 and 1960 to 1967).
6. Number of Armed Attacks (Avg 1950 to 1959 and 1960 to 1967)
7. Number of Governmental Sanctions (Avg 1950-1959 and 1960 to 1967)
8. Number of Deaths Due to Domestic Violence (1950 to 1967)
9. Percent of Total Population Voting in Presidential Elections
10. Competitiveness and Freedom of Elections

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[1]Expenditures in health and education are included since it is often argued that military interference in the political systems causes increasing expenditures in the area of defense and a corresponding decreases in the availability of capital for other areas.

[2]Military related variables are included not as indicators of modernization or development, but rather as variables which would indicate societal cost of politicized militaries.

Analysis of Development

Each of the indicators within the three broad categories, Economic, Social, and Military Related, will be discussed separately. The discussion of each will follow an explanation of the variable, including the "ideal" trend which would suggest progress and development as having occurred, and an analysis of the data between the categorizations of countries which have militaries classified as "Dominant," "Powerful," or "Non-Involved."

ECONOMIC DEVELOPMENT

Agriculture

For an increase in agricultural productivity to become a viable indicator of progress, it must be considered in relationship with the structural change of employment occurring within the agricultural sector. Increased agricultural food production with a corresponding decrease in the relative number of persons employed in the agricultural sector is a normal trend which has traditionally been characterized as occurring within the development process. (Kuznets, 1962). This trend indicates increased efficiency regardless of whether it is a result of the removal of "under-employed workers" or of improved technology within the agricultural sector. The process of development, as argued by Johnston and Mellor (1961: 566-581), is dependent upon the contribution made by the agricultural sector, which has significant ability to increase production while at the same time

releasing manpower to be used in the industrial sector. Additional increased agricultural food productivity per capita implicitly suggests that a greater amount of the production becomes available for consumption or exportation and thus decreases the necessity for importation of food items. TABLE III-2 reveals that all categories of countries have experienced an increase of per capita food production during the period from 1955 to 1970. During the entire period the "powerful" category increased per capita food production in the greatest amounts. It increased food production per capita by 13.72% in contrast to 8.3% the "non-involved" countries. The "dominant" category experienced an overall decline in per capita food production, while the other two categories continued to improve. Although the "non-involved" countries did not achieve so great a percentage increase, their sustained high level suggests that they should be evaluated as equal to the "powerful" countries.

The average annual growth trend of agricultural production is an often used indicator of economic development. The rate of growth should be of such magnitude as to satisfy the domestic demand for consumer goods, and export trends. The significance of the increase in agricultural production is dependent on the proportion of agricultural products imported. The indicator includes items which are not used as food, and thus is a fairly general indicator of progress or development occurring within the agricultural sector. TABLE III-3 compares the growth rates for each of the three classifications of countries during the first and second halves of the period from 1951 to 1969.

TABLE III-2

Index of Per Capita Food Production (1963=100)

Category/Country	1955	1960	1970
POLITICALLY DOMINANT[1,2]			
Dominican Republic	109	128	92
Guatemala	83	87	96
Honduras	89	97	103
Paraguay	113	107	111
Average	98.5	104.8	100.5
POLITICALLY POWERFUL			
Argentina	89	80	96
Bolivia	64	96	90
Brazil	92	98	112
Colombia	111	103	102
Ecuador	85	99	102
Panama	95	98	112
Peru	104	105	99
Venezuela	89	97	116
Average	91.5	97	103.6
NON POLITICAL			
Chile	104	93	97
Costa Rica	105	102	124
Mexico	86	105	107
Uruguay	113	107	113
Average	102	101.8	110.2

Source: U.N., Statistical Bulletin for Latin America, Economic Commission for Latin America (ECLA), VIII, 1, United Nations, New York, March, 1971. Table 12.6 p. 74. (Future references will be designated ECLA date)

[1]El Salvador and Nicaragura are omitted, data not available.

[2]Haiti is omitted, lack of consistent data. Haiti's per capita food production (1955-1959 = 100) has decreased from an index of 100 in 1960 to an index of 76 in 1967. (See: U.S. Office Public Affairs Latin America Growth Trends, Office Public Affairs Bureau of Inter-America Affairs, U.S. Department of State, (1968, Table 8).

TABLE III-3

Agricultural Production Trends

(% Average Annual Growth Rates)

Category	Time Period	
	1951-1953 to 1959-1961	1959-1969
Politically Dominant	3.23[1]	2.87
Politically Powerful	3.25	3.68
Non Political	2.82	3.43

Source: ECLA Economic Survey of Latin America 1970, Table 5, p. 15 and Table 9, p. 40-41, 1972 Sales No.: E. 72.II.G1.

[1]Does not include Haiti.

Due to the slight overlapping of time periods, the figures for agricultural production trends are not directly comparable; however, the overall trend is visible. The "dominant" countries have suffered a slowing of their rate of growth in agricultural productivity while the other two categories of countries have had comparable increases in agricultural productivity. The target annual rate of growth for agriculture, established in the International Development Strategy for Latin America for the 1970's, is 4%.[6] The "politically powerful" group nearly achieved this target rate during the past decade. These countries are in the best position to achieve the target growth rate and meet the demands associated with the overall increase in economic development (ECLA, 1972: 15-17). The "non-involved" countries achieved a similarly significant increase in agricultural productivity.

Kuznets (1966) describes the structural changes which occurs within the three major sectors of production in association with the development process.[7] The normal structural changes are a

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[6]The International Development Strategy adopted by the U.N. General Assembly in its Resolution 2626 (XXV), is the basic instrument of the action programme for the Second United Nations Decade. This document represents agreements between governments, concerning actions to be initiated and measures to be systematically applied with the immediate end of promoting the economic and social progress of the developing countries during the present decade. The strategy points to goals and objects to be achieved. (See United Nations, International Development Strategy United Nations Publication Sales No.:E. 71. II. A. 2). The Agricultural Growth Rate established for the 1970's is 4% See: Economic Survey for Latin America 1970, p. 15.

[7]For a brief discussion of the trends in production and employment within the three sectors (primary or agricultural; secondary or industrial; and tertiary or service) which occur with economic development see E. E. Hagen The Economics of Development, op. cit., p. 45-51. Also see Hollis B. Chenery, "Patterns of Industrial Growth" American Economic Review, L, 4 (September 1960), pp. 624-654, and Gustan Ranis, and John C. Fei, 4; "A Theory of Economic Development," American Economic Review, LI, 4 (September 1965), pp. 533-557.

continuous reduction in the proportion of the labor force employed in the agricultural sector, and an increase in the proportion employed in the industrial and services sectors. Production within each of these sectors follows similar trends. The agricultural output represents a generally declining portion of total production, whereas the industrial output and service output claim increasing proportions (Ibid.). TABLE III-4 shows the structural changes of employment and productivity occurring within the agricultural sector of the countries in question during the past decade. Each of the categories of countries followed the normal trend associated with development. The "powerful" countries decreased the share of agricultural production in their total production by the greatest percentage, 15.4%, followed by the "dominant" at 14.2%, and, at a slower rate, the "non-involved" countries at 11.5%. The slower rate in the "non-involved" countries was expected and is explainable, assuming that, as the lower limits are reached, reductions become more difficult and come at a slower rate. Industrialized countries have experienced overtime a similar slowing in the rate of change in decreasing the share of agriculture in total productivity (Kuznets, 1966: 86-153). Thus, the rates of the three categories are approximately equal. The "non-involved" category had a slightly greater decrease in the movement of the employed population out of agriculture, a decrease of 11.71%, compared with decreases of 6.8% in the "dominant" and 10.85% in the "powerful" categories. The rates of change for the

TABLE III-4

Structural Changes In The Agricultural Sector

Category/Country	Production as Percent of Total Production		Employment as Percent of Employed Population	
	1960	1969	1960	1969
POLITICALLY DOMINANT				
Dominican Republic	64.8	59.8	30.7	24.8
El Salvador	58.3	56.1	32.4	26.0
Guatemala	68.0	64.7	30.3	27.3
Haiti	81.2	(1)	48.5	45.9
Honduras	71.4	66.9	44.1	38.5
Nicaragua	61.8	56.0	37.2	27.9
Paraguay	56.1	51.1	38.8	34.2
Average	63.4	59.1	37.4	32.1
POLITICALLY POWERFUL				
Argentina	19.1	15.6	17.4	15.2
Bolivia	59.7	55.0	30.6	23.1
Brazil	52.2	46.6	22.1	19.9
Colombia	48.2	42.3	34.1	30.3
Ecuador	55.8	52.5	36.8	31.7
Panama	47.0	43.9	24.9	21.0
Peru	52.2	46.2	24.1	18.2
Venezuela	34.2	26.6	7.2	7.8
Average	46.1	41.1	24.7	20.9
NON POLITICAL				
Chile	26.9	22.5	12.1	10.1
Costa Rica	52.5	49.3	27.0	22.4
Mexico	54.3	47.2	16.6	12.8
Uruguay	19.9	16.6	19.3	20.9
Average	38.4	33.9	18.8	16.6

Source: ECLA, 1972, Table 25 section 1 and 2, p. 54.

(1) Data not available, Haiti was omitted for computation of averages for both 1960 and 1969.

"non-involved" and "powerful" countries are considered about equal, with the "dominant" countries experiencing the least amount of labor moving out of the agricultural sector.

Industry

Structural changes occurring within the agricultural sector must be considered in the context of changes occurring within the other two sectors. Classical theories of industrialization assume that a large portion of the labor force released from the agricultural sector will become employed within the industrial sector (Johnston and Mellor, 1961: 571-581).[8] As the industrial sector expands, creating more job opportunities for the labor force released from agriculture, it will also expand in its share of the total output of the economy. Those persons released from agriculture but not absorbed into the industrial sector either become part of the services sector or become unemployed. The undesirability of the services sector's absorbing the released labor force is expressed in the resulting increase in the number of "shoe shine stands" and other relatively non-productive endeavors. A recent United Nations report states that, "The services sector generates a variety of marginal activities into which labor is for all intents and purposes 'dumped' and employed at an extremely low level of productivity" (ECLA, 1972: 46).

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[8]Also See: W. A. Lewis, "Economic Development with Unlimited Supplies of Labor," The Economics of Underdevelopment, (eds.). A. N. Agarwala and S. P. Singh (London: Oxford University Press, 1958).

The change in distribution of the labor force and the productivity within these two sectors are shown in TABLE III-5. The labor force released by the agricultural sector was absorbed into the "service" sector, rather than into the industrial sector as was expected in classical theories of economic development. The "dominant" group of countries absorbed more of their released labor force in the industrial sector than did the "powerful" countries. The "non-involved" category actually decreased in the portion of the total labor force employed by the industrial sector. In Latin America the process of industrial absorption of the released labor from the agricultural sector has not occurred. Only in its initial stages has industrialization fulfilled the function of rapidly increasing industry's share of total employment (ECLA, 1972: 46). In all three categories, the "service" sector absorbed the 'extra' labor force.[9] The "dominant" category experienced the greatest expansion in the "service" sector's portion of the total labor force, expanding by about 27%, while the other two categories expanded by about 15%.

As mentioned previously, it is undesirable for the "service" sector to absorb this 'extra' labor force, since it frequently leads to unemployment and/or 'underemployment.' Even though none of the categories were successful in this area, the "powerful" category has done slightly better than any other category. As indicated by their lowest percentage increase (14.9% as compared to 15.2% for the "non-

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[9]"Extra," as used herein, meaning the excess remaining after accounting for the portion released by agriculture being absorbed by the industrial sector.

TABLE III-5

Indicators of Structural Changes In the Economy

Category/Country	Employed Population by Sector (Percentages)				Share of Total Production by Sector (Percentages)			
	Industry(1)		Service		Industry(1)		Service	
	1960	1969	1960	1969	1960	1969	1960	1969
POLITICALLY DOMINANT								
Dominican Republic	14.3	14.2	20.9	26.0	24.7	28.7	44.6	46.5
El Salvador	18.4	19.1	23.3	24.8	23.7	28.8	43.9	45.2
Guatemala	15.3	15.5	16.7	19.8	17.7	20.9	52.0	51.8
Haiti	6.7	(2)	12.1	(2)	18.5	20.8	33.0	33.3
Honduras	11.7	12.3	16.9	20.8	22.5	31.0	33.4	30.5
Nicaragua	18.2	17.4	20.0	26.6	24.6	27.1	38.2	45.0
Paraguay	19.0	20.1	24.9	28.8	24.7	28.4	36.5	37.4
Average	14.8	16.4	19.3	24.5	22.3	26.5	40.2	41.4
POLITICALLY POWERFUL								
Argentina	38.0	36.9	42.9	47.5	46.4	51.2	36.2	33.6
Bolivia	20.1	21.1	20.2	23.9	36.4	46.1	33.0	30.8
Brazil	23.0	23.3	24.8	30.1	33.9	36.3	44.0	43.8
Colombia	24.5	23.0	27.3	34.7	32.3	34.2	33.6	35.5
Ecuador	21.9	20.4	22.3	27.1	27.4	29.0	35.8	39.3
Panama	14.7	17.0	38.3	39.1	26.2	33.5	48.9	45.5
Peru	24.8	25.8	23.0	28.0	35.4	38.9	40.5	42.9
Venezuela	23.8	27.2	42.0	46.2	47.3	46.3	45.5	45.9
Average	23.9	24.3	30.1	34.6	35.7	39.4	39.7	39.7
NON POLITICAL								
Chile	33.0	31.6	40.1	45.9	46.1	51.5	41.8	38.4
Costa Rica	20.5	19.6	27.0	31.1	27.2	30.8	45.8	46.8
Mexico	21.5	23.3	24.2	29.5	32.6	36.2	50.8	51.0
Uruguay	33.9	31.7	46.2	51.7	35.3	34.5	45.4	44.6
Average	27.2	26.6	34.4	39.6	35.3	38.3	45.9	45.2

Source: ECLA, 1972, Table 25 section 1 and 2,p. 54.

(1) Includes: mining, manufacturing, construction, electricity, gas, water, sanitation, transportation and communications.

(2) Data for Haiti is not available, and in not included in the average.

involved" countries). However, the difference between the "powerful" and "non-involved" is so small that they must be considered equal. The industrial sector of the "non-involved" category is apparently not only unable to absorb a greater portion of the total working force, but is unable to maintain its portion, leading to an even greater expansion of the "service" sector. The low average labor productivity of the "service" sector is apparent, considering that although most of the released labor force was absorbed by this sector, its overall portion of total output changed only marginally. The "dominant" category's "service" sector increased its total share of production slightly, while the "powerful" group experienced no change. The "non-involved" group experienced the poorest performance. In addition to not having absorbed the released agricultural labor force, a small portion of the labor force from industry was released to the "service" sector, yet the portion of output claimed by this sector actually declined during the decade.

Each of the categories of countries experienced an increase in the industrial sector's share of total production. The greatest increase occurred within the "dominant" category which, with the "powerful" category, experienced a greater increase than the "non-involved" group. The "powerful" category has attained the highest overall level of industrial production as its portion of total productivity. The increase among the "non-involved" group, although slightly smaller than for the other two groups of countries, was accomplished simultaneously with an overall decrease in the portion

of the labor force employed by industry.[10] Nordlinger (1972: 1139-1140) found in his study that countries in which the militaries were active in the political system had a high rate of growth in the industrial sector. He argues that this greater industrial productivity is explicable in the military's vast expenditures on defense material, and it thus represents an increase in military industrilization' rather than an increase in the production of consumer goods.

The highest average annual growth rate in the industrial sector during the past two decades was achieved by the "powerful" countries (TABLE III-6). During the last decade the industrial growth rate of the "dominant" countries rose sharply. Both of these categories enjoyed growth rates above the average for all of Latin America, which was 6.4% (ECLA, 1972: 37-38). The "non-involved" group achieved a slight increase in the growth rate during the past decade; however, it is well below the Latin American average and that of the other two groups of countries.

McGranahan, et.al. (1972: 33-80), selected consumption of energy, expressed in coal equivalents, as one of their key indicators. They argue that energy consumption is an indicator of "[the] level of industrial technology and its use within a country" (Ibid.: 39). During the period of 1955 to 1971, the level of industrial technology, as expressed by this indicator, is significantly greater among the

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[10]Distinctions in the improvement of industry's share of total productivity is difficult, if not impossible, to make among the three categories. In the final analysis, the rate of improvement is considered about equal.

TABLE III-6

Industrial Production Trends[1]

Category	% Average Annual Growth Rates 1951-1953 to 1959-1961	1959-1969
Politically Dominant	5.2[2]	6.7
Politically Powerful	6.3	6.6
Non-Political	5.2	5.9

Source: ECLA: 1972, Table 7, p. 17 and Table 9, p. 40-41.

[1]Includes manufacturing and basic services, see footnote 2, TABLE III-5.

[2]Haiti was not included in the average, data not available.

"powerful" and "non-involved" categories of countries than in the "dominant." The "dominant" countries achieved the greatest improvement during the period from 1955 to 1971 as shown in FIGURE III-1.[11] The greatest increase occurred between 1970 and 1971. All three categories increased their respective levels of energy consumption about equally during the period from 1955 to 1970. The data for 1971 reflects the best estimate, rather than actual accomplishments, therefore, its reliability is very low. The overall evaluation of the country groups achievements is based upon the period from 1955 to 1970. Although, each of the categories experienced nearly equal increase, in energy consumption, the "powerful" and "non-involved" countries achieved their high rates at substantially higher levels. The graphic illustration is based upon a percentage increase which, as higher levels are reached, becomes more difficult to achieve high percentage improvements. However, in view of the estimates for 1971 all three categories are considered to have achieved about equal performance on this variable.

Trade

Samuelson argues in his classic study that free trade, even for a small country which is unable to influence world prices, is better than no trade at all (1949: pp. 239-252). Caves and Jones (1973: 18-36) argue that the opportunity to trade at any world market relative price, which differs from the relative prices of a country

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[11]Data in tabular form is at Appendix A.

THIS BOOK CONTAINS NUMEROUS PAGES WITH DIAGRAMS THAT ARE CROOKED COMPARED TO THE REST OF THE INFORMATION ON THE PAGE.

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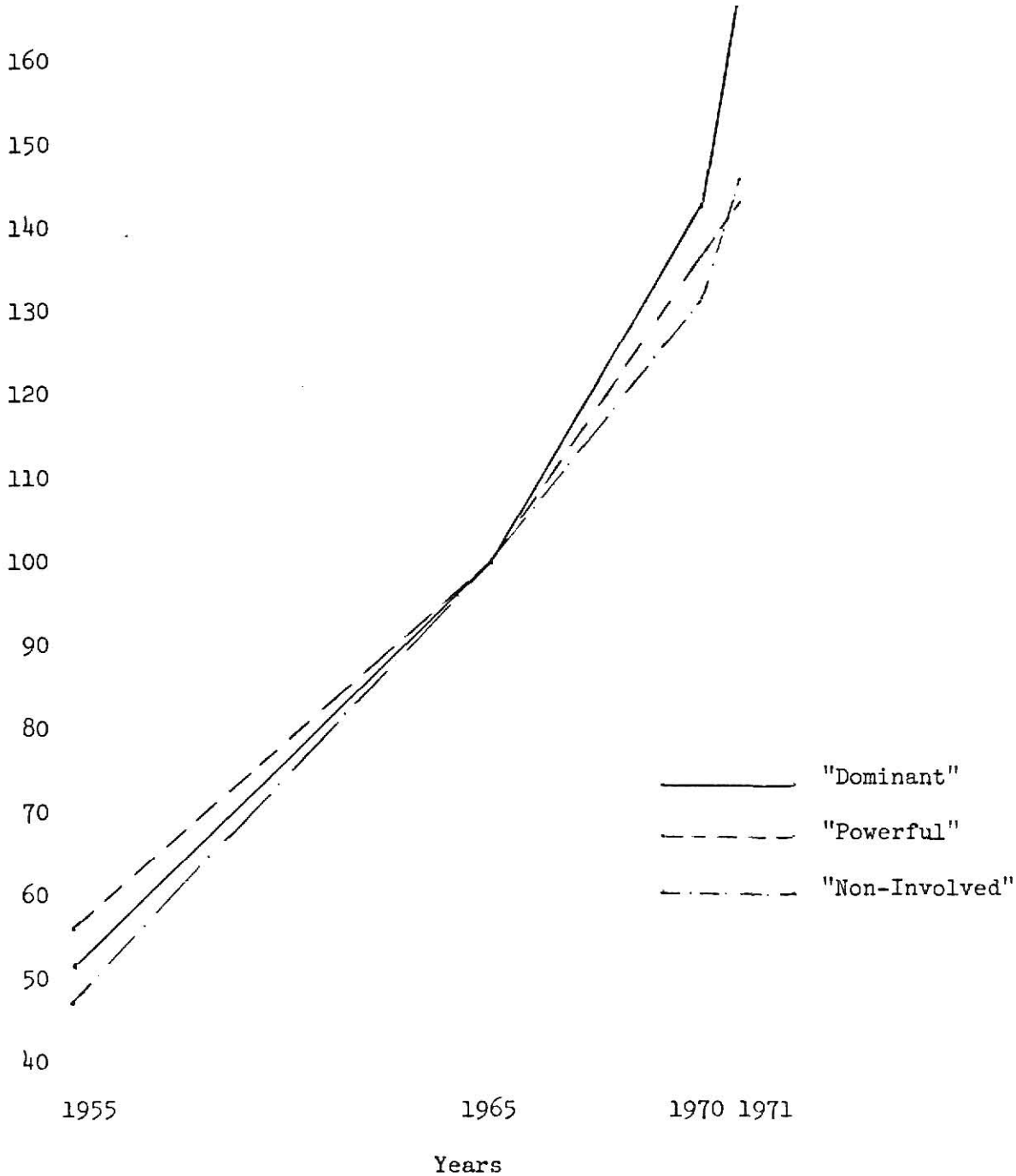
FIGURE III-1

Energy Consumption



Source: See Appendix A for original data. The index numbers are computed from the base year 1965, which is set equal to 100.

in isolation, makes trade beneficial both to the world and to that particular country. International trade allows each country to enjoy more goods and services than would have been the case in the absence of trade. However, the role which international trade fulfills in the development process is far from agreed upon. Myrdal (1970: 479-484) and Prebisch (1970: 484-492) argue that international trade has inhibited industrial development within the 'Third World' or poorer nations. In contrast, Haberler (1970: 492-497) argues in favor of the "dynamic benefits" of foreign trade and the contribution it makes to the development process.

One of the functions of international trade is to allow the flow of scarce resources between countries. Many goods, e.g. materials, needed for development perhaps cannot be produced within the developing country. Thus importation of the goods is essential and participation in trade is unavoidable. Chenery and Bruno (1962: 79-109) suggest that exports may be a limiting factor to development. In the absence of a machinery industry within a country, it becomes necessary to import machines, and, pertinent resources to this concern. Cairncross (1970: 261-275) argues that high levels of exports enlarge the volume of imports of equipment that can be financed without endangering the balance of payments. The scarcity of foreign exchange in 'Third World' countries inhibits their abilities to pay for required imports. A general characteristic of 'Third World' countries has been that their demand for imports exceeds exports, creating

trade deficits--an excess of imports over exports. When the value of exports exceeds that of imports, the net flow of foreign enchange is into the country, enabling it to finance investments, e.g. to bring in imports of machines, or accumulate international reserves.

Samuelson (1967: 636-637) suggests four stages as typical in the change in balance of payments and trade during the process of industrialization. Hagen modifies these four stages slightly, reporting the sequence as follows:

> First, there is a period of capital inflow, during which the country goes increasingly into debt. Then, its exports begin to grow relative to its imports. The country has passed into the second stage when its exports become great enough to pay for its imports plus the interest and dividends on the past investments by foreigners. As its exports continue to increase relative to imports, it uses the proceeds to invest abroad. In due time, its investments abroad come to equal and then exceed past foreign investments in it, and it becomes a creditor nation. In this third stage, so long as it uses its surplus of exports plus the net interest and dividends due it for continued investment abroad, its debtors abroad will have no difficulty in paying the interest and dividends annually. Lastly--the fourth stage--the country's imports rise, with its growing income and the increasing capacity of other countries to produce attractive goods, and it uses the interest and dividends due it to pay for an excess of imports over exports. (Hagen, 1968: 352-353,[Italics mine]).

Thus, it appears that the ratio of the value of exports to imports is a viable indicator of economic development.[12] However, several

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[12]Samuelson, and Hagen:conceptualization of the relationships between imports and exports is based upon a long period of time, perhaps a century, rather than a short time period as used in this thesis. Thus it may be argued that the relationship of imports and exports over a short time span is not a good indicator of development. However, it seems plausible that countries which are able to develop a favorable balance of trade without limiting their growth rates are in a better position than countries which must experience a severe imbalance of trade in order to maintain an equal growth rate. Thus, the relationship is considered a valid indicator.

limitations to the use of the balance of trade may be noted. For example, it is frequently argued that the exports represent flow of products from foreign-owned industries. The revenue from such exports is not necessarily representative of cash flows into the country. It is further argued that instead of the revenue being used to further industrialize the exporting country, it is syphoned off by the parent organization in the highly industrialized country (Frank, 1972: 154-155).[13] The validity of such an argument will not be discussed herein. Assuming such an argument has some element of truth, its effects become minimized in this study by the criteria used in categorizing the countries; thus the effects will be dispersed relatively equally among the three categories.

The changes in the value of imports and exports during the period from 1960 to 1970 are illustrated in FIGURE III-2. The "powerful" category of countries have entered at least partially, into Samuelson and Hagen's conceptualized second stage in which the value of exports exceeds that of imports. The other two categories remain at the first stage. The assumption is made that the third and fourth stages have not been attained by any of the Latin American countries. During the 1960's the "powerful" category's exports increased by about 54%, while their imports increased by only 36%. In each of the other two categories the inverse relationship existed. The disparity was the greatest in the "dominant" category, where the imports more than doubled compared to a less than thirty percent increase in their exports. (See Appendix B for tabular data).

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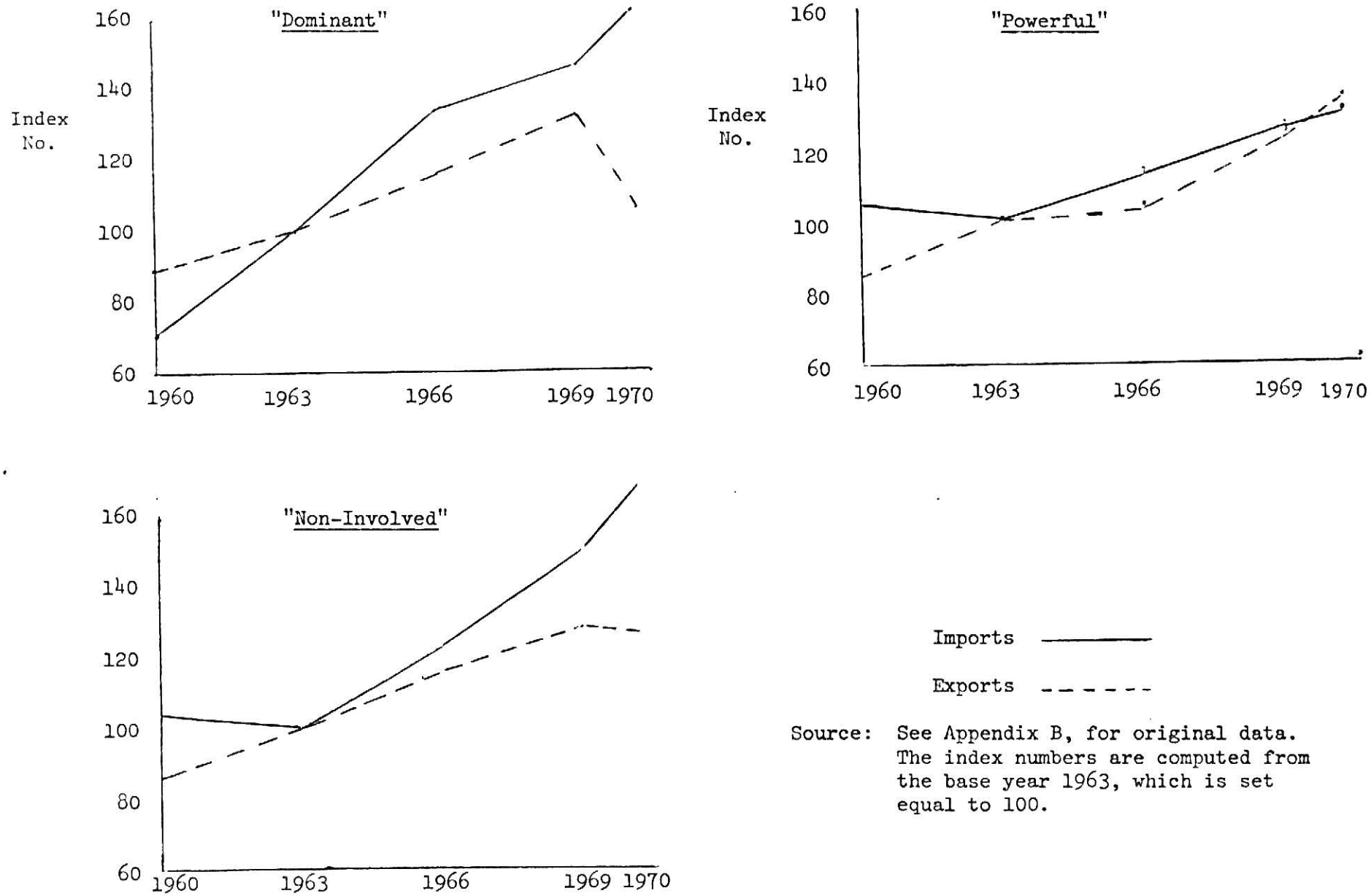
[13] A frequently cited example is the petroleum industries.

FIGURE III-2

Relationship of Import & Export Trends



Source: See Appendix B, for original data. The index numbers are computed from the base year 1963, which is set equal to 100.

Assuming the "powerful" category's figures may be somewhat distorted by Venezuela's petroleum resources, Venezuela can be deleted from the computation, placing the "powerful" category into Hagen's first stage where imports exceed exports. However, the gap between the two remains much smaller for the "powerful" group than for any other. In 1960, the "powerful" category's imports, excluding Venezuela, averaged $664 million and their exports averaged $559 million. In 1970 this gap was greatly narrowed. Imports had an average value of $924 million, while their exports were valued at $885 million (See Appendix B). Even removing the advantage of Venezuela's rich petroleum resources, the "powerful" category approaches the stage where exports exceed imports. The trade gap in the other two categories remains significantly larger with the largest in the "dominant" category.

The average annual rate of growth in the value of exports during the period from 1950 to 1969 for each category was "dominant," 5.6%; "powerful," 5.1%; and "non-involved," 5.2%. The greatest rate of growth occurred during the past decade in each category. Although the "dominant" category experienced the greatest growth in exports, it similarly experienced the greatest annual rate of growth in the value of imports. The annual growth rate in the value of imports for each category, in the sequence used for, above, are 8.5%, 5.8%, and 6.1% (ECLA, 1972: 73-85). The gaps between the two rates of growth is least among the "powerful" category, and greatest in the

"dominant" category, which suggests that the progress of the "powerful" and "non-involved" countries toward industrialization exceeds that of the "dominant" category.

General Economic

Frequently used 'gross' indicators of the economic level of development achieved by a group of countries are the Gross National Product Per Capita (GNP/Capita) and the Gross Domestic Product Per Capita (GDP/Capita). GNP for a country is based upon the production accounted for by country owned factors of production, whereas the GDP is based upon total production within the geographic borders. The latter, because it is a geographic concept, includes output from foreign-owned means of production. The differences between the two measures for a given country may be quite great. Normally, the GDP is greater in most less developed countries than the GNP. Thus, both indicators are used in this study. In addition to the per capita growth rate, the overall growth rate is frequently used as a gross indicator of development. The universality of the use of both of these indicators as measurements of economic development preclude the need to justify their use in this study. However, the limitations should be noted. As single indicators of development, they are limited by variations in the technical procedures applied in deriving the data[14] and by their values as overall measurement

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[14]See E. E. Hagen, The Economics of Development, op. cit., pp. 7-15.

of development.[15] Considering the effects of population growth, the per capita indicator provides a clearer estimate of progress then the use of the total gross (National or domestic) indicator; however, both are included in this study. A recent UN study noted that when using international comparisons of GDP, Latin America had achieved above the average annual growth; however, using GDP/Capita, the rate of growth was "much lower than that achieved in the socialist countires, in Japan, and even in some developing countires" (ECLA, 1972: 9-10).

The GNP/Capita for the period 1950 to 1972 is shown in TABLE III-7. During the period, the "powerful" countries experienced an increase of per capita GNP of about 63%. The "non-involved" countries' increase amounted to about 55%, while the "dominant" category achieved an increase of slightly less than 50%.

The GDP/Capita annual growth rates (see TABLE III-8) during the period from 1950 to 1970 indicate that the "powerful" category has achieved the highest rate of growth, followed by the "non-involved" category. In terms of overall growth rate the "non-involved" and "powerful" countries have achieved higher levels than the "dominant" group. However, by dichotomizing the period into the two decades, it is apparent that the "powerful" and "dominant" countries have both enjoyed an increase in their respective average annual growth rates

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[15] See McGranhan, et.al., Content and Measurements of Socioeconomic Development, op. cit., pp. 6-9.

TABLE III-7

Per Capita GNP in Constant 1971 Prices, US $

Category/Country	1950	1955	1960	1965	1970	1971	1972(1)
POLITICALLY DOMINANT(2)							
Dominican Republic	229	263	295	288	366	382	404
El Salvador	(3)	(3)	240	282	296	300	304
Guatemala	261	250	277	308	348	355	365
Honduras	190	207	228	227	259	265	268
Nicaragua	258	321	322	425	452	463	463
Paraguay	217	222	227	248	262	267	273
Average	231	253	265	296	331	339	346
POLITICALLY POWERFUL							
Argentina	761	797	835	963	1085	1111	1138
Bolivia	(3)	(3)	167	187	222	225	234
Brazil	201	240	288	311	389	421	452
Colombia	221	248	258	275	307	315	328
Ecuador	175	195	210	218	243	251	260
Panama	372	387	459	589	734	774	804
Peru	287	348	376	444	461	480	493
Venezuela	517	655	774	948	1004	1004	1010
Average	362	410	421	492	556	573	590
NON POLITICAL							
Chile	520	539	585	672	768	795	796
Costa Rica	(3)	(3)	428	450	560	570	579
Mexico	379	435	488	581	687	689	717
Uruguay	(3)	758	704	679	710	697	686
Average	449	577	551	596	681	688	695

Source: Agency for International Development, Gross National Product Growth Rates and Trend Data, Table 3a, p. 9, 1 May 1973.

(1) Preliminary

(2) Haiti not included in average. Data is not available.

(3) Data not available

TABLE III-8

Trend of Gross Domestic Product
at Market Prices, 1950-1970

Percentage Average Annual Growth Rate

Category/Country	Per Capita Rates 1950-1960	1960-1970		Overall Growth Rates 1950-1960	1960-1970	
POLITICALLY DOMINANT						
Dominican Republic	2.5	0.4		5.7	3.7	
El Salvador	1.9	2.5		4.7	5.8	
Guatemala	0.9	2.2		3.8	5.2	
Haiti	-1.2	-1.8		1.9	0.5	
Honduras	0.5	1.7		3.5	5.2	
Nicaragua	2.3	3.6		5.2	6.7	
Paraguay	0.1	1.1		2.7	4.7	
Average	1.0	1.4	1.19(1)	3.9	4.5	4.2(1)
POLITICALLY POWERFUL						
Argentina	1.0	2.1		3.1	3.7	
Bolivia	-1.6	3.2		0.4	5.6	
Brazil	3.7	2.9		6.8	5.8	
Colombia	1.4	1.8		4.6	5.2	
Ecuador	1.8	1.2(2)		4.7	5.0(2)	
Panama	1.9	4.6		4.9	5.0	
Peru	2.9	1.7		5.3	4.9	
Venezuela	3.6	2.4		7.7	5.8	
Average	1.8	2.5	2.16(1)	4.7	5.2	4.9(1)
NON POLITICAL						
Chile	1.5	1.8		4.0	4.3	
Costa Rica	3.2	2.9		7.1	6.8	
Mexico	2.7	3.6		5.8	7.2	
Uruguay	0.7	-0.1		2.1	1.3	
Average	2.0	2.1	2.04(1)	4.7	4.9	4.8(1)

Source: ECLA, 1972, Table 1, p. 10.

(1) Average annual growth rates 1950-1970.

(2) "The figures for Ecuador do not include 1970 when, judging from partial information, there was a substantial increase in the product." (Ibid.)

during the past decade, while the "non-involved" countries were nearly stagnant. That is, the rate of increase has not increased, through the average rate during the entire period is slightly above the average of the other categories. However, it should be noted that this is based upon a very diverse group--Mexico and Uruguay with greatly different rates of growth. The "dominant" category, though having improved its average growth rate, is clearly well below the achievements recorded in the other two categories during the twenty-year period. They average annual, overall growth rate of the domestic product during the period from 1950 to 1970 was highest for the "powerful" countries (4.9%) and lowest among the "dominant" countries (4.2%), as seen in TABLE III-8. The "non-involved" countries tended toward the higher level, achieving an average rate of 4.8%. However, the improved rate of growth from the 1950's to the 1960's was greater in the "powerful" and "dominant" categories and least in the "non-involved" countries.

SOCIAL DEVELOPMENT

Correlates of development and modernization are the advancements achieved in the raising of overall living conditions and general well being in the society. One need not present any vast array of statistical data to argue that great gaps exist between the more developed countries and the 'Third World' in terms of living conditions and other societal characteristics as a whole. The gaps in health,

education, housing conditions, etc., are well known. As the 'Third World' countries struggle through the process of economic development, they, simultaneously, must cope with the problems of social development. A true measure of development for a country or group of countries must consider the social variables.[16]

Health

The level of health can be assessed using a variety of indicators. McGranahan, et.al. (1972: 17), found life expectancy at birth to have the highest correlation with development. The Compendium of Social Statistics rates life expectancy as "one of the priority indicators of the health component of levels of living" (1968: 16). The Interim Guide of International Measurements of Standards and Levels of Living considers this indicator to be "theoretically the best indicator of health" (1961: 13). TABLE III-9 shows the improvements in life expectancy made from 1950 to 1968. Each of the three categories of countries recorded advancements during this period. On initial observation, it appears that the "dominant" category made the greatest advancement, extending life expectancy by 8.9 years during the period, whereas the other two categories extended life expectancy by approximately 6.5 years. To distinguish which category of countries achieved the best results, one must

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[16]For the need to measure social development as part of the overall developmental process, see: U.N. Introduction to Compendium of Social Statistics, United Nations, New York, 1968.

TABLE III-9

Health

Category/Country	Life Expectancy(1) at Birth 1950	1968	(3)	Health Expenditures as(2) Percent GNP 1964-1970 1964	1965	1966	1967	1968	1970
POLITICALLY DOMINANT									
Dominican Republic	43.0	52.0	20.9	2.4	0.5	2.3	2.2	1.2	1.2
El Salvador	51.4	56.9	9.5	0.6	1.9	1.3	1.4	1.5	1.7
Guatemala	43.6	47.0	7.8	0.8	(e)	0.8	0.8	2.3	1.3
Haiti	32.6	47.5	45.7	1.5	0.9	0.9	1.0	1.2	1.1
Honduras	36.9(c)	42.6	15.4	1.1	0.4	1.1	1.1	1.1	0.7
Nicaragua	38.6(b)	51.0	32.1	1.0	0.9	2.7	2.7	0.7	1.0
Paraguay	54.4(d)	59.1	8.8	1.3	0.5	0.4	0.4	0.6	0.8
Average	42.9	50.9	20.0	1.3	0.8	1.4	1.4	1.2	1.1
POLITICALLY POWERFUL									
Argentina	60.6	67.0	10.6	0.5	0.3	0.2	0.3	0.2	0.1
Bolivia	40.8	46.0	12.7	1.4	2.0	2.8	3.8	0.4	0.8
Brazil	42.3(a)	56.0	32.4	0.8	0.6	1.5	2.3	0.3	0.4
Colombia	52.2	60.0	14.9	1.8	1.1	0.7	0.8	1.7	1.7
Ecuador	49.9(b)	57.7	15.6	1.5	0.5	1.0	1.0	0.4	0.4
Panama	62.2	64.3	3.4	2.8	2.1	1.7	1.7	1.9	1.9
Peru	57.4	58.0	1.0	1.6	1.1	1.7	1.7	1.2	1.2
Venezuela	58.0	65.8	13.0	3.1	2.5	3.4	3.3	4.3	4.3
Average	52.9	59.4	13.0	1.7	1.3	1.6	1.8	1.3	1.4
NON POLITICAL									
Chile	54.0	62.0	14.8	2.5	1.5	2.1	2.5	2.7	2.7
Costa Rica	56.5	63.3	12.0	0.9	3.2	8.0	9.1	2.7	2.7
Mexico	48.8	60.0	23.0	0.4	0.4	1.1	1.1	1.2	1.2
Uruguay	68.5	68.5	0.0	0.7	0.5	1.0	1.8	8.1	0.8
Average	56.9	63.5	12.5	1.2	1.4	3.1	3.6	1.8	1.9

Sources: (1) ECLA, 1972, Table 54, p. 70-71.
(2) U.S., U.S. Arms Control and Disarmament Agency, World Military Expenditures and Related Data 1971, Bureau of Economic Affairs (Washington, D.C.: July 1972), Table III. Also see issues 1969 to 1965.
(3) Variance: Percent change for each country, average computed by averaging the countries change within each category.

(a) 1945
(b) 1956
(c) 1954
(d) 1955
(e) Not available.

consider that death in itself cannot be avoided; thus, there is some limit beyond which the life expectancy at birth cannot be extended. As the upper limits, which we may assume to be about 70 years of age, are approached, it would seem that each subsequent increase becomes slower and more difficult to attain. The trend in the United States has followed such a pattern, with large quantum jumps initially, as medical science discovered ways and means of extending life through both improved medication and better facilities. Yet, once these quantum leaps were achieved, extension of life expectancy has slowed considerably. If this notion is correct, the difference between the categories may be either very small or non-existant. The percentage improvement for each country and the average for the three categories were computed. As expected, the "dominant" countries have a slightly greater improvement, 20%, as compared to the other two categories, 13%. However, this above explanation accounts for this difference. In view of the fact that life expectancy failed to reveal any distinction among the categories of countries, the percentage of gross national product expended on health was considered as an additional indicator which would measure the desire to improve the health conditions of the society (See TABLE III-9). During the period from 1964 to 1970, the "non-involved" countries expended a considerably greater portion of their GNP on health than those in the other two categories (the average during the period for each category is: "dominant," 1.19%; "powerful," 1.52%; "non-involved," 2.15%).

Likewise, a definite distinction may be made between the other two categories, with the "powerful" countries expending a larger portion on health than the "dominant." Considering that both the "non-involved" and "powerful" countries have, on the whole, a larger annual gross national product than the "dominant" countries, the absolute dollar differences would be even greater evidence of the disparities between the groups.

Nutrition

Two indicators of the food consumption and nutritional components of the level of living were proposed by the Interim Guide. However, the Guide notes that they are inadequate, and "no satisfactory and practical indicators have yet been developed." Two of these suggested indicators, 'calorie' and 'protein' consumption, will be used in this analysis. Daily calorie consumption, used as the only indicator of nutritional level, may be extremely misleading. High calorie consumption does not necessarily imply a balanced diet. The protein consumption provides some insight into the balance of the diet; however, achieving the required level of protein does not necessarily mean that all the daily nutritional requirements are consumed. Thus, it is not a complete indication of a balanced diet. An additional measurement, which compares the estimated daily consumption, is used as the best available indicator of the adequacy of the nutritional level[17] (see TABLE III-10). During the period

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[17]Estimated requirements for active healthy people are based upon the national target, body weight, age- and sex-distribution of the population, and average annual environmental temperatures.

TABLE III-10a

Nutrition

Category/Country	Per Capita Calorie Consumption 1955(a)	1967(a)	1970(b)	Requirement (1)	Percent of Requirement (2)
POLITICALLY DOMINANT					
Dominican Republic	2470	2290	2060	2240	91.96
El Salvador	2030	1840	1850	2230	82.96
Guatemala	2040	2200	2020	2320	87.07
Haiti	(5)	1930(4)	1930	(5)	
Honduras	2080	2010	2200	2120	103.81
Nicaragua	2300	2350	2330	(5)	
Paraguay	2510	2520	2540	2320	109.48
Average	2238	2163	2133	2246	94.96
POLITICALLY POWERFUL					
Argentina	3070	2920	3160	2550	123.93
Bolivia	1830	1980	(5)	2400	82.50(6)
Brazil	2560	2690	2820	2350	120.00
Colombia	1900	2200	2140	2320	92.24
Ecuador	1890	2020	1970	2320	84.91
Panama	2310	2500	2370	2280	103.94
Peru	2040	2340	2260	2370	95.36
Venezuela	1950	2490	2430	2350	103.44
Average	2194	2393	2450	2368	103.48
NON POLITICAL					
Chile	2550	2890	2560	2490	102.81
Costa Rica	2420	2610	2370	2290	103.49
Mexico	2370	2550	2620	2360	111.02
Uruguay	2960	3170	2740	2630	104.18
Average	2575	2805	2573	2443	105.32

(a) Source: ECLA, 1972, Table 54, p. 70-71.
(b) Source: U.N. United Nations Statistical Yearbook, 1972, Table 162.
(1) Estimated Calorie and Protein Requirement: United Nations Report on the World Social Situation 1967, p. 36.
(2) Percentage of Requirement is based on 1970 data only.
(3) Intake is computed by multiplying the Protein Consumption by a factor (NPU) which gives actual intake. See: Report on World Social Situation 1967. Computed for 1970 only.
(4) Based upon 1964-1966.
(5) Not available.
(6) Based upon 1967 data.

TABLE III-10b

Category/Country	Nutrition Per Capita Protein 1955(a)	1967(a)	1970(b)	NPU	(7)	(8)	(9)
POLITICALLY DOMINANT							
Dominican Republic	53.0	41.7	50	60	30	33.0	90.90
El Salvador	56.7	44.2	45	51	23	32.6	70.25
Guatemala	55.4	56.8	50	48	24	33.2	72.59
Haiti	(5)	(5)	47(4)	(5)		(5)	
Honduras	53.6	51.0	55	53	29	32.0	91.25
Nicaragua	62.1	59.0	63	(5)		(5)	
Paraguay	65.3	63.3	65	57	37	35.4	104.80
Average	57.7	52.7	53.6		29	33.2	83.15
POLITICALLY POWERFUL							
Argentina	96.9	88.0	105	62	65	42.8	152.10
Bolivia	48.6	50.6	(5)	59	30(6)	36.2	82.60
Brazil	61.5	66.3	67	57	38	36.1	105.82
Colombia	42.9	48.9	50	62	31	34.4	90.12
Ecuador	47.5	51.5	46	59	28	32.4	86.11
Panama	60.5	62.9	59	64	38	33.0	114.55
Peru	50.5	54.1	55	58	32	34.4	92.73
Venzuela	51.3	65.9	60	60	36	37.2	96.77
Average	57.5	61.0	63.1		37	35.8	102.35
NON POLITICAL							
Chile	80.1	81.8	66	60	40	37.4	105.88
Costa Rica	53.9	57.9	62	62	38	32.1	119.62
Mexico	63.3	65.7	67	50	34	35.9	93.26
Uruguay	95.8	101.6	91	62	56	43.9	127.76
Average	73.3	76.8	71.5		42	37.3	112.33

Source: See Table III-10a.

In addition to notes Table III-10a
(7) Protein Intake

(8) Requirement

(9) Percent of Requirement.

from 1955 to 1970, the "dominant" countries' average daily per capita consumption of both calories and protein decreased, while the "powerful" countries increased their consumption of both. The "non-involved" countries experienced very little change in their level of calorie consumption; however, the levels of protein consumed were reduced slightly. Both the "non-involved" and "powerful" countries, on the average, exceeded the estimated daily per capita requirements for both calorie and protein consumption. People within the "dominant" countries, as a whole, are unable to obtain an adequate amount of food to provide the basic daily requirements of calories and proteins. Further, their diet is poorly balanced, as indicated by the lower level of protein consumption. The people within the other two groups of countries, as a whole, have a well balanced diet, with adequate proportions of calories and protein.

Education

The contribution of education and its by-products to economic growth and development has received considerable attention. The analysis of factors which account for output increases in selected advanced economies give considerable weight to the role of education, primarily secondary education, as a major source of the rise in aggregate productivity.[18] Studies of 'Third World' countries have

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[18]See E. F. Dennison, The Source of Economic Growth in the United States (New York: Committee of Economic Development, 1962).

also emphasized the role of education in both social and economic development, stressing the importance of primary education with its key product, literacy.[19] Adelman and Morris (1967: 36) state, "Literacy is an essential economic asset in industrial urban occupations . . . . In addition, it is an important modern mechanism for integrating both the social and political structures of a nation." Lerner (1958: 64) argues that literacy is a basic human skill which underlies the whole process of modernization.

The international committee of experts on levels of living selected the level of education as an important component indicator (U N: 1954). Among the Interim Guide's recommendations for priority indicators of education were adult literacy rate and the primary and secondary school enrollment ratio. McGranahan, et.al. (1972: 38-63, and Chapt. 6), found that both of these indicators were highly correlated with levels of development and should be included in establishing general indexes of development. However, neither of these indicators necessarily reflects the quality of education. In attempting to find such an indicator, McGranahan, et.al., considered the pupil-teacher ratio. However, they found its correlation with development to be very low (1972: 33-64). In an attempt to assess the quality of education and the government's concern with promoting educational facilities, two additional indi-

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[19]See H. H. Golden, "Literacy and Social Change in Underdeveloped Countries" Rural Sociology, Vol. 20 (March 1955), pp. 1-7; Also Richard L. Meier, Development Planning, (New York: McGraw Hill, 1965), Part III, p. 261-372.

cators have been selected for this study. The ratio of school-aged children to the number of public and private schools may suggest the quality of the educational system. The fewer children per school, it is assumed, the greater the quality of education received. The government's concern with education may be reflected in the portion of the Gross National Product expended on both public and private educational institutions. It is recognized that none of these indicators measure the equality of distribution of the educational system within the countries. Schools may be located predominately in urban areas and not available for a large portion of the rural populace. Information on the distribution is unfortunately not available. Such information would provide a more meaningful evaluation and would further the insights of this study.

The proportion of the total population over fifteen years of age which is literate varies considerably among the three categories of countries. The "non-involved" countries in 1968 had attained the highest level of literacy among their populace (85.6%), followed relatively closely by the "powerful" countries (72%). A significant drop appears from these two categories to the "dominant" countries, in which less than fifty percent of those fifteen years old and older are literate (see TABLE III-11). Between the period from 1950 to 1968, the "powerful" countries showed the largest improvement in raising the level of literacy, followed by the "non-involved" and then the "dominant" group. The latter two categories achieved about the same

TABLE III-11

Education

Category/Country	Percent of Literate Population over the age of 15 yrs. about 1950(1)	about 1960(2)	1968(1)	Percent of Population 5-14 yrs old enrolled in primary education about 1950(1)	1968(1)
POLITICALLY DOMINANT					
Dominican Republic	43.0	66.6	53.1	40.0	55.7
El Salvador	39.0	53.9	50.8	31.0	52.3
Guatemala	29.0	44.1	37.9	22.0	35.7
Haiti	11.0	12.7	18.8	22.0	14.8
Honduras	35.0	48.7	47.0	22.0	55.5
Nicaragua	38.8	50.5	49.8	28.0	42.4
Paraguay	66.0	(3)	69.0	51.0	60.2
Average	37.4	46.1	46.6	30.9	45.2
POLITICALLY POWERFUL					
Argentina	86.0	92.0	91.4	66.0	73.1
Bolivia	32.0	48.4	39.8	24.0	54.7
Brazil	49.0	62.7	69.6	28.0	45.7
Colombia	57.0	74.8	72.9	28.0	45.5
Ecuador	56.0	68.4	72.0	41.0	55.5
Panama	70.0	76.1	78.3	54.0	60.6
Peru	42.0	74.4	67.0	43.0	68.7
Venezuela	52.0	68.0	85.0	40.0	63.0
Average	55.5	70.1	72.0	40.5	58.6
NON POLITICAL					
Chile	80.0	84.8	89.6	66.0	81.4
Costa Rica	79.0	84.8	85.8	49.0	61.6
Mexico	57.0	70.2	77.5	39.0	61.0
Uruguay	85.0	91.0	89.4	61.0	73.5
Average	75.3	82.7	85.6	53.8	69.4

Source: (1) ECLA, 1972, Table 54, p. 70-71.
(2) Ruddle, op. cit., Table 41, p. 126.
(3) Data not available, not included in average.

rate of improvement. However, it is doubtful that the same meanings can be attached to their nearly equal performances. The "non-involved" countries by 1950 had already reached a relatively high level of literacy, and as upper limits are neared, improvement becomes more difficult; whereas at the opposite extreme of the beginning level of literacy,as were the "dominant" countries, improvement could reasonably be expected to be accomplished more easily.

The percentage of the school aged children enrolled in the primary educational system is highest for the "non-involved" category and lowest for the "dominant" category. The "powerful" category more closely approximates the "non-involved" category, even at a considerable distance behind its level. The rate of increase in enrollment from 1950 to 1968 was the greatest within the "powerful" countries. The other two categories achieved about the same rate, with the "non-involved" countries' performance slightly the greater.[20] During the period from 1961 to 1968 the "powerful" category of countries increased its number of primary school facilities by about 30% (see TABLE III-12). During the same period the "non-involved" and "dominant" countries' increases were about 23% and 14%, respectively. The number of primary school facilities becomes meaningful only when compared with the total number of school-aged children within the various countries. Such a comparison allows one to establish a ratio

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[20]The "non-involved" countries' achievement may be slightly greater if one considers that as higher levels are attained, each improvement becomes more difficult.

TABLE III-12a

Educational Facilities and Expenditures

Category/Country	Primary Educational Establishments 1961-1968 (Public and Private) (1)			Ratio Children 5-14 yrs old per school (2) about	
	1961	1964	1968		1966
POLITICALLY DOMINANT					
Dominican Republic	4703	(4)	4803		234
El Salvador	2571	2944	2828		298
Guatemala	3889	4163	4923		252
Haiti	1616	1909	(4)		552
Honduras	3384	3768	4143		169
Nicaragua	(4)	2185	(4)		249
Paraguay	2317	2605	2809		187
Total	20,665	22,327	23,600	Average	277
POLITICALLY POWERFUL					
Argentina	18,865	19,972	20,933		215
Bolivia	5,866	6,812	7,994		140
Brazil	99,677	124,946	134,909		102
Colombia	20,533	23,611	27,361		210
Ecuador	5,666	6,486	6,534		191
Panama	1,372	1,503	1,519		224
Peru	14,860	17,407	20,588		153
Venezuela	10,734	10,837	10,775		225
Total	176,573	211,574	230,593	Average	183
NON POLITICAL					
Chile	6,833	(5)	7,940		261
Costa Rica	1,691	1,978	2,346		190
Mexico	34,240	37,576	42,783		307
Uruguay	1,910	2,203	(4)		212
Total	44,674	49,146	55,272	Average	242

(1) Source: Ruddle, op cit., Table 47, p. 136.
(2) Source: Ruddle, op cit., Table 51. p. 141. Estimated number of school age children for each country.
(3) Source: World Military Expenditures 1971, Table IX, p. 39.
(4) Data not available; previous years data used in computing totals.
(5) Data not available; average of difference between 1961-68 used to compute 1964 data.

TABLE III-12b

Educational Facilities and Expenditures

Category/Country	Education Expenditures, as Percent of GNP				
	1961	1963	1965	1968	1970
POLITICALLY DOMINANT					
Dominican Republic	1.8(a)	2.5	2.2	2.7	2.8(7)
El Salavador	2.6(c)	2.5	2.7	1.3	1.1
Guatemala	1.9(c)	1.6	2.1	2.1	1.8
Haiti	1.3	1.5(7)	1.5	1.5(8)	1.7(7,8)
Honduras	1.9(a)	2.1	2.9	2.9	3.2(7)
Nicaragua	2.3(8)	2.5(8)	2.6	2.6	
Paraguay	1.3(8)	1.6(8)	1.6(8)	2.2(8)	2.5(7,8)
Average	1.87	2.04	2.21	2.40	2.64
POLITICALLY POWERFUL					
Argentina	2.4	2.9	3.3	3.6(8)	3.1(8)
Bolivia	2.9(8)	2.7(8)	3.8	3.6(8)	3.5(8)
Brazil	0.7(a,8)	0.6	1.1	0.9(8)	0.9(8)
Colombia	2.9(b)	2.7	2.1	3.1(8)	3.1(8)
Ecuador	1.8(8)	2.5(8)	3.0	4.0	4.3(7)
Panama	4.0	4.0	4.1	4.7	4.9(8)
Peru	3.1(a)	3.4	5.2	4.3	4.3(8)
Venezuela	1.8	3.8(8)	4.0	4.1	4.5(8)
Average	2.45	2.82	3.32	3.54	3.58
NON POLITICAL					
Chile	4.7	3.5	3.6	4.6	5.8
Costa Rica	4.1(c)	3.7	4.0	4.8	5.2
Mexico	1.5(8)	1.9(8)	2.3(8)	2.6	2.5(7,8)
Uruguay	2.9(a)	2.3	3.6	3.2	4.7
Average	3.30	2.85	3.38	3.80	4.55

In addition to notes Table III-12a.
(6) Not used
(7) Estimate of GNP, ACDA (Arms Control and Disarmament Agency) estimate used.
(8) Estimate of Public Education Expenditures, ACDA estimate used.
(a) National (federal government) expenditures only.
(b) Does not include local level capital expenditures.
(c) National Ministry of Education expenditures only.

of the number of students per school facility. A ratio, based upon the number of children between the ages of 5 and 14 years at about 1966, was computed for each country; the average for each category could then be compared.[21] The ratio for the "powerful" countries is approximately 183 students per school, which is the lowest of all three categories. The number of students per school facility (see TABLE III-12) in the "dominant" countries is nearly 50% greater than that of the "powerful" countries, with 277 students. The "non-involved" countries have, on the average, slightly over 25% more students per school (242) than the "powerful" countries.[22] The smaller the number of students per school, it is assumed, the higher the quality of education, since more individual attention can be given to each student. McGranahan, et.al. (1972: 65-79), found that the teacher-pupil ratio had little correlation with development. However, they were not concerned with attempting to evaluate the "quality" of education itself. Whether the small number of students per facility is a meaningful indicator of quality remains

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[21]The disparity of time between when the school age population was estimated and when the number of educational establishments was estimated will not materially effect the results. The increase in school establishments was large for each category, while the increase in school age population would be relatively constant.

[22]A basic assumption is made that both schools and children are distributed so as to allow the maximum utilization of the facilities. It is highly doubtful that such an assumption is true; however, it must be made in order to use the limited data and to make an evaluation of the educational facilites.

highly debatable. However, the fact remains that the number of students per facility is a reflection of the concern held by the countries for improving their educational levels, which most studies have considered to be an important element in the developmental and modernization processes (Meier, 1965: 261-372).

The proportion of the gross national product expended on education is also indicative of the emphasis placed upon education by the various categories of countries. The "non-involved" and "powerful" countries devoted, on the average during the 1960's, a significantly larger portion of their GNP to education, 3.5% and 3.2%, respectively; whereas the "dominant" countries devoted just slightly over 2% (2.3%). In absolute dollar values, the difference between the first two categories and the "dominant" would be even more significant.[23] All of these categories have continuously increased the proportion of the GNP expended on education throughout the period (see TABLE III-12). The emphasis on education in both the "powerful" and "non-involved," as indicated by the large increase in the portion of GNP expended on education, has been greater than that in the "dominant" countries. The difference in emphasis between the "powerful" and "non-involved" countries is quite small.

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[23]The average GNP, during the period, of the "powerful" and "non-involved" countries is considerably higher than that of the "dominant" countries.

Housing

The United Nations Council on Measurements of the Standards and Levels of Living considered the adequacy of housing and sanitary facilities to be key indicators. The Interim Guide established as priority indicators: the percentage of population living in 'dwellings' (permanent dwellings as distinguished from improvised and semi-permanent huts and shacks), the percentage of occupied dwellings with piped water, the percentage of dwellings with toilets, and the percentage of dwellings with three or more persons per room. Data for each of these indicators is not available. However, incomplete data is available for the percentage of dwellings with piped water, the average number of persons per housing unit, and the average number of persons per room[24] (see TABLE III-13). McGranahan, et.al. (1972: 33-80), found the percentage of dwellings with piped water and the average number of persons per room to be correlated with development; however, they only included the average number of persons per room in their general index of development. The reliability of this data is extremely questionable, since it involves value judgements, especially in measuring the percentage of the population living in dwellings. The variations in the definitions of dwellings would cause large distortions in the data from country to country.[25] In addition, the adequacy of the dwellings

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[24]The number of persons per room is recommended as a supplementary indicator of housing conditions. See: U.N., Statistical Indicators of Housing Conditions ST/STAT/Ser. N. 37 (Sales No. 62. XVII. 7) para. 32-37.

[25]See: U.N., Compendium of Social Statistics: 1967: pp. 253-256, for further comments.

TABLE III-13

Housing

Category/Country	Percentage of Dwellings (Total) With Piped Water About		Average Number(a) of Persons per Room About		Average No. of Persons per Household (1) About
	1955	1960	1955	1965	1963
POLITICALLY DOMINANT					
Dominican Republic (1)	5.9	8.1	1.9	1.4	5.0
El Salvador (2)	39.8	26.0	2.2	3.1	(3)
Guatemala (2)	32.5	29.5	(3)	2.1	5.2
Haiti (4)	10.2	(3,b)	(3)	(3)	4.5
Honduras	7.5(2)	12.1(1)	(3)	2.4	5.7
Nicaragua	(3)	12.5(1)	(3)	2.8	6.1
Paraguay	0.8(2)	5.9(1)	(3)	2.6	5.4
Average	16.1	16.9		2.5	5.3
POLITICALLY POWERFUL					
Argentina (2)	46.7	53.1	1.9	1.4	3.7
Bolivia	(3)	(3)	(3)	(3)	(3)
Brazil (2)	15.6(2)	32.8(1)	1.3(4)	1.1	4.8
Colombia (1)	26.0	41.3	1.9	1.9(4)	5.8
Ecuador	(3)	37.5(4)	(3)	2.5	5.1
Panama (2)	44.4	46.2	(3)	2.4	4.7
Peru	(3)	21.1(4)	(3)	2.3(4)	4.9
Venezuela	30.2(1)	67.1(2)	2.1	1.6	5.3
Average	32.6	44.1		1.87	4.9
NON POLITICAL					
Chile (2)	54.5	62.0	1.7	1.4	5.1
Costa Rica (2)	94.5	68.3	1.5	1.1	5.8
Mexico	(3)	32.3(1)	2.9	2.5	5.8
Uruguay	(3)	59.3(1)	(3)	1.5	3.8
Average	74.5	55.5		1.6	5.1

(1) Source: U.N., United Nations Statistical Yearbook 1972, Table 203, p. 754-764.
(2) Source: Ruddle, op cit., Table 37, p. 120.
(3) Data not available, not included in averages.
(4) Source: ECLA, 1972, Table 54, p. 70-71.
(a) Data from UN Statistical Yearbook, 1972 unless otherwise noted.
(b) Previous data used in computing average.

cannot be ascertained from the information available. Therefore, the results and trends which are suggested herein are very questionable. Yet, they provide a basic insight into the existing variations in the living conditions and the progress being made within each category of countries.

Bearing in mind the unreliability of this data, a few generalizations may still be made. The "non-involved" countries have the highest percentage of dwellings with piped water; however, during the period on which data was available, they actually decreased in the proportion of the total number of dwellings with piped water. However, the "powerful" category, though having a smaller percentage of their dwellings with piped water, made a significant increase during the period. The "dominant" countries were relatively stagnant in this area with only a slight improvement recorded during the period. Both the "powerful" and "non-involved" countries are significantly better equipped, in terms of piped water, than the "dominant" countries. Similarly, the "powerful" and "non-involved" countries are superior to the "dominant" category in terms of average number of persons per room. Comparing the "powerful" with the "non-involved" groups, the "non-involved" have, on the average, slightly fewer persons per room, 1.6 as compared to 1.9. The average number of persons per household is nearly the same across the three categories. However, the "powerful" countries seemingly

have the fewest people per household.[26] Beyond these generalizations, little can be said about the housing conditions in Latin America. It is a well known fact that all of the Latin Amercian countries have a large number of 'shanty towns' and slum dwellings. Reliable data on the percentage of the populace within each country living in these sub-standard housing areas is not available. An assessment of a country's progress towards modernization should include its ability to eliminate such living conditions.[27]

Communications

The area designated as communications deals primarily with the ability of the government to communicate with the populace. Newspapers and radios serve the function of recording the news of current events in public affairs, national and international affairs, politics, etc. These are major means by which a government communicates its plans, policies, and decisions to the general populace. In addition, the communication systems have an important function in the socialization process (UN, 1970: 152). The broadening of these communications media increases the awareness in the populace of the trends and policies of its respective country. Radios overcome the barriers associated with written communications, reaching that strata which either has had no access to newspapers or is unable to read printed material. An increase in the communications systems

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[26]Note the wide variations in dates of available statistics, which may seriously distort this finding.

[27]The Interim Guide made a recommendation that such statistical data be collected.

is not without some consequences, such as increased awareness of and demand for goods and services, and awareness of the breadth of inequalities (UN, 1970: 105-111). Lerner (1963: 335) noted the frustrations brought about within a society as communication facilities are improved. He argues that improved communications become the source of raised aspirations, and of the so-called "rising expectations."[28]

McGranahan, et.al. (1972: 33-80), found that newspaper circulation and the availability of radios were highly correlated with development. In addition to these indicators, they added the number of telephones per hundred inhabitants, which also correlated highly with development. All three were included in their general index of development. These three indicators are applied in TABLE III-14. The use of telephones per hundred inhabitants is considered the least useful indicator, since it is an item found primarily in the urban centers among the middle class. Thus, an increase in the number of telephones would, to some extent, be associated with improvements for the already 'better-off' portion of the populace rather than for the entire populace; whereas increasing the number of radios and newspapers per thousand would be indicative of improved communications for the whole of the population. Of the importance of the radio, a recent United Nations report stated, "Transistor

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[28]Also see: Lucian W. Pye, Communications and Political Development (Princeton, N.J.: Princeton University Press, 1963). Seymour M. Lipset, Political Man (Garden City, New York: Doubleday 1960); and Phillips Cutright, "National Political Development" American Sociological Review, Vol. 28, No. 2, (April 1963), pp. 253-264.

TABLE III-14a

Communications

Category/Country	Newspaper Circulation per 1000 Inhabitants 1950(1)	1967(2)	1971(3)	Radios Per(4) 1000 Inhabitants 1960	1970
POLITICALLY DOMINANT					
Dominican Republic	24	26	36	34	38
El Salvador	33	51	74	89	85
Guatemala	27	27	16	55	115
Haiti	4	6	6(a)	5	17
Honduras	18	17	42	68	57
Nicaragua	51	51	51(a)	53	55
Paraguay	12	38	40	83	71
Average	23.6	30.9	37.9	55.3	62.6
POLITICALLY POWERFUL					
Argentina	154	169	179	167	370
Bolivia	23	23	42	73	288
Brazil	51	31	36(b)	66	60
Colombia	59	53	109	139	105
Ecuador	50	44	41	41	279
Panama	111	81	106	159	157
Peru	40	100(b)	118	101	134
Venezuela	71	31(b)	93	186	164
Average	69.9	85.9	90.5	116.5	194.6
NON POLITICAL					
Chile	79	(c)	89	94	143
Costa Rica	88	60	101	66	71
Mexico	48	116	116(a)	95	276
Uruguay	233	185	140(b)	285	346
Average	112.0	120.3	111.5	135	209

(1) Source: UN Report on World Social Situation, 1957, Table pp. 88.
(2) Source: Ruddle, op cit., Table 166, p. 294.
(3) Source: UN Statistical Yearbook 1972, Table 210, p. 826.
(4) Source: UN Statistical Yearbook 1972, Table 213, p. 833.
(a) Latest available data, 1967.
(b) Data for 1969.

TABLE III-14b

Communications

Category/Country	Telephones per 100 Inhabitants(5)(6)						
	1959	1966	1967	1968	1969	1970	1971
POLITICALLY DOMINANT							
Dominican Republic	0.53	0.85	0.90	0.90	1.00	1.20	1.30
El Salvador	0.49	0.65	1.20	1.10	1.00	1.10	1.10
Guatemala	0.30	0.53	0.70	0.70	0.80	0.90	0.80
Haiti	0.10	0.10	0.10	0.10	(c)	(c)	0.10
Honduras	0.32	0.39	0.40	0.50	0.50	0.50	0.70
Nicaragua	0.47	0.68	0.70	1.20	1.40	1.30	1.30
Paraguay	0.52	0.66	0.70	0.90	0.90	1.00	0.80
Average	0.39	0.55	0.67	0.77	0.83	1.00	1.02
POLITICALLY POWERFUL							
Argentina	5.91	6.50	6.70	6.80	7.00	7.50	7.70
Bolivia	0.54	0.60	0.80	0.70	0.80	0.90	0.90
Brazil	1.33	1.58	1.70	1.70	1.90	2.20	2.40
Colombia	1.60	2.30	3.80	4.10	2.70	3.80	3.90
Ecuador	0.56	0.80	0.80	1.50	1.60	2.10	2.40
Panama	2.40	4.10	4.30	4.20	4.30	5.50	5.50
Peru	0.90	1.10	1.20	1.30	1.30	1.70	1.70
Venezuela	2.00	3.00	3.40	3.50	3.70	3.90	4.20
Average	1.91	2.50	2.84	2.98	2.91	3.45	3.59
NON POLITICAL							
Chile	2.16	2.95	3.20	3.30	3.50	3.70	4.00
Costa Rica	1.00	1.40	1.70	3.00	3.30	3.50	3.70
Mexico	1.20	1.90	2.30	2.50	2.70	3.10	3.40
Uruguay	5.34	6.73	7.30	7.30	7.30	7.40	8.00
Average	2.43	3.25	3.63	4.05	4.20	4.43	4.78

(5) Source: Ruddle, op cit., Table 164, p. 292 for 1959-1966.
(6) Source: UN Statistical Yearbook 1972, Table 160, p. 505-508 for 1967-1971.
(c) Not available, not included in averages.

radios constitute the most important exception to the generalization that the production of durable and semi-durable consumer goods has been directed towards the urban upper-income market. In fact, the high priority given to them by low-income families in laying out their scanty resources resembles the priority given to the automobile by upper-income families. At the lower level, the new priority might even depress levels of food consumption" (UN, 1970: 112). The number of radios per 1000 population as of 1970 was about 200 in both the "powerful" and "non-involved" countries, compared to only 63 per 1000 population in the "dominant" countries. During the past decade the "powerful" and "non-involved" countries experienced a large increase in the number of radios per thousand, increasing 67% and 55%, respectively. Apparently, neither of these two categories of countries is attempting to prohibit the news from reaching most of their populace, but in the "dominant" countries it appears as though the desire to incorporate the general populace into the communications network is limited, as shown in a mere 13% increase during the past decade. However, this generalization is not as evident when viewing the increase in newspaper circulation during the past two decades. Even though the "non-involved" countries have the highest circulation of newspapers per thousand inhabitants, they have actually decreased the availability of newspapers during the past decade. The "powerful" countries, nearly equalling the "non-involved" in total circulation as of 1971, have continuously expanded their circulation during the past 20 years, increasing the

number of newspapers available per thousand population by over 20. The "dominant" countries, though far below the other two categories on availability of newspapers, have recorded an increase in that area from 1950 to 1971. Since literacy is required for understanding written communications, newspapers are for a somewhat select group, especially in the "dominant" countries where less than fifty percent of the population over the age of fifteen are literate.[29] Therefore, the variations in the circulation of newspapers may not be as important as the increase in the availability of radios. Comparing only the "non-involved" and "powerful" countries, the latter has achieved the greater improvement in both radio and newspaper distribution. As a single indicator, this finding tends to dispute the generalization that the militaries' participation is one which denies the lower strata the privelege of participating in the political system, allowing that increased distribution of the news implies a willingness to advance the awareness of the entire population to the trends and policies of the respective governments. According to Russett, et.al. (1964: 105), a high level of communications development represents the capability of a nation and a government. "Communications provide governments with the ability to mobilize and control its populace. . . . Radio, newspaper, and other media. . . may provide the means whereby the existence of common goals and values are recognized or created; equally they may point up underlying conflicts and inconsistencies" (Ibid.).

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[29]Refer to TABLE III-11 in this study.

Russett's comments on communications did not include consideration of the distribution of telephones, which, as already suggested, is considered a poor indicator. Taylor, et. al. (1972: 208), includes telephones as an indicator of the "evolution of technical means for transmitting personal or business messages as well as the growth of mass media." Its inclusion as an indicator in this study is based upon its high correlation with overall development. However, the real beneficiaries of the telephone are businessmen, bankers, and governmental officials rather than the general populace. The "non-involved" and "powerful" countries are both significantly better-endowed with telephones than the "dominant" countries. Since 1959, the increase in the actual number of telephones per 100 inhabitants was greatest in the "non-involved" and least in the "dominant" category. The "powerful" category was nearly midway between the two extremes. Increases in the number of telephones per hundred population, during the period from 1959 to 1971, for each category were "dominant," .631; "powerful," 1.68; and "non-involved," 2.35.

General Social

The last group of indicators within the social development area are classified under the heading, of "general." The first two indicators under this classification are oriented toward measuring the consumption of goods and services. The change in

the level of per capita consumption during two time periods gives a "general" indication of the overall improvement of the economy and of the general level of living. Increasing the level of consumption, as indicated by the number of dollars spent per capita, suggests that a greater amount of goods has become available to the populace, which ultimately has the effect of improving its standard of living. By using constant prices, the impact of inflation is largely eliminated. The actual dollar increase on per capita consumption was greatest within the "non-involved" and "powerful" countries, each raising the dollar value of consumption by about $67. Within the "dominant" category the increase was less than $45 during the same period (see TABLE III-15). Due to the variation in prices of consumer goods which exists between countries' statements concerning the actual amount of consumer goods available within each category cannot be determined with any degree of reliability. Similarly, the difference during the two time periods does not necessarily mean that the groups enjoyed the same difference of real improvement in the availability of consumer goods.[30]

Though inflation was controlled for in the analysis of consumer goods above, it is a problem which faces both the more developed

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[30]For example, if bread in the "powerful" and "non-involved" countries cost 50 cents per loaf but only 25 cents per loaf in the "dominant" countries, in terms of bread the increase of $45 in the "dominant" countries would have more purchasing power than the same increase in the other two groups.

TABLE III-15

Consumption and Inflation

Category/Country	Per Capita Consumption ($ at 1960 Prices) (1)			Inflation, changes in Consumer prices from (2) 1960 to 1969 (Percentages)
	1954-59	1967-69	Variation	
POLITICALLY DOMINANT				
Dominican Republic	161.0	200.0	24.2	1.8
El Salvador	208.4	256.3	23.0	0.4
Guatemala	231.7	283.4	22.3	0.7
Haiti	93.5	93.4	-0.1	2.8
Honduras	164.5	197.3	19.9	2.5
Nicaragua	211.4	295.4	39.7	1.9
Paraguay	(a)	235.1		3.7
Average	178.4	222.9	21.48	1.98
POLITICALLY POWERFUL				
Argentina	562.2	676.5	20.3	22.2
Bolivia	139.1	152.2	9.4	5.6
Brazil	183.4	258.8	41.1	47.2
Colombia	229.9	292.0	27.0	11.7
Ecuador	201.5	229.0	13.6	4.2
Panama	302.7	431.1	42.4	1.2
Peru	214.2	297.6	38.9	10.1
Venezuela	344.0	370.9	7.8	0.7
Average	272.1	338.5	25.1	12.86
NON POLITICAL				
Chile	(a)	489.5		26.0
Costa Rica	292.8	401.3	37.1	2.2
Mexico	324.4	470.7	45.1	2.4
Uruguay	591.8	522.9	-11.6	47.1
Average	403.0	471.0	25.2	19.4

(1) Source: ECLA, 1972, Table 54 section 1, p. 70-71.
(2) Source: ECLA, 1972, Table 9 section 6, p. 40-41.
(a) Not available, not included in average.

and less-developed nations in the world. The consequences of inflation in any economy are largely carried by the lower income groups, which in Latin America in general represents the largest portion of the population. Control of inflation is ultimately to the advantage of the majority of the population within any Latin American country. One means of controlling inflation is through governmental actions which fix the prices for consumer goods. There are a great number of reasons a government may select to enact such control. One is to allow the lower income group with their scant resources to purchase more consumer goods; however, the corollary effect is to also allow the same advantage to the higher income groups. Another reason to tightly control prices is to reduce the profit margin of industry, so that new wealth cannot be created. These are only two of many reasons that could be given. The purpose of mentioning these two is neither to argue the advantages or disadvantages of either nor to suggest that price controls are good. Rather, their usefulness here is to suggest that there may be widely different reasons for the implementation of political actions to control inflation.[31] The influence which political decisions have had in controlling the rates of inflation in Latin American countries is not known. However, from TABLE III-15 it is apparent that the rates of inflation during the period from

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[31]See Everett E. Hagen, The Economics of Development (Homewood, Illinois: Richard D. Irwin, Inc., 1968), pp. 325-331 for discussion of the advantages and evils of inflation. Also for specific reference to the Latin American economy, pp. 331-347.

1950 to 1969 are considerably different among the three categories of countries. The "dominant" category experienced the least amount of inflation, with an average annual rate of about 0.2%, while the "powerful" countries' rate was about 2.2% per annum. Hagen (1968: 329) says of inflation,

> ...Within a fairly wide range of each, any rate of inflation is consistent with any rate of growth, is indicated in the post war period by the association of price stability with no growth or slow growth in Burma, Ceylon, and India; of price stability with rapid growth in Pakistan, Thailand, and Japan; of rapid inflation with a zero or low rate of growth in Indonesia and Argentina; and of rapid inflation with moderate or rapid growth in Brazil and Turkey.

In view of the overall growth rates attained by the three categories of countries, the low average rate of inflation in the "dominant" countries is associated with their overall slow rate of growth, and the higher though moderate rates of inflation in the other two categories are associated with those countries' greater rates of growth overall.[32] Johnson (1970: 229) describes a moderate degree of inflation as "the logical concomitant of efficient mobilization." He argues that at such rates inflation serves two purposes, especially in the less-developed countries; first, to redistribute income and, secondly, to relocate labor and resources.

The last indicator in the social development area involves the distribution of scarce resources. In the past it has generally

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[32]Overall annual average growth rates for each category during the period from 1950 to 1970 were "dominant", 4.2%; "powerful," 4.9%; "non-involved," 4.8. See TABLE III-9 in this study.

been believed that the relationship of income distribution to development was twofold:"[a] Income distribution is highly uneven in the early stages of development, to create favorable conditions for a process of self sustaining growth; [b] once this process is under way and higher income levels are reached, distribution becomes less and less uneven" (UN, 1970: 277). However, a more recent concept argues that uneven distribution of income impedes development and has deleterious effects upon the well-being and social and economic integration of the population.[33] Income redistribution in its wide implications, socially, politically, and economically, has come to be one of the major themes around which development policy is organized.

The availability of data which reflects the degrees of inequality within countries is sorely lacking. Data which would enable one to determine inequalities of income distribution is not available; however, data describing land distribution is available and is assumed to be an indirect measure of income distribution. Russett's (1964) and Taylor's (1972) World Handbooks of Political and Social Indicators provide data on the distribution of land in Latin America, using the Gini Index of measurement. A large portion of Taylor's data is extracted from Russett's earlier work; however, when newer information was available, Taylor updated the Gini Index. TABLE III-16

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[33]See: U.N., "The Process of Industrial Development in LA.," UN Pub. Sales No.: 66. II. G. 4.) Also U.N., "Income Distribution in L.A.," UN Pub. E/CN 12/863, 1971, pp. 1-8.

TABLE III-16

Land Distribution

Category/Country	Gini Index (1) 1950	Gini Index (2) 1960	Wien's Index (3) 1963	Ratio of % of Total Landowners to the % of Total Arable Land Held, in Size of Holdings by Hectare. (3)(b) 1-10	10-50	50-500	over 500
POLITICALLY DOMINANT							
Dominican Republic	0.795	0.803	35				
El Salvador	(a)	0.860	67				
Guatemala	0.828	0.827	35				
Haiti	(a)	(a)	16				
Honduras	(a)	0.757	41				
Nicaragua	0.757	0.801	67				
Paraguay	(a)	(a)	35				
Average		0.810	42	79.32 / 19.30	13.3 / 23.7	2.3 / 19.0	0.42 / 30.70
POLITICALLY POWERFUL							
Argentina	0.863	0.867	54				
Bolivia	(a)	0.938	41				
Brazil	0.837	0.845	67				
Colombia	0.849	0.864	67				
Ecuador	(a)	0.864	67				
Panama	(a)	0.737	35				
Peru	0.875	0.933	67				
Venezuela	(a)	0.909	67				
Average		0.857	55	64.20 / 5.90	21.6 / 10.8	4.3 / 12.5	3.8 / 70.8
NON POLITICAL							
Chile	(a)	0.938	54				
Costa Rica	(a)	0.892	36				
Mexico	(a)	0.694	36				
Uruguay	0.817	0.826	60				
Average		0.838	47	54.2 / 2.1	22.5 / 10.9	8.1 / 8.6	4.4 / 68.1

(1) Source: Russet, et.al., World Handbook of Political and Social Indicators, (New Haven, Conn.; Yale University Press, 1964), Table 69, p. 237-240.
(2) Source: C. L. Taylor and M. C. Hudson, op cit., 1972, Table 4.14, p. 267-270.
(3) Source: C. Wien, The Generalization of a Latin America Development Model, Latin American Studies Program Dissertation Series, (Cornell University, Dec. 1971) No. 29, p. 170-172 and 181-197.
(4) Source: Ruddle, op cit., Table 85, p. 188-189.
(a) Not available.
(b) Ratios do not total to 100%, original data does not tabulate to 100%.

provides the Gini Index for land distribution. Where data is available for two time periods, both are noted. Adelman and Morris (1967: 101-104) developed an index based upon "the character of agricultural organization" which actually was used to describe the type of land holding system. Wein (1971: 74-75 and 183-197) converted Adelman's data to an index which reflects the inequality of the distribution of land. The results obtained by Wein show the same general pattern of land distribution as those obtained with the Gini scale (see TABLE III-16). The "powerful" countries have the highest level of inequality of land distribution, with "dominant" countries having the lowest. The range from high to low is extremely narrow, as reflected in both the Gini Index and Wien's measurement. The ratio of the number of holdings by size category to the portion of arable land held demonstrates the differences of inequality which exist among the three categories of countries. In the "dominant" category, 80.5% of the total land holdings between 1 and 50 hectares control about 43% of the available arable land; whereas, in the "powerful" category, 85% of the land holders in this category control only 16% of the land and in the "non-involved" group about 76% of all land holders control about 13% of the land. The "dominant" countries have a more equitable distribution in the smaller size holdings than do the other two groups of countries. In terms of large land holdings the number of large land holders in the "dominant" countries is very small in comparison to the

total number of land holders (less than 0.5%), yet they control over 30% of all the available land. In the other two categories there are a larger number of large land holders, approximately 4% of the total in each group of countries, controlling nearly 70% of the available land. The inequality of land distribution is extremely great in all three country groups; however, as the Gini Index and Wien measurement show, the least amount of inequality exists within the "dominant" countries, while the other two groups have nearly the same degree of inequality. Unfortunately, there is not sufficient data covering two specific time periods which would suggest any general trend developing within the categories. From the limited data available on earlier periods recorded by Russett, it appears as though, in each category, the trend has been towards greater inequality rather than less. The Economic Commission for Latin America recently published a study on The Income Distribution of Latin America. However, due to the lack of significant data, the study compares only eight of the Latin American countries with other, more developed economies.[34] Yet even with the limited data, it is apparent that wide differences occur among the countries. On a coefficient of concentration scale, the countries of Latin America

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[34] See: U.N., Income Distribution in Latin America, UN Pub. E/CN. 12/663, Sales No.: E. 71 II. G.2. The eight Latin American countries are: Argentina, Brazil, Costa Rica, Columbia, El Salvador, Mexico, Panama, and Venezuela. The more developed economies are those of France, Netherlands, Norway, United Kingdom, and the United States.

ranged from a low of 48 to a high of 57.5. The number of countries falling within each of the categories used herein is so small that it precludes analysis.

Data on the general area of inequality of scarce resources would add significantly to this study. The basis of many of the military interventions in the political process has been verbalized as the rectification of gross inequalities; however, the success or failure of these interventions to accomplish that purpose cannot be assessed.

MILITARY RELATED INDICATORS

The variables included under this heading are used in an attempt to analyze often-cited reasons for considering military intervention to be detrimental to the modernization process. Nordlinger (1970: 1134-1137) argues that military officers have 'corporate interests' which are not compatible with modernization. He further argues that, as a military becomes active in politics, it seeks to influence decisions which are favorable to its own corporate interest, at the expense of other areas within the society. Once the military attains the leadership position within a country, the amount of scarce resources devoted to the military increases, which is unproductive both socially and economically. Finer (1962: 47) also argues that the corporate interest of the military influences the social and economic policies of a country. Another argument which is often voiced against military intervention is what Nordlinger (1970: 1137) has termed

'military values.' These values, he says, are "the normative attachments to order, dignity and hierarchy--with which most officers are strongly imbued, out of which emerges an over-whelming concern for political stability" (Ibid.) Janowitz (1964: 63-67) similarly cites the military ideology of orderliness and general distrust of civilian politicians which creates the overwhelming desire for stability. This effects social and economic development in two ways: (1) reliance on force for the removal of political groups which are probable producers of conflict and competition; (2) resulting changes from government's response to articulated forceful demands, once the precedent of the use of force has been established. Interest groups' demands are expressed in a similar manner with force rather than through normal political procedures. Huntington (1964: 208-219) argues that the continuous threat that direct action(e.g., riots, coups, demonstrations) may be imposed by the militaries encourages the application of direct action techniques by other interest groups as proper and legitimate means of expressing demands. Payne (1965: 271-272) makes a similar argument: that violence becomes the system itself. Thus, military intervention, in its efforts to maintain stability, becomes a source of conflict and violence. A related connotation is the military's wanton use of restraints to eliminate opposition, clearly shown in its frequent restriction of the press. Finally, a possible consequence of intervention is that it creates a sense that voting is useless. If elected officials are frequently

removed from office by the military, the feeling that it has become a wasted effort to vote in presidential elections may emerge.

Cost

Three indicators are used in analyzing the concept of 'corporate interest' (See TABLE III-17). The military expenditures as percent of GNP during the period from 1961 to 1970 were the highest for the "powerful" category of countries (1.94% of GNP). The "dominant" group's portion of the GNP expended was about the same as that of the "powerful" (1.87% of GNP); however, the "non-involved" countries expended a considerably smaller share of their GNP for military hardware (1.28% of GNP). During the period, a steady increase in military expenditures (trend) is noticable in the "powerful" category whereas the other two categories have remained fairly constant throughout the period. Nordlinger (1972: 1135) reports the findings of a Latin American study conducted by Schmitter giving the level of defense expenditures: "[In] countries with a politically non-involved military the mean level of defense expenditures as a proportion of central government expenditures is 9.3%; in countries with an officers corps that has intermittently entered in the political arena the percentage of 14.1; while the figure reaches 18.5% in countries dominated by the military circa 1960."[35] Although these two measurements are slightly different, the countries

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[35]A listing of the countries included in each category was not given; therefore, the countries included in each category for my analysis may differ and account for some of the discrepancies. The time periods covered do not overlap, which also affects the results.

TABLE III-17

Military Expenditures

Category/Country	as percent GNP (1)					Arms Imports	Manpower
	61-62	63-64	65-66	67-68	69-70	(a)(2)	Ratio(b,3)
POLITICALLY DOMINANT							
Dominican Republic	4.1	3.45	3.5	2.8	2.15	12	10.6
El Salvador	1.2	1.25	1.25	1.25	2.05	(g)	3.9
Guatemala	0.85	0.85	1.1	1.1	1.25	(g)	4.0
Haiti	2.4	2.25	2.25	2.2	1.95	(g)	1.9
Honduras	1.45	1.35	1.25	1.25	1.65	(g)	4.6
Nicaragua	1.7	1.66	1.45	1.5	1.55	6	8.7
Paraguay	1.5	2.02	2.9	2.05	1.95	10	19.7
Average(c)	1.89	2.00	1.95	1.73	1.80		7.63
POLITICALLY POWERFUL							
Argentina	2.8	2.25	2.05	2.25	2.2	139	9.3
Bolivia	1.15	1.75	2.4	2.95	2.85	33	7.7
Brazil	1.65	2.50	2.3	2.45	2.7	294	4.5
Colombia	1.7	1.8	1.65	1.65	1.55	85	6.6
Ecuador	2.2	1.9	2.2	1.9	1.5	49	7.2
Panama	0.1	0.2	0.15	0.1	0.15	(g)	4.3
Peru	2.7	3.15	2.8	3.65	3.75	185	8.1
Venezuela	2.35	1.95	2.25	2.2	2.0	75	6.7
Average(d)	1.80	1.95	1.98	2.00	1.97	123	6.8
NON POLITICAL							
Chile	3.2	2.95	2.55	2.1	2.3	122	9.4
Costa Rica	0.0	0.2	0.4	0.2	0.0	0	0
Mexico	0.7	0.7	0.8	0.7	0.7	34	3.2
Uruguay	1.2	1.55	1.45	1.75	2.0	39	9.8
Average (e)	1.28	1.38	1.65	1.19	1.25	65(f)	7.5(f)

(1) Source: U.N., World Military Expenditures, 1971, Table VI, p. 27. Avg. Ea. Yr.
(2) Source: U.S., Congress International Transfer of Conventional Arms, US Arms and Disarmament Agency, An Interim Report to the Congress, 1972.
(3) Source: Taylor, op. cit., Table 2.4, p. 38-41.
(a) During period 1961-71. Expressed in Millions of US $.
(b) Military Manpower Ratio as percent of Working Age Population.
(c) Average yearly expenditures during the decade 1.87.
(d) 1.94
(e) 1.28
(f) Costa Rica not included in average, when Costa Rica is included the average is reduced to 5.6%.
(g) Not available.

which have military intervention within their political systems (the "dominant" and "powerful" categories) have a much higher expenditure on national defense than the "non-involved" countries. During the period from 1961 to 1971, the "powerful" category of countries imported conventional weapons valued at 860 million dollars, or about 123 million for each country, as compared to 195 million dollars for the "non-involved" countries, amounting to about 65 million dollars per country, excluding Costa Rica[36] (See TABLE III-17). This does not necessarily reflect dollar expenditures; yet, it does reflect that there is a significant difference in the emphases on attaining military hardware. Imported military hardware is obtained at some expense by the recipient; however, the exact amount expended is not necessarily reflected in the table. Surprisingly, the military manpower ratio, shown in TABLE III-17, reflects that a larger portion of the working age population in the "dominant" and "non-involved"[37] countries are taken out of what Nordlinger would call the 'economically productive employment areas' and placed into the military than in the "powerful" countries. The smaller proportion for the "powerful" countries is contrary to what most critics have suggested. If Costa Rica, which has no full time active military, is included in the "non-involved" category, that group of countries would have a much smaller portion than the other two categories.

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[36]Data was not available for a representative sample of the "dominant" countries.

[37]Costa Rica is not included in computation of the average, since it has no full time active military force.

Conflict

An unclear relationship exists between conflict and military intervention. Two arguments exist. One view argues that the military has intervened in order to disrupt and eliminate violence and restore stability; the other argues that the use of force accompanying the military's intervention produces higher levels of violence and conflict. The intent of analyzing conflict herein is not to argue the causual relationship, but to compare those socieites whose respective militaries have intervened in their political processes to those whose militaries have remained non-political. Three variables measuring different levels of conflict are used: number of protest demonstrations, number of riots, and number of armed attacks (See TABLE III-18). A fourth variable, the number of deaths related to domestic violence, is indicative of the wanton use of force by both the government and protesters as institutionalized methods of voicing grievances and demands (See TABLE III-19). Finally, a closely related variable, the number of governmental sanctions, is included in TABLE III-18, suggesting the various amounts of pressure applied by the three categories of countries in their effort to suppress threats to the existing government.

The number of protest demonstrations is highest within the "powerful" category, each country averaging about 2.5 demonstrations

TABLE III-18

Conflict

Category/Country	No. Protest Demonstrations		No. Riots		No. Armed Attacks		No. Governmental Sanctions	
	1950 to 1959	1960 to 1967	1950 to 1959	1960 to 1967	1950 to 1959	1960 to 1967	1950 to 1959	1960 to 1967
POLITICALLY DOMINANT								
Dominican Republic	0	61	0	121	15	242	85	218
El Salvador	0	1	1	1	1	4	24	17
Guatemala	26	11	22	17	64	153	171	68
Haiti	16	5	40	4	65	76	128	63
Honduras	3	1	5	0	42	11	46	15
Nicaragua	0	3	18	9	14	29	39	20
Paraguay	11	1	8	11	51	15	50	21
Average	8	11.9	13.4	23.3	36	75.7	70.4	74.6
POLITICALLY POWERFUL								
Argentina	48	51	48	50	202	186	816	209
Bolivia	10	21	37	58	83	143	119	83
Brazil	11	17	59	36	59	58	153	170
Colombia	25	28	45	80	274	278	170	42
Ecuador	8	21	29	44	39	38	63	53
Panama	17	18	47	51	28	28	107	30
Peru	13	14	22	19	25	122	96	51
Venezuela	11	29	79	91	71	438	162	268
Average	18	24.9	45.8	53.6	97.6	161.4	210.8	113.2
NON POLITICAL								
Chile	16	15	35	29	18	23	108	42
Costa Rica	0	0	2	6	32	2	51	7
Mexico	10	22	79	52	40	42	81	38
Uruguay	2	11	3	14	1	4	16	26
Average	7	12	29.8	25.2	22.8	17.8	64	28.2

Source: Taylor, op. cit., Tables 3.1, p. 88-93; 3.2, p. 94-101; 3.3, p. 102-109; 3.5, p. 116-123.

See footnotes 38, 39, 40, and 41 for definitions of terms.

per year from 1950 to 1967.[38] The other two categories averaged only one such demonstration per year. Although the time periods are not equal, the number of demonstrations from 1960 to 1967 is higher for each category than during the entire decade of the 1950's. Following the same general trend, the "powerful" countries have had nearly twice as many riots during the time span as have the other two categories.[39] Surprisingly, the number of riots is lowest among the "dominant" countries, each having an average of two riots per year as compared to almost three in the "non-involved" countries. However, when comparing the number of riots in the sixties with those which occurred during the fifties, only the "non-involved" countries have recorded fewer incidents. The other two categories have, in only seven years, exceeded the number recorded during all of the fifties. The number of armed attacks during the time period follows the trend of the other two indicators, in one respect. The "powerful"

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[38] Protest Demonstration is a nonviolent gathering of people organized for the announced purpose of protesting against a regime, government, or one or more of its leaders; or against its ideology, policy, intended policy, or lack of policy, or against its previous action or intended action. Taylor, op. cit., pp. 64-66.

[39] Riot is a violent demonstration or disturbance involving a large number of people. Violent implies the use of physical force, which is usually evidenced by the destruction of property, the wounding or killing of people by the authorities, the use of riot control equipment such as clubs, gas, guns, or water cannons, and by the rioters' use of various weapons. . . . characterized by spontaneity and by tumultuous group behavior. Taylor, op. cit. p. 67.

countries recorded a much higher occurrence of such activities.[40] Between the other two categories, the number of armed attacks is much higher in the "dominant" category, whereas with the other two indicators the "dominant" countries were lower than or equal to the "non-involved" category. The "non-involved" countries have had considerably fewer armed attacks than the other two categories. Comparing the ten years of the fifties with the first seven years of the sixties, both the "dominant" and "powerful" countries, during the later period, have nearly doubled the number which occurred during the fifties. Yet, the "non-involved" countries have thus far recorded a fewer number of such attacks.

The low frequency of violent conflict events within the "non-involved" countries suggests that adequate peaceful political mechanisms are available through which interest groups' demands may be expressed to the governmental officials. The effectiveness of the institutionalized peaceful political process is further indicated by the relatively smaller number of governmental sanctions imposed, especially during the sixties.[41] (See TABLE III-18). In neither the

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[40] Armed Attacks are acts of violent political conflict carried out by (or on behalf of) an organized group with the objective of weakening or destroying the power exercised by another organized group. . . . characterized by bloodshed, physical struggle, or the destruction of property...encompasses all organized political violence in a political system. . . and excludes all non-violent protests and incidents of turmoil (riots). . . . Armed Attacks are organized by political groups for the purpose of displacing an established regime or gain for themselves substantial power or authority. Taylor, op. cit. 67-68.

[41] Governmental Sanctions are actions taken by the authorities to neutralize, suppress, or eliminate a perceived threat to the security of the government, the regime, or the state itself. Includes three types of actions: 1) censorship, 2) restrictions on political participation, and 3) espionage. Taylor, op. cit., p. 69-70.

"dominant" nor "powerful" countries are demonstrations or riots used as the predominant method of expressing demands. Rather, reliance is placed upon the application of the most extreme use of violence, armed attacks. The ineffectiveness of their political processes is further suggested by the governments' greater dependence upon the use of sanctions, to eliminate or suppress threats to the existing systems. However, the "powerful" countries recently appear to be placing less dependency upon sanctions, while the "dominant" countries have increased their reliance upon this technique to reduce threats and demands.

The wanton application of violence and physical force within the "powerful" countries in contrast to the other two categories, is reflected by the significantly larger number of deaths directly attributed to domestic violence.[42] (See TABLE III-19). The use of such force is interrelated with the militaries' interventions in the political process. Nearly seventy percent of all the deaths are accounted for during the years in which coups successfully toppled existing regimes. Within the "dominant" category fewer deaths have been attributed to domestic violence; however, their reliance upon force and violence remains significantly greater than in the

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[42]Deaths from Political Violence--abody count--deaths which occurred in conjunction with armed attacks, but also in conjunction with riots and demonstrations. Does not include foreigners, persons wounded, assassination victims, political executions, deaths in enemy prisons, deaths in formal warfare, or deaths in border incidents with other countries. Taylor, op. cit., p. 68-69.

TABLE III-19

Deaths Due to Domestic Violence

Category/Country	Total number of deaths for each two year period								
	50/51	52/53	54/55	56/57	58/59	60/61	62/63	64/65	66/67
POLITICALLY DOMINANT									
Dominican Republic	8	0	0	100	145	120	86	4001[a]	43
El Salvador	0	0	1	0	0	11	0	0	0
Guatemala	30	22	156	11	0	5	45	24	75
Haiti	0	0	0	61	25	4	62	70	4
Honduras	0	0	1	47	72	16	13	1	0
Nicaragua	0	0	13	37	236	20	0	0	151
Paraguay	0	26	0	0	157	17	3	1	0
Total	38	48	171	256	635	193	209	4097	273
Total	1950 to 1959; 1148					1960 to 1967; 4772			
POLITICALLY POWERFUL									
Argentina	5	19	6606[b]	42	0	22	75[c]	16	2
Bolivia	16	3040[d]	3	8	112	296	23	441[e]	61
Brazil	26	18	14[f]	6	2	22	8	1	22
Colombia	183	872[g]	765[h]	1654[i]	383	280	277	806[j]	72
Ecuador	2	6	0	6	59	43	3	4	6
Panama	31	0	3	0	14	0	0	45	2
Peru	292	0	1	7	5	8	17	530[k]	10
Venezuela	12	82	2	30	710	62	682[l]	62	31
Total	567	4037	7394	1753	1285	733	1085	1905	206
Total	1950 to 1959: 15,037					1960 to 1967: 3929			
NON POLITICAL									
Chile	1	2	0	40	0	3	5	0	10
Costa Rica	0	0	57	0	0	1	0	0	0
Mexico	25	48	90	3	24	131	20	44	61
Uruguay	0	0	0	0	0	1	0	0	0
Total	26	50	147	43	24	136	25	44	71
Total	1950 to 1959: 290					1960 to 1967: 276			

Source: Taylor, op. cit., Table 3.4, p. 110-115.
(a) Dominican Republic conflict; 4000 deaths occurred in 1965.
(b) 6600 deaths occurred in 1955, coup occurred September 1955.
(c) March 1962 coup.
(d) 3000 deaths occurred in 1952, coup occurred in April 1952.
(e) 322 deaths in 1964; coup in November 1964.
(f) Coup 1955.
(g) 833 deaths 1952.
(h) 714 deaths 1955, military government.
(i) 1500 deaths in 1956, military government.
(j) 740 deaths in 1964. (k) 345 deaths in 1964. (l) 620 deaths in 1962.
Reference to dates of coups, extracted from: Statistical Abstract of Latin America 1968, Latin American Center, University of California, Table 148, pp. 140-162.

"non-involved" countries. The number of deaths, within the "non-involved" countries, related to domestic violence are less than 1/10 of the number of such deaths in the "dominant" countries, and are but a small fraction (.03%) of the number occurring within the "powerful" countries.

Voting Behavior

The voting behavior of the populace within each category of countries was selected as an indicator suggesting the degree of participation in the electoral process. Yet, the mere participation, reflected by voter turnout, does not necessarily suggest a willingness upon the part of the voter to participate in the electoral proceedings nor does it mean that they necessarily believe they can influence the selective process. A high turnout of voters could be attributed to the use of coercion or to the giving out of rewards by the government. (Taylor, 1972: 22-24). The three categories of countries have had about the same level of voter participation during the past two decades, as shown in TABLE III-20. The degree of competition and freedom of elections has only a slight, if any, influence upon voter turn out.[43] During the sixties it is suggested, as shown

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[43] Free Election: "An independent judiciary to interpret electoral laws;. . .an honest, competent, non-partisan administration to run elections;. . .a developed system of political parties, well enough organized to put their policies, traditions and teams of candidates before the electors as alternatives between which to choose;. . .a general acceptance throughout the political community of certain rather vague rules of the game, which limit the struggle for power because of some unspoken sentiment that if the rules are not observed more or less faithfully the game itself will disappear amid the wreckage of the whole system." See W.J.M. Mac Kenzie, Free Elections (London: George Allen and Unwin, 1958), p. 14.

TABLE III-20

Voting Patterns and Competitiveness of Elections

Category	Percent of total population voting in Presidential elections.[1]			Competitiveness and free elections.[2]
	1946-50	1951-59	1960-68	
Politically Dominant	20.03	26.56	26.67	2.33
Politically Powerful	13.40	26.46	29.81	1.63
Non-Political	13.08	23.38	32.39	1.00

[1]Paul C. Roberts (ed.), Statistical Abstract of Latin America, 1968 Latin American Center, University of California, Los Angeles, Table 50, p. 18, December 1969.

[2]Constructed from Table 28, p. 54-56 in Taylor, et.al., op. cit. Each country was given a value of A through C (A=competitive and reasonably free; B=displaying significant deviations from the competitive free norms; C=displaying extreme deviation from the competitive and free norms). These scores were transformed to a numerical index, 1=A, 2=B, 3=C and averaged for each category.

in TABLE III-20, that the greater the freedom and competitiveness of elections, the larger the proportion of the populace voting. However, the variable age structures of the countries is not considered. The lower percentage noted in the "dominant" category could be attributed to the proportionally small percentage of their total population which is of voting age. Considering the variations in life expectancies of the three categories, as discussed earlier, the differences noted in voter participation are not considered significant. The effects of competition and freedom of elections on voter turnout cannot be adjudged. The only conclusion which may be drawn is that the level of competitiveness and freedom of elections is greatest among those countries in which the militaries are non-political. The greater the participation by the militaries in the political system, the less competitive and free elections become.

CHAPTER IV

DICHOTOMIZATION AND REEVALUATION OF THE POLITICALLY POWERFUL COUNTRIES

The analysis of the data presented in the preceeding chapter reveals that the three categories of countries are not representative homogeneous groups. Considering any one variable, a considerable amount of variation within each category of countries may be discerned. However, the amount of variance is most pronounced within the category designated politically "powerful;" whereas, the other two categories, though not perfect, are more representative homogeneous groups.

This noted discrepancy suggests the need for a critical re-evaluation of the feasibility of classifying countries into distinct categories, as done in this study. Spencer's (1897) early use of typologies in classifying societies as either 'militant' or 'industrial' was used to represent two polar positions on an imaginary continuum on which all societies could be classified, falling between these two extremities. The concept of a continuum is suggested in this study by the existance of wide variations, especially with the "powerful" category.

Role of the Military at Different Stages of Development

Without repeating all of the theoretical considerations argued in CHAPTER I, a brief summarization of the characteristics of militaries in different types of societies would be helpful in constructing a continuum which may provide a more realistic categori-

zation of the countries and eliminate the large variances noted within the "powerful" group. Huntington's major premise, as argued in CHAPTER I, is that the military's intervention into politics varies with the level of praetorianism within a society. Huntington's (1968: 197-198) two polar societies, are at the one end, the oligarchical society in which the political involvement centers around a small number of personal and family cliques, and at the other extreme, are the politically institutionalized societies in which interest groups are assimilated into the political system. The role of the military in the oligarchical society is primarily to maintain the status quo and the traditional elite; whereas, in the institutionalized society, the military's role shifts from domestic interest to external interest, foreign affairs and national defense. The military of any society should never be considered truly non-political, because in a sense they are always an important component of the decision-making process. In the oligarchical society the military functions to maintain the traditional elite and the status quo. Thus, it dominates the internal political process of the country. At the opposite extreme, the military functions as an advisor and counselor in decisions regarding foreign affairs and national defense, thus limiting its influence to decisions involving primarily external political affairs.

Societies move from the oligarchical position to the fully institutionalized political system through a series of stages, as summarized in TABLE IV-1, which Huntington refers to as radical and

TABLE IV-1

Typologies of Societies at Different Stages of Development

	Praetorian Societies			Politically Institutionalized Societies
	Oligarchial	Radical	Mass	
Social Relationships	Highly stratified with a well defined elite. No significant middle class	Highly Stratified. Middle class is beginning to develop.	Stratified. The middle class is fairly well developed.	May or may not be stratified. No dominant ruling class.
Political system	Centers around small number of personal and family cliques. "Traditional Elite."	New interest groups begin competing with the traditional elite for power.	Many interest groups compete for political power. However, political system is not fully institutionalized.	Interest groups fully assimilated into the political system with fully institutionalized political system.
Militaries Role	Maintenance of the status quo and the traditional elite.	Period of transition wherein portions of the military are willing to shift support to new interest groups, yet a large portion remains loyal to the traditional elite.	Supports interest group which it determines to be in the best interest of the country. Overtly intervenes in the political system when necessary to deny political leadership to interest groups which in the Military's opinion are detrimental to the society.	External interest. Advises in matters pertaining to foreign affairs and national defense. Not involved in politics.
Development Effect	Socio-economic development progresses slowly.	Socio-economic development progresses faster than in the oligarchic society but slower than in either mass or fully institutionalized societies.	Socio-economic development progresses at a rate above that of either the oligarchical or radical society, and at a rate equal to that of fully institutionalized systems.	Socio-economic development rates are about the same as found in the mass praetorian society.
Military Categories	Dominant	Powerful Transition	Powerful Modern	Non-Involved

mass praetorianism.[1] The given position of a country at any particular time is dependent upon the degree in which the society participates in the political process. The development of the middle class within a country leads to the creation of interest groups which compete for political power with the traditional elite. The middle class interest groups assimilate a portion of the lower strata, giving them sufficient numerical strength to eventually culminate in ursurping the power from the traditional elite. As political modernization or awareness spreads throughout the country, the level of societal participation increases and other interest groups develop and become competitive in seeking political power. The new interest groups are oriented to a more active program of socio-economic development, though their programs are not necessarily liberal. However, in comparison to the traditional elites, the new interest groups advocate greater distribution of the resources within the society. To be competitive, these new groups assimilate larger portions of the lower strata into the political process; thus the strength of the group's support serves as its basis for influence in the political system. The increase in the numerical strength is achieved through permitting higher levels of societal participation. The process continues until the majority of the voting age portion of the society becomes politically involved (Huntington, 1968: 198-263).

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[1]Defined in Chapter I, p. 18.

The process of political modernization may take several decades. The military's role is continuously changing as this political modernization process occurs. As a society moves from the oligarchical to radical praetorianism, [Huntington's terms] the military's role changes from that of maintaining the status quo to supporting interest groups which it conceives to be in its own best interest and, supposedly, the best interest of the country (see TABLE IV-1). If, in the military's opinion, such an interest group is lacking or the wrong interest group achieves political power, it overtly intervenes into the political system and claims the leadership of the country. This process continues until the political institution becomes sufficiently developed and the military no longer has a function in the internal political affairs of a country. The progression from one stage to the next is slow and often characterized by power changing back and forth, e.g., from the traditional elites to the new interest groups. During such a period, the military, traditionally supporting the elites, is confronted with making the decision of whether to continue support for the elites or to transfer its loyalty to the new interest groups. Until such a decision is agreed upon by the military, internal conflict within the military evolves, with some segments supporting the traditional elites while others support the new interest groups with their orientation towards socio-economic development. Entangled in this conflicting role, the military's overall effect upon socio-economic development would seem to be

dualistic, both stimulative and constraining. Thus, during this "transitional" period socio-economic development would proceed at a rate slightly greater than that of those countries in which the military is "dominant," maintaining the status quo. Yet, the rate of development would not be as great as in those countries in which the military is politically powerful and functions as the arbitrator between various competing interest groups, or of those countries in which the military is politically non-involved.

Societal Participation

Huntington's various categories of praetorianism are dependent upon the level of societal participation. In the oligarchical society the level of participation is low. Such a society is characterized as being highly stratified, allowing limited social mobility and lacking any great sense of national unity. In the higher categories of praetorianism, radical and mass, a larger portion of the society is permitted to participate; correspondingly, the degree of stratification is lower, greater social mobility is permitted, and a sense of national unity develops.[2]

In view of these considerations, the level of societal participation may be helpful in explaining the occurrance of the great variances noted, especially within the "powerful" countries. Theoretically, some of those countries classified as having powerful

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[2]All praetorian societies are characterized as being highly stratified and of having low social mobility when compared to more developed nations; however, within the context of the praetorian societies as one moves towards the "mass" stage, the level of stratification is reduced and greater opportunities are available for social mobility.

militaries may be at an early stage of eliminating the traditional elites, while others may already have replaced the traditional elites and now be serving in the role of arbitrator between various interest groups. Thus, the rate of socio-economic development would vary considerably within this simple category designated "powerful." Specifically, if the struggle between the traditional elites and the new interest groups is currently being acted out, the rate of development would be lower than for those countries in which this struggle has been completed. However, those countries in this transitional phase would achieve a rate of development higher than the countries which have been designated "dominant."

Unfortunately, data which reflects the degree of stratification for each Latin American country is not readily available. A recent United Nations' study refers to levels of stratification for different types of Latin American countries, but does not stipulate the level for each country (UN, 1970). Beals (1965) argues that the degree of stratification and social mobility, though similar in many respects, is different between the Latin American countries.[3] However, his analysis does not provide data for each country, but is rather a general study of Latin America. Neither Russett's (1964) nor Taylor's (1972) World Handbook of Social and Political Indicators provide a measure of the degree of stratification within the many countries in which they have systematically collected data. Adelman and Morris (1967) include in their data base the size of the middle class and

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[3]Also, see for general statements on the level of stratification and the degree of social mobility within Latin America in general.

the extent of social mobility. However, their classification is in broad categories rather than specific levels, but is, never-the-less, the most relevant for determining the level of social participation.

Index of Societal Participation

Huntington's (1968) use of the phrase "level of social participation" is not precisely defined, thus the variables which would indicate it are left to the imagination of the reader. Six variables used by Adelman and Morris (1967) in varying degrees suggest the level of societal participation within any given country. They are: (1) Importance of the Indigenous Middle Class (pp. 30-33); (2) Extent of Social Mobility (pp. 33-35); (3) Degree of Modernization of Outlook (pp. 49-51); (4) Degree of National Integration and Sense of National Unity (pp. 54-56); (5) Degree of Competitiveness of Political Parties (pp. 64-66); and (6) the Political Strength of the Traditional Elites (pp. 71-73).[4] Countries having high levels of societal participation, it is assumed, would have the following characteristics: an important middle class, high rates of social mobility, a modern outlook, a sense of national unity, a relatively high degree of competitiveness between political parties, and a weakened traditional elite group. Each country in the Adelman and Morris study is assigned a letter disignation for each of the six variables above. These letter

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[4]Explicit definitions of each of these variables may be found on the pages indicated in Adelman and Morris (1967). These variables are sufficiently descriptive in themselves to permit their use without restating precise definitions and arguments for each.

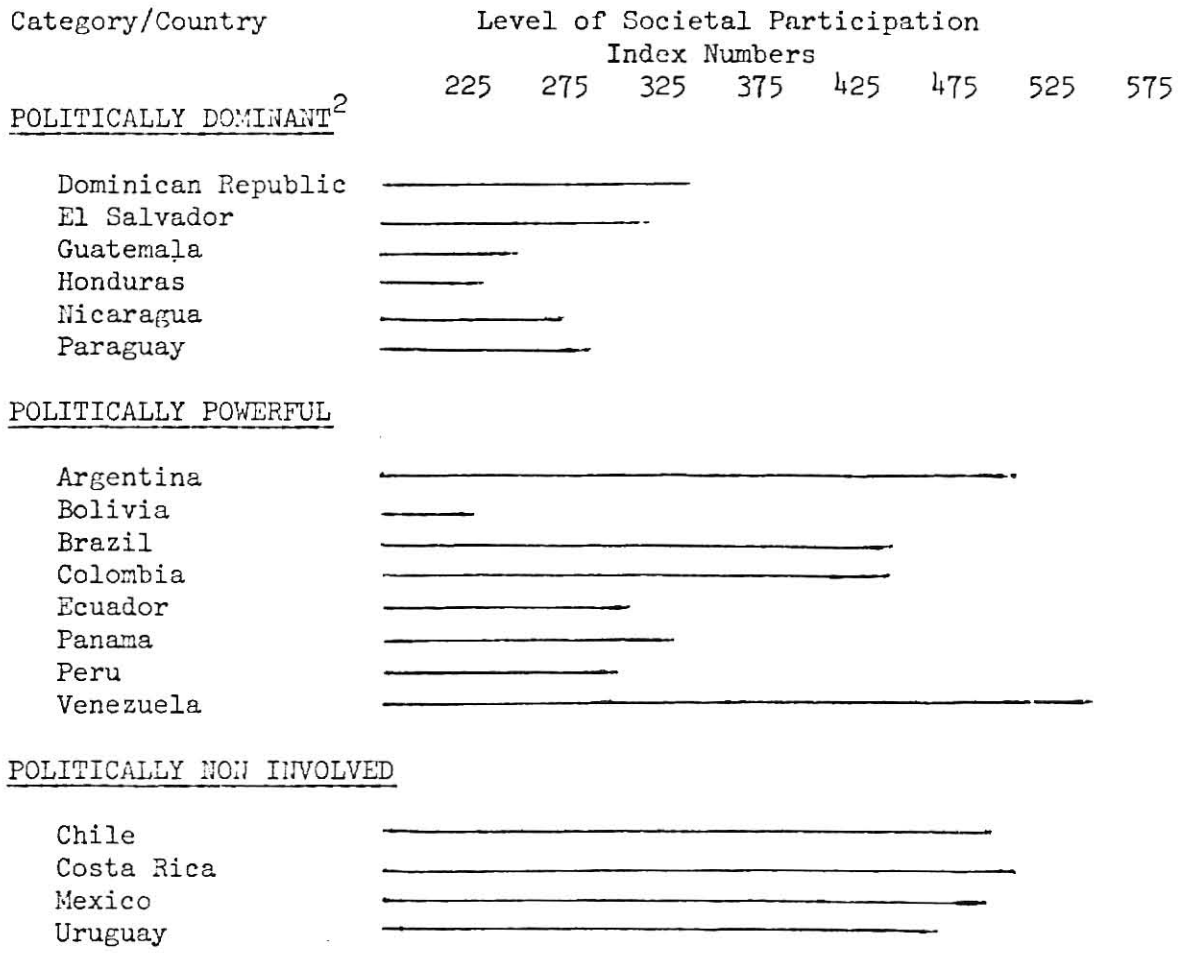
designations are then transformable into a numerical index. The total of the six numerical indexes provides an overall numerical value which represents the level of societal participation for each Latin American country. The level of societal participation is graphically portrayed in FIGURE IV-1. The computations employed in arriving at the numerical indexes used in construing this graph are discussed in APPENDIX C.

Categoriezation of Countries by Level of Societal Participation

Two distinct groupings of countries become readily apparent when using the level of societal participation index. One group of countries, composed of all the "non-involved" countries and four of the "powerful countries (Argentina, Brazil, Colombia, and Venezuela) scored high on this index, as graphically depicted. The remaining "powerful" countries and all of the "dominant" countries scored low on this index, suggesting that these four "powerful" countries are similar to the "dominant" countries in that the traditional elites remain a powerful force and only a relatively small segment of the population is politicized. However, within these four countries the new interest groups which have developed compete with the traditional elites for political power; whereas, in the "dominant" countries there is a lack of a significant threat to the traditional elites. These "powerful" countries in this lower range of societal participation are in a period of transition in which there is an on-going process in which new interest groups are competing with the traditional

FIGURE IV-1

Level of Societal Participation



Source: Extracted from data used by Adelman and Morris: Societies, Politics, and Economic Development, see Appendix C for discussion and reference.

(1) Maxium Score Possible = 598

(2) Haiti is not included, data is not available.

elites for political power but have not yet successfully eliminated or significantly reduced the power enjoyed by the traditional elites. These four countries, Bolivia, Ecuador, Panama, and Peru, should more aptly be described as "powerful-transition;" whereas, the other four "powerful" countries should be described as "powerful-modern."

The dichotomization of the "powerful" category offers a tenative explanation for the wide variations noted within this group in the preceding chapter. Similarly, the range of the societal level index assigned to each country within the "dominant" and "non-involved" countries suggests an explanation for the variance within each of the categories in the preceding chapter. For example, a "dominant" country, such as Honduras, with an extremely low score (247) would have a slower rate of socio-economic development than a country such as the Dominican Republic, which comparatively, has a much higher societal participation (349). Yet both countries remain classified as "dominant," since the respective roles of the military are the same, support of the traditional elite. However, the Dominican Republic may be nearing the time when effective interest groups will begin to compete with the elites, and then the military's role may shift and the country would resemble the "powerful-transition" countries.

A re-evaluation of the "powerful" countries, as dichotomized above, will serve to substantiate or refute this theoretical explantion for the variances within each category of countries.

Limitation of the Index

A limitation to the societal participation index must be noted before going to the re-evaluation for the "powerful" countries. Adelman and Morris, in their study from which the data was extracted for computing this index, based their evaluation for each of the six variables in this index for the period from 1957 to 1962. Thus, the time span for constructing the index includes only a small portion of the period which this thesis covers (1955-1970). In determining the validity of the societal participation scores, a comparison was made with narrative descriptions of Latin American countries. Needler's Political Systems of Latin America, published first in 1960 and again in 1970, provides an excellent narrative description for all the countries. The narrative descriptions for the four countries re-classified as "powerful-transition" suggest that the changes within the political systems have been minor during the two periods. The narrative analysis argues for each of these countries that the traditional elite remain a powerful force even though new interest groups are actively competing with them in their struggle for power.

Based primarily upon Needler's works, the societal participation index derived from Adelman and Morris appears to be valid throughout the time period used in this study.

Evaluation of Dicohotomized "Powerful" Countries

The re-evaluation of the data for the dichotomized "powerful" category is in Appendix D.[5] The composite data for the other two categories is included in the appendix, along with a short narrative analysis of the data for each variable. The narrative evaluation first discusses specifically the "powerful-modern" and "powerful-transition" countries, followed by a short statement describing all four categories using the Four Category classification. The re-analysis of the four categories does not create any significant change in the relationships from that presented in the preceding chapter.

Economic

Of the fourteen economic variables considered in this thesis, the "powerful-modern" countries achieved greater rates of development than did the "powerful-transition" countries in five of the variables; the two "powerful" categories were nearly equal in four variables; and the "powerful-transition" countries achieved greater rates of development on the other five variables. TABLE IV-2 shows the relationship of the economic variables among these two categories of countries. The dichotomization of the "powerful" category did not reveal any great difference in the rates of development between the two categories. Based upon McGranahan, et.al.'s (1972), findings which suggest that in the early stages of modernization the greatest

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[5]The data used for the "powerful" countries in chapter three is dichotomized into the "powerful-modern" and "powerful-transition" which permits a comparative analysis of these two groups.

TABLE IV-2

Relationship of Economic Variables for the

Two "Powerful" Categories

Variables in which the "Powerful-Modern" achieved the higher rate of development.	Variables in which "Powerful-transition" rated higher in development.	Variables in which both categories rated nearly equal in development.
1. Average Annual Agr. Growth Trends	1. Per Capita Food Production	1. Sector Share Empl. (Industrial)
2. Sector Employment Change (Agr.)	2. Sector Production (Agr.)	2. Sector Share Empl. (Svc.)
3. Sector Share Production (Svc.)	3. Avg. Annual Industrial Growth Rate	3. Sector Share Prod. (Ind.)
4. Trade	4. Energy Consumption	4. Overall Growth Rate GDP
5. GNP Per Capita	5. GDP/Capita	

emphasis is placed upon economic development, one would expect considerable emphasis, by both categories, on economic development. As new interest groups threaten the traditional elite, they may later permit higher rates of economic development as a means of demonstrating their "modern" outlook. As many interest groups compete, as in the "powerful-modern" countries, emphasis will continuously be for rapid expansion of the economic area of development.

Social

In the area of social development nineteen variables were analyzed. The "powerful-modern" countries achieved the greatest improvement on eleven of the variables. The "powerful-transition" countries achieved the greatest rate on only one of the social variables. On the other seven variables the rates of development were nearly equal. TABLE IV-3 lists the specific relationship for each variable. The higher rate of social development among the "powerful-modern" countries was expected. The competing interest groups, found within the "powerful-modern" countries, achieve their basis of power by drawing more of the population into active participation in the political arena. Thus, in gaining power, interest groups place greater emphasis upon social development.

Military Related

The "powerful-modern" countries achieved the best rating on one of the ten military related variables. On two of the variables the

TABLE IV-3

Relationship of Social Variables for the

Two "Powerful" Categories

Variables in which the "Powerful-modern" rated higher in development.	Variables in which the "Powerful-Transition" rated higher in development.	Variables in which both categories rated nearly equal
1. Life Expectancy	1. Radios	1. Literacy Rate
2. Health Expenditures as % GNP		2. Primary and Secondary School Enrollment.
3. Calorie Consumption		3. Ratio No. School Age Children to No. Facilities.
4. Protein Consumption		4. School Facilities
5. Adequacy of Diet		5. Educ. Expenditures as % GNP
6. % Dwellings With Piped Water		6. Consumption/Capita
7. Average No. Persons Per Room		7. Inequality
8. Newspaper Circulation		
9. Telephone		
10. Inflation		
11. No. Persons/Housing Unit		

"powerful-transition" countries achieved the best rating. There was no difference between the two categories on the remaining seven military variables. TABLE IV-4 gives the specific relationships for the military variables.

The close similarity between the two "powerful" categories in this area was expected. The high societal costs, as indicated by the military expenditures and the degree of violence within both categories of countries, is an apparent result of the covert forceful role in which the militaries participate in the political system. The more competitive elections among the "powerful-transition" countries was not expected nor can an explanation for these results be provided.

Summerization of the Effects of Dichotomizing

The effects of the dichotomization of the "powerful" category is most apparent in the area of social development. The numerous competitive interest groups enhance social development in order to broaden their basis of power. The military in its "overseer" role does not attempt to limit the rate of social development. Perhaps they actually perpetuate social development since they ultimately decide whether or not any one particular interest group may effectively rule the country.

The equal emphasis upon economic development suggests the dominant role that the less developed nations place upon rapid economic development.

TABLE IV-4

Relationship of Military Related Variables for the Two "Powerful" Categories

Variables in which the "Powerful-Modern" Rated Higher.	Variables in which the "Powerful-Transition" Rated Higher.	Variables in which Both Categories Rated Equal.
1. Military Expenditure as % of GNP	1. Deaths Due to Domestic Violence	1. Weapons Imports
	2. Competitiveness of Elections	2. Manpower Ratio
		3. Protest
		4. Riots
		5. Armed Attacks
		6. Govt. Sanctions
		7. Voting Patterns

The socio-economic rates of development achieved by either "powerful" category are at extremely high societal cost. Although the two categories are nearly equal, the greater number of deaths due to domestic violence were noted in the "powerful-modern" countries. The influential militaries in these countries seemingly set the stage for high levels of violences within these countries.

CHAPTER V

SUMMARY

A summary of the findings in the preceding chapter is complicated by the large number of variables used and by the complexity of evaluating each variable in terms of its overall meaning within the modernization process. McGranahan, et.al. (1972), argue that in the early stages of development emphasis is normally placed upon economics, and, as some degree of development is achieved, emphasis is shifted from the economic to the social area. Even though such a pattern may be substantiated, the emphasis placed upon either area in any one country is influenced by the decisions, policies and ideologies of the governing regime. Ghana, under the Nkrumah regime, provides an example of a country which pursued a plan of development emphasizing the creation of an intensive social and economic infrastructure, with little consideration given to industrialization and economic development. In the large amount of literature on development, the argument between the options of balanced and unbalanced growth patterns remains unresolved. Basically, the question centers around whether policies should be pursued in one specific area, such as industry, or in all areas (social as well as economic) simultaneously.[1] There is no single plan enjoying general approval which ultimately will lead to modernization; thus, it cannot be argued with any degree of certainty that a country which advocates

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[1]The concept of balance in this study refers to the process of development in general and is not used in the restricted sense of referring only to economic factors.

economic development at the cost of social development is more surely moving towards modernization than a country which follows a developmental plan emphasizing the reverse procedure, or even than one which advocates balanced growth.

The evaluation of the data herein is based upon the concept of balanced growth, in which equal importance is given to progress in both the economic and social areas.

To facilitate the summary and evaluation of the data in the two preceding chapters,[2] an overall developmental index was created. An equal value is assigned to each of the variables. Such an index permits the total evaluation of the four designated country categories within each of the major topics discussed (economic, social, and military related). The basic assumption made in creating such an index is that each of the major areas is of equal importance. Thus, the concept of balanced growth is implicitly accepted as valid. It is further assumed that within each major area, the inclusive variables are equally weighted,[3] and that the

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[2]Reference to Appendix D may also be helpful.

[3]It is recognized that the underlying assumption made may be subjected to considerable argument; however, it provides an orderly manner of evaluating each group of countries' performance. Further, it is recognized that some of the variables are somewhat repetitious, measuring basically the same process from a slightly different perspective; however, all are utilized in the compilation of the overall developmental index. A further deficiency of the index is that it does not measure the magnitude of differences between the country categories, e.g., the category given a value of 3 may be much closer to the category with an evaluation of 1 than to the countries evaluated at 4. Such is a fundamental problem with the application of a scaling mechanism. Thus, the magnitude of the variations between the categories will be narratively explained.

values are additive. With these assumptions, an arbitrary total value of ten was assigned each variable, and distributed as follows:

1 = group of countries which achieved the highest achievement associated with development.

2 = group of countries which obtained the second highest achievement evaluation.

3 = group of countries which obtained the third highest achievement evaluation.

4 = group of countries which obtained the least achievement.

In those particular instances where the two categories of countries' achievements were nearly equal, the two values were summed and distributed equally between the two categories. Similarly, if all four categories were considered to have achieved nearly equal performances, each was given a value of 2.5.

A total of fourteen variables were analyzed to provide an indication of the progress achieved by the countries analyzed, in the quest for economic development. Using the index described, the four categories received the following evaluations: the "powerful-transition" countries, 28.0; the "powerful-modern" countries, 29.5; the "non-involved" countries, 37.5; and the "dominant" countries, 45.0. The magnitude of the difference among the three categories is not reflected by the scores obtained. The two "powerful" categories achieved the best performance (i.e., low scores) in overall economic development; however, the distinction between either "powerful" category and the "non-involved" countries was only slight.

These two categories closely parallel each other in overall economic achievements. The "dominant" countries lagged behind in all but seven of the variables considered. However, neither stagnation nor regression was evident within any of the four categories of countries. Surprisingly, each group of countries has made significant economic advancements, and even though the "dominant" countries comparatively demonstrated the least advancement, the differences among the categories, in terms of overall economic development, are not significant.[4]

The noticeable differences between the categories becomes quite apparent in the area of social development. Of the 19 variables considered (total value of 190) the scores obtained from the constructed scale were distributed among the three categories as follows: the "powerful-modern" countries obtained a value of 34.0; the "non-involved," 37.0; the "powerful-transition", 49.5; and the "dominant" countries obtained a value of 69.5. The "dominant" and "powerful transition" countries' progress in the area of social development was significantly inferior to the other two categories. The "dominant" countries achieved the least social development as indicated by their receiving the poorest rating in all but three variables. The overall social achievements attained by both the "powerful-modern" and "non-involved" countries were nearly equal. The emphasis upon balanced growth and development of the entire

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[4]Significant is not used in the sense of STATISTICAL significance in this study.

society is clearly more pronounced in the "powerful-modern" and "non-involved" countries. Both the "dominant" and "powerful-transition" countries have placed considerable emphasis on economical achievements, but for the most part have done so at the cost of social development which would benefit the whole society.

The analysis presented in CHAPTER III tends to substantiate a portion of the original hypothesis. First, those countries in which the militaries intervene intermittently ("powerful" category) have achieved rates of development, both socially and economically, at least equal to that of countries in which the militaries are "non-involved". Based upon the variables used as indicators of socio-economic development, the original "powerful" countries have at least equaled, and for the most part have slightly exceeded the rate attained by the "non-involved" countries. Secondly, in those countries in which the militaries dominant the political process, development is significantly slower. However, it was hypothesized that development would be significantly slower in both social and economic areas. Although in both areas the "dominant" countries have achieved comparatively the poorest performance, their economic development is not significantly less than that of the other two categories. However, their social development is considerably slower.

The reconceptualization of the original hypothesis in CHAPTER IV, resulting from the wide variations noted in the original "powerful" category, suggests that the original "powerful" category was composed of two distinct groups. One of the groups of countries, the "powerful-transition," would achieve rates of socio-economic development that fall between the "dominant" countries and the upper two categories, "powerful-modern" and "non-involved." A definite distinction is not apparent within the area of economic development; however, in the area of social development the "powerful-transition" countries clearly have achieved rates about mid-way between the "dominant" countries and the upper two categories of countries.

The results suggest that an overwhelming desire existed within all four categories to achieve economic development during the period from about 1950 to 1970. Regardless of the political system and the role the military occupies within that system, the determined effort to achieve economic development is of paramount importance. A possible explanation for this phenomenon may lie in the emphasis, at least until recently, placed upon economic development rather than social development by the more developed western countries, whom the 'Third World' looks to as models to emulate. Thus, the goal to be modern in the economic sphere is sought by all four groups of countries.

The inferior achievements of the "dominant" countries in the area of social development were expected and confirmed in this analysis. The domination of the political process by any one group implies that this group will tend to limit social development as

a method of retaining their select position. The slower the pace of social development, the less chance exists that any viable threat can be imposed, thus enabling the continued maintenance of the "dominant" groups' own select position.

The intermediate rate of performance in social development among the "powerful-transition" countries was expected. As new interest groups begin to compete for political power with the traditional elite, both begin to make concessions to the populace in order to either retain or gain a powerful position. However, the level of competitiveness is lower than in either the "powerful-modern" or "non-involved" countries. In addition the militaries of these "transitional" countries, caught in the conflicting position of supporting the elite or transferring their loyalty, tend to limit the full expansion of social development. Once the military decides to permit larger segments of the society to participate in the political system, the rate of social development increases, as noted in the "powerful-modern" and "non-involved" countries.

The "powerful-modern" countries achieved a rate of socio-economic development very similar to that attained by the "non-involved" countries. However, limiting the analysis to only those variables which are normally associated with modernization falsely suggests that development is attained within the two categories not only equally, but also at the same relative cost to each society. When consideration is given to the total cost involved, in terms of

the maintenance of a large military machine; the frequent occurrence of conflict and violent events; the vast number of deaths directly related to internal conflict; and the greater imposition of governmental sanctions; it is apparent that the "powerful-modern" countries have attained their high rates of socio-economic development at extreme cost to the society. In contrast, the countries in which the militaries have not intervened in the political system, the attainment of equal rates of social and economic development are achieved at a negligible cost to the society.

The effects of intermittent military intervention, such as occurs in the "powerful-modern", should not be viewed as detrimental to the process of socio-economic development. Rather, that intervention should be considered in terms of the social costs it imposes upon the society. The intervention of the military establishes an environment in which violence and force become the institutionalized means of expressing the political demands and grievances of all interest groups. As long as the military remains a constant threat, through its potential use of force to overthrow elected regimes, the application of force and violence by other interest groups will continue to be a proper, legitimate means of expressing demands. The withdrawal of the military, as an overt political actor, will permit the development of political institutions in which grievances and demands may be dealt with short of the eruption of violence. Likewise, its withdrawal from the political process should not materially

affect the rate of socio-economic development, as evidenced by the achievements attained in those countries in which the militaries have been non-politically oriented.

Limitations

One obvious limitation of this study lies in the categorization of the countries, especially the category of "non-involved." Since 1970, two of the "non-involved" countries have experienced situations in which the militaries have forsaken their non-political role and have overtly intervened into the political process. After a long period of being non-political, the military intervened in Uruguay's political system in February 1973. More recently the Chilean military forceably seized control of that country's government, in September 1973. These two events suggest that these two militaries may never have been completely non-political. Instead they may always have been a powerful latent force within the political system, able to achieve their goals and demands through covert manipulations. When achievement of their goals was blocked or threatened, they became manifest forces which were able to achieve their demands through the use of direct overt actions. The ultimate consequences of these actions are not known, but from the preceding analysis one would expect that the militaries' continued involvement would establish environments in which the application of force becomes the accepted means of expressing demands.

Militaries of either the more developed or less developed countries are never truly non-political, in the sense that they are always a component part of the decision-making process, especially in the area of foreign affairs in both the democratic and communist countries. They become non-political in that they willingly accept and implement the decisions made by the governmental authorities, regardless of whether those decisions are favorable to their own interests. Neither the military of Uruguay or that of Chile has achieved that level of political behavior. Thus, the classification of these two countries, it may be argued, were incorrect; however, the analysis covered by this study considered only the period in which these militaries were at most a latent political force. Mexico has also enjoyed a non-political military for the past several years; however, the political system has been dominated by one political party which may be meeting the needs of the military. New political parties and interest groups are growing in strength, thus, the real test of whether Mexico's military is "non-involved" will come if a new political party comes to power which does not meet the needs of the military. Until such a test, the real extent of non-involvement on the part of Mexico's military is not known.

A suggestion for further study need also be noted. The wide range of variance noted for many of the variables within each grouping of countries suggests a more detailed comparative study would be

beneficial. Within each category, reasons for one country's achieving a rapid rate of development, while others made insignificant gains, need to be found. A possible explanation is suggested in CHAPTER IV of this thesis. The level of societal participation influences not only the role in which the militaries perform in the political process, but also influence the rate of socio-economic development.

The level of societal participation appears to be a more viable variable for further analysis. The level of the variable, it appears, influences the rate of socio-economic development as well as the function that the militaries perform within their respective countries. In those countries in which the level of societal participation is low, it is expected that the rate of socio-economic development would likewise be low and further that the military would be a significant actor in the political system. As the level of societal participation increases, it appears from this analysis that the rate of socio-economic development would increase and that the role of the militaries within the internal functioning of the political systems would decrease. This continues on to the highest level of societal participation wherein the greatest rate of socio economic development, it is expected, would occur and the militaries'role in internal politics would be completely removed. The only influence the military would have in the political system would be to offer recommendations in the area of foreign affairs and national defense.

Thus an area of exploration suggested by this thesis is to conduct a similar analysis using the level of societal participation to rank-order the countries under investigation, analyzing both the rate of socio-economic development and the role of the militaries in the respective countries. The societal level of participation, as suggested in CHAPTER IV, it appears may offer a better explanatory function in explaining the role of the militaries in both developed and less developed countries.

TABLE V-1

Summary Index
(Each Variable Assigned Total Weight of Ten)
(1=Best Performance: 4=Worst Performance)

ECONOMIC INDICATORS[1]	Dominant	Powerful Transition	Powerful Modern	Non-Involved
Per Capita Food Prod.	4	1	2.5	2.5
Avg. Annual Agr. Growth Tr.	4	2.5	1	2.5
Sector Employment Change (Agr)	3	1	3	3
Sector Prod. Change (Agr)	3.5	3.5	1.5	1.5
Sector Share Employ. (Ind.)	1	2.5	2.5	4
Sector Share Employ. (Service)	4	2	2	2
Sector Share Prod. (Ind.)	2.5	2.5	2.5	2.5
Sector Share Prod. (Service)	2	3	1	4
Avg. Annual Ind. Growth Rate	2	1	4	3
Energy Consumption	3	1	3	3
Trade	4	3	1	2
GNP/Capita	4	2	1	3
GDP/Capita	4	1	2.5	2.5
Overall Growth Rates (GDP)	4	2	2	2
Total	45.0	28.0	29.5	37.5
SOCIAL INDICATORS[1]				
Life Expectancy	2	4	2	2
Health Expend. as % GNP	3	4	2	2
Calorie Consumption	3.5	3.5	1	2
Protein Consumption	4	3	1	2
Adequacy of Diet	4	3	1.5	1.5
Literacy Rate	4	2	2	2
Prim. & Second. School Enrol.	4	2	2	2
Ratio No. School Age Children to No. Facilities	4	1.5	1.5	3
Educational Expend. % GNP	4	2	2	2
School Facilities	4	1.5	1.5	3
% Dwellings with Piped H_2O	4	3	1	2
Avg. No. Persons/Housing Unit	4	1.5	1.5	3
Avg. No. Persons/Room	4	3	1.5	1.5
Newspaper Circulation	4	3	1.5	1.5
Radio	4	1	3	2
Telephone	4	3	2	1
Consumption/Capita	4	2	2	2
Inflation	4	3	1.5	1.5
Inequality	1	3.5	3.5	2
Total	69.5	49.5	34.0	37.0
MILITARY RELATED[2]				
Milit. Expend. as % GNP	2	4	3	1
Weapons Imports	NA	2.5	2.5	1
Manpower Ratio	4	2.5	2.5	1
Protest	1.5	3.5	3.5	1.5
Riots	3	3	3	1
Armed Attacks	3	3	3	1
Deaths Due to Domest. Viol.	2.5	2.5	4	1
Govt. Sanctions	4	2.5	2.5	1
Voting Patterns	2.5	2.5	2.5	2.5
Competitiveness of Elect.	4	2	3	1
Total	26.5	28.0	29.5	12.0

(1) Valuations are based upon rates of change, indicating development.
(2) Valuations are based upon both absolute levels and rates of change.

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APPENDIX A

Energy Consumption

1955 to 1971

APPENDIX A

Table 1

Energy Consumption
(Quantities in Millions of Metric Tons of Coal Equivalents)

Category/Country	1955(1)	1965(1)	1970(2)	1971(2)(a)
POLITICALLY DOMINANT				
Dominican Republic	0.40	0.57	1.03	1.10
El Salvador	0.23	0.50	0.37	0.81
Guatemala	0.40	0.89	1.24	1.33
Haiti	0.12	0.15	0.13	0.14
Honduras	0.21	0.36	(b)	(b)
Nicaragua	0.19	0.38	0.75	0.79
Paraguay	0.09	0.26	0.35	0.35
Average	0.23	0.45	0.65	0.75
POLITICALLY POWERFUL				
Argentina	18.50	30.01	39.16	41.75
Bolivia	0.47	0.76	1.07	1.13
Brazil	16.92	29.42	44.61	47.70
Colombia	5.26	9.50	13.76	13.90
Ecuador	0.05	1.11	1.79	1.98
Panama	0.35	1.28	2.43	3.13
Peru	2.58	6.36	8.55	8.70
Venezuela	12.28	22.20	26.76	27.10
Average	7.06	12.58	17.27	18.17
NON POLITICAL				
Chile	5.33	9.13	12.49	15.09
Costa Rica	0.20	0.44	0.71	0.80
Mexico	20.00	41.07	59.34	64.70
Uruguay	1.72	2.40	2.62	2.80
Average	6.81	14.26	18.79	20.85

Source: (1) Kenneth Ruddle and Mukhtar Hamour, (ed.), Statistical Abstract of Latin America 1970, Latin America Center, (University of California, 1971), Table 145, p. 263.
(2) U.N., United Nations Statistical Yearbook 1972, Table 140, pp. 353-356.

(a) Estimated for all of 1971

(b) Data not available, not included in average.

APPENDIX B

Value of Imports and Exports

1960 to 1970

APPENDIX B

Table 1

Total Imports and Exports at 1963 Prices
(Millions of US $ CIF for Imports, Millions of US $ FOB for Exports)

Category/Country		1960	1963	1966	1969	1970(1)
POLITICALLY DOMINANT						
Dominican Republic	(I)	85.5	184.0	179.6(2)	231.4(2)	260.9
	(X)	233.4	173.2	134.0	153.3	185.7
El Salvador	(I)	132.4	151.7	230.4	218.0	230.5
	(X)	103.7	153.8	174.6	195.7	181.1(2)
Guatemala	(I)	144.8	171.1	202.3	238.3	268.5
	(X)	105.1	154.1	214.8	251.9(2)	234.0
Haiti(3)	(X)	31.8	41.4	32.6	38.0	37.8
Honduras	(I)	74.0	95.1	152.3	183.7	203.4
	(X)	71.8	81.9	141.6	162.1	165.3
Nicaragua	(I)	70.4	110.4	190.8	180.0	198.0
	(X)	63.6	105.8	144.7	159.1	152.4
Paraguay	(I)	36.4	38.7	53.4	68.9	61.0
	(X)	27.6	40.2	43.3	49.4	55.7
Average	(I)	90.6	125.7	168.1	185.1	203.7
	(X)	91.0	109.2	126.5	144.2	116.2
POLITICALLY POWERFUL						
Argentina	(I)	1167.6	980.7	1018.1	1389.9(2)	1428.5
	(X)	1090.1	1365.1	1517.3	1539.7	1646.4
Bolivia	(I)	76.1	103.3	141.0	158.7	171.8
	(X)	61.2	67.4	89.9	119.2	109.9
Brazil	(I)	1564.6	1486.8	1457.0	2272.4	2599.7
	(X)	1074.8	1406.5	1674.4	2180.3	2288.2
Colombia	(I)	535.0	506.0	661.1(2)	653.3(2)	787.0
	(X)	422.4	446.1	474.4	599.1	604.2
Ecuador	(I)	113.6	128.9	173.5	248.6(2)	261.5
	(X)	126.2	148.7	160.7	174.2	194.9

Table 1 (Continued)

Category/Country		1960	1963	1966	1969	1970(1)
Panama	(I)	136.7	192.1	240.1	270.4(2)	331.0
	(X)	29.8	59.2	81.6	97.0(2)	102.5(2)
Peru	(I)	391.4	551.8	706.1	559.5	573.3
	(X)	450.5	537.2	570.7	602.1	659.0
Venezuela	(I)	1220.2	950.0	1140.2	1457.9	1516.1
	(X)	2167.2	2465.3	2573.6	2772.5	2879.4
Average	(I)	648.4	612.5	692.1	876.3	883.6
	(X)	690.3	811.9	833.5	1010.5	1060.6
NON POLITICAL						
Chile	(I)	513.0	557.5	756.6	892.3	917.6
	(X)	471.2	542.0	624.3	620.6	674.6
Costa Rica	(I)	113.6	123.8	185.3	238.5	263.6
	(X)	86.0	94.9	135.4	196.3(2)	212.0(2)
Mexico	(I)	1316.8	1239.7	1472.6	1838.9	2158.6
	(X)	828.9	968.5	1130.7	1263.4	1157.3
Uruguay	(I)	232.2	176.9	168.9	183.8	211.6
	(X)	128.1	165.2	175.3	198.4	215.7
Average	(I)	543.9	524.5	645.9	788.4	887.9
	(X)	378.6	442.7	516.4	569.7	564.4

Source: Statistical Bulletin for Latin America, October, 1971, Vol. 8, No. 2, United Nations, New York: Imports, Table 16.2, p. 69; Exports, Table 19.2, p. 89.

(1) All Imports are estimate for 1970.

(2) Estimated

(3) Import Data not available, Haiti excluded from average of Imports.

APPENDIX C

Societal Participation Level

SOCIETAL PARTICIPATION

Six variables, extracted from Adelman and Morris' Society Politics and Economic Development (1967), are used in constructing the societal level of participation index which suggests the level of participation by the various countries in their respective political processes. Valuations are assigned to each variable, as shown in TABLE C-1, with the larger total score representing higher assumed levels of societal participation. All of the countries used throughout this thesis, except Haiti, are included and assigned an overall societal level of participation. The importance of the size of the indigenous middle class is the first variable used in constructing this societal level index. According to Adelman and Morris (op. cit., pp. 30-33), ". . . the presence of active indigenous groups in the middle class is considerably more conducive to the initiation of a widespread growth process than is the existence of expatriate groups that characteristically tend to concentrate their efforts within the existing modern sector." The proportion of the male labor force engaged in commerce, banking, insurance, or in technical, professional, managerial, administrative, or in clerical employment was used by Adelman and Morris in estimating the importance of the indigenous middle class. The expansion of the middle class suggests that an increase exists in the political awareness of this group, which threatens the ruling traditional elite.

The extent of social mobility is the second variable used in creating the societal participation index. The higher the rate of

social mobility, the greater the opportunity for larger proportions of the total society to participate in the political system. Adelman and Morris (op. cit., pp. 33-36) used three characteristics to estimate the rate of social mobility, extent of access to education, extent of opportunity to advance into middle class occupations, and presense or absence of prohibitive cultural or ethnic barriers to upward social mobility.

Another variable used in creating the index involves the degree of modernization of outlook. Many authors stress the importance of a modern outlook as necessary for the occurance of social, economic, and political change. The notion of the individual's sense of participation in the socio-cultural and political life of his nation has often been referred to as a distinguishable characteristic of modern societies. Thus, it is expected that as a modern outlook is achieved, a greater willingness and desire of the population to become an active element in the political system occurs. Adelman and Morris (op. cit., pp. 49-51) used the degree of the modernized outlook among the urban educated and the degree of the modernized outlook among the urban educated and the degree to which various social, political, and economical modernization programs have been supported by the population to derive their modern outlook variable.

The degree of national integration and sense of national unity are also used as components of the societal participation index. Adelman and Morris (op. cit., p. 54) have stated, "An important aspect

of growth of modern nation-states is the process of integrating the political system and of creating a sense of national unity among the population." They further state, ". . .economic and social development tend to be accompanied by a process of gradual transference of social and political loyalties from traditional communally based socio-political organizations to the more aggregated political structures typical of higher levels of development" (Ibid., pp. 54-55). The elements used in the creating of this index include both cultural and political aspects of the degree of national integration (Ibid., pp. 54-56).

The degree of competitiveness of political parties is used as an indicator of the extent of societal participation. However, it is realized that the mere presence of two political parties does not necessarily mean that a large portion of the populace participates in the political system. Yet, at the same time the development of competitive political parties is indicative of the movement from a pure dictatorship toward a greater level of democracy. Adelman and Morris (op. cit., pp. 64-66) considered both the number of political parties within a country and the extent of competition, as indicated by frequency of rotation of political leadership among at least two political parties, in deriving these variables.

The last variable employed in constructing this index involves the political strength of the political elite. The breakup of the control held by the traditional elite is generally accepted as an

important step for the initiation of economic growth. The reduction of the dominance of the traditional elite implicity suggests the increase by level of societal participation in the political process. Adelman and Morris (op. cit., pp. 71-73) measured the degree of dominance held by the traditional elite during the period from 1957 to 1962. The greater the political power held by the traditional elite, the higher the score a country was assigned by Adelman and Morris. However, in constructing the societal level index the reverse relationship was given the highest score, e.g., the lower the level of political power held by the traditional elite, the higher the score assigned to a country.

Country scores for each variable were compiled as shown in TABLE C-1. The higher the composite score, the greater the level of societal participation. The politically "dominant" countries form a relatively homogenous group as do the politically "non-involved" countries. However, the politically "powerful" countries are a heterogeneous category with half of the countries (Bolivia, Ecuador, Panama, and Peru) having scores similar to those among the politically "dominant" countries and the other half (Argentina, Brazil, Colombia, and Venezuela) having nearly the same scores as the politically "non-involved" countries. Thus the politically "powerful" category may be divided into two distinct groups, "powerful-transition" countries in which there no longer exists truly dominating militaries, yet they possess military forces that are extremely politically "powerful" and which continuously

participate in the political process, and the "powerful-modern" countries with potentially politically "powerful" militaries, but which are not always overt actors in the political systems; rather, they intermittently become active overt actors at which time they directly influence the political process.

TABLE C-1

Level of Societal Participation Index[1]

Category/Country	Size of Indigenous Middle Class	Social Mobility	Modern Outlook	National Unity	Competitiveness of Political Parties	Strength of Traditional Elite	Total
POLITICALLY DOMINANT[2]							
Dominican Republic	70	50	50	60	35	90	335
El Salvador	65	50	40	60	90	10	315
Guatemala	70	10	50	35	90	10	265
Honduras	30	20	40	54	83	01	228
Nicaragua	65	50	60	54	35	10	274
Paraguay	65	50	50	54	54	10	283
POLITICALLY POWERFUL							
Argentina	95	100	90	90	90	40	505
Bolivia	15	20	50	10	54	80	229
Brazil	70	90	90	60	90	40	440
Colombia	70	90	60	90	83	50	443
Ecuador	70	50	40	54	90	10	314
Panama	70	50	50	50	90	70	330
Peru	70	50	40	41	90	10	301
Venezuela	90	90	90	90	90	90	540
POLITICALLY NON INVOLVED							
Chile	90	80	90	90	90	50	490
Costa Rica	70	90	80	83	90	90	503
Mexico	90	80	90	90	54	80	484
Uruguay	90	100	90	90	60	40	470
Maximum Score Possible	95	100	100	97	97	100	589

Source: Adelman and Morris: Society, Politics and Economic Development op. cit.

(1) Adelman and Morris' alphebetical scores are transformed into a numberical value using their transformation device (IBID: 14-15).

(2) Haiti was not included in Adelman and Morris' study. However it is assumed that its total score would be within the range of the "dominant" category.

APPENDIX D

Socioeconomic Data for the Analysis of the Dichotomized "Powerful" Category

TABLE D-1

Index of Per Capita Food Production (1963=100)

Categories/Country	1955	1960	1970
POLITICALLY DOMINANT			
Average	98.5	104.8	100.5
POWERFUL TRANSITION			
Bolivia	64	96	90
Ecuador	85	99	102
Panama	95	98	112
Peru	104	105	99
Average	87	99.5	100.8
POWERFUL MODERN			
Argentina	89	80	96
Brazil	92	98	112
Colombia	111	103	102
Venezuela	89	97	116
Average	95.3	94.5	106.3
NON POLITICAL			
Average	102	101.8	110.2

Source: See Table 3.2

The "powerful transition" countries achieved the greatest increase in per capita food production, an increase of 15.8%, compared to 12.6% for the "powerful modern" countries.

In considering all four categories, the "powerful transition" countries' rates of growth exceeds all others. The "powerful modern" countries' rate was slightly greater (12.6%) than the "non involved" countries (8.3%). However, in view of the fact that the latter's rate was consistently high and increasing, both categories are considered as achieving nearly equal accomplishments. The "dominant" countries with only a 2% increase were inferior to all other categories.

TABLE D -2

Agricultural Production Trends
(% Average Annual Growth Rates)

Categories/Country	1951-1953 to 1959-1961	1959-1969
POLITICALLY POWERFUL		
Average	3.23	2.87
POWERFUL TRANSITION		
Bolivia	0.3	2.7
Ecuador	3.3	3.1
Panama	4.1	5.2
Peru	3.7	2.4
Average	2.85	3.35
POWERFUL MODERN		
Argentina	1.8	2.2
Brazil	4.8	4.3
Colombia	3.3	3.4
Venezuela	4.7	5.9
Average	3.65	3.95
NON POLITICAL		
Average	2.82	3.42

Source: See Table 3.3.

Although the "powerful transition" and the "non-involved" countries achieved a considerable increase in their average annual growth rates during these two periods, they both fall far behind the rate sustained by the "powerful modern" countries. Thus, the "powerful modern" category is evaluated as having achieved the greatest results. The target rate for average annual agriculture growth for the 1970's has been set at 4%, which was nearly achieved by the "powerful modern" countries during the past decade.

TABLE D-3

Structural Changes In The Agricultural Sector

Categories/Country	Production as Percent of Total Production		Employment as Percent of Employed Population	
	1960	1969	1960	1969
POLITICALLY DOMINANT				
Average	37.4	32.1	63.4	59.1
POWERFUL TRANSITION				
Bolivia	30.6	32.1	59.7	55.0
Ecuador	36.8	31.7	55.8	52.5
Panama	24.9	21.0	47.0	43.9
Peru	24.1	18.2	52.2	46.2
Average	29.1	23.5	53.7	49.4
POWERFUL MODERN				
Argentina	17.4	15.2	19.1	15.6
Brazil	22.1	19.9	52.2	46.6
Colombia	34.1	30.3	48.2	42.3
Venezuela	7.2	7.8	34.2	26.6
Average	20.2	18.3	38.4	32.8
NON POLITICAL				
Average	18.8	16.6	38.4	33.9

Source: See Table 3.4.

The "powerful transition" countries reduced the share of agricultural production by 19.24%, as compared to 9.4% for the "powerful modern". However, this higher rate is partially explainable by the fact that as lower limits are approached the rate of decrease will be slower. The overall evaluation for all four categories is: "powerful transition" achieved the greatest improvement, all other categories achieved about equal improvements.

The "powerful modern" countries decreased their portion of their labor force in agriculture by 14.8%, as compared to a much lower reduction by the "powerful transition" countries, only 8.0%. In comparing all the categories the "powerful transition" reduction in their labor force engaged was similiar to the "dominant" category. The "powerful modern" and the"non involved" countries were similiar with larger reductions in their agricultural force.

TABLE D-4

Indicators of Structural Change In The Economy

Categories/Country	Employed Population (Percentages)				Share of Total Production (Percentages)			
	Industry		Service		Industry		Service	
	1960	1969	1960	1969	1960	1969	1960	1969
POLITICALLY DOMINANT								
Average	14.8	16.4	19.3	24.5	22.3	26.5	40.2	41.4
POWERFUL TRANSITION								
Bolivia	20.1	21.1	20.2	23.9	36.4	46.1	33.0	30.8
Ecuador	21.9	20.4	22.3	23.7	27.4	29.0	35.8	39.3
Panama	14.7	17.0	38.3	39.1	26.2	33.5	48.9	45.5
Peru	24.8	25.8	23.0	28.0	35.4	38.9	40.5	42.9
Average	20.4	21.1	26.0	29.5	31.4	36.9	39.6	39.6
POWERFUL MODERN								
Argentina	38.0	36.9	42.9	47.5	46.4	51.2	36.2	33.6
Brazil	23.0	23.3	24.8	30.1	33.9	36.3	44.0	43.8
Colombia	24.5	23.0	27.3	34.7	32.3	34.2	33.6	35.5
Venezuela	23.8	27.2	42.0	46.2	47.3	46.3	45.5	45.9
Average	27.3	27.6	34.3	39.6	40.0	42.0	39.8	42.2
NON POLITICAL								
Average	27.2	26.6	34.4	39.6	35.3	38.3	45.9	45.2

Source: See Table 3.5

Both the "powerful modern" and the "powerful transition" expanded the size of their industrial labor force during the time period. The latter countries achieved a slightly higher increase than the "powerful-modern"; however, the difference is not of sufficient magnitude to distinguish a great difference, thus both categories are considered equal. The "powerful modern" and "powerful transition's" increase of labor force into the service sector was also about equal, 15% and 14% respectively.

The "powerful-transition" countries increased their share of total production accounted for by the industrial sector by 17.5%, while the "powerful modern" category increased by only 5%. However, because of the higher share of the industrial sector accounting for total production in the "powerful modern" countries, the difference between these rates of change becomes less significant.

The "powerful-modern" countries experienced a slight increase in the share of the service sector accounting for total production, while the "powerful-transition" countries recorded no change. In comparison with the other categories the "powerful modern" countries increased the service sector's share of total production the most.

TABLE D -5

Industrial Production Trends

Categories/Country	1951-1953 to 1959-1961	1959-1969
POLITICALLY DOMINANT		
Average	5.2	6.7
POWERFUL TRANSITION		
Bolivia	-1.3	7.5
Ecuador	4.5	11.5
Panama	8.6	5.5
Peru	6.9	6.4
Average	4.7	7.7
POWERFUL MODERN		
Argentina	5.0	5.3
Brazil	9.9	6.8
Colombia	11.7	5.7
Venezuela	0.7	3.8
Average	6.8	5.4
NON POLITICAL		
Average	5.2	5.9

Source: See Table 3.6.

The "powerful-transition" countries achieved the largest increase in the average annual industrial growth rates, when compared to all other categories, followed by the "dominant" countries, and at a much lower rate the "non-involved" countries. The "powerful-modern" countries had the poorest performance, with an actual slowing of their industrial growth rate. However, their average growth rate for the two decades was high at 6.1%.

TABLE D-6

Energy Consumption
(Quantities in Millions of Metric Tons of Coal Equivalents)

Categories/Country	1955	1965	1970	1971
POLITICALLY DOMINANT				
Average	0.23	0.45	0.65	0.75
POWERFUL TRANSITION				
Bolivia	0.47	0.76	1.07	1.13
Ecuador	0.05	1.11	1.79	1.98
Panama	0.35	1.28	2.43	3.13
Peru	2.58	6.36	8.55	8.70
Average	0.86	2.38	3.46	3.66
POWERFUL MODERN				
Argentina	18.50	30.01	39.16	41.75
Brazil	16.92	29.42	44.61	47.70
Colombia	5.26	9.50	13.76	13.90
Venezuela	12.28	22.20	26.76	27.10
Average	13.24	22.78	31.07	32.61
NON POLITICAL				
Average	6.81	14.26	18.79	20.85

Source: See Table At Appendix I.

The "powerful-transition" countries increased their level of energy consumption by about 4 times during the period 1955-1971; whereas, the "powerful-modern" countries' level of consumption increased by only about 2.5 times. However, the vast difference in the total levels of energy consumed, nearly 10 times greater for the "powerful modern" countries, suggests that the difference in rates of increase is insignificant.

When comparing all four categories, the increase is nearly equal for the "dominant" and "non-involved" countries, having increases of about 3 times the beginning level. In evaluating these results once again consideration must be given to the fact that at higher levels, improvements become more difficult to achieve. Thus, considering that the total level attained by the "powerful-modern" countries is considerably greater than for any other category of countries, their rate of improvement is at least equal to that achieved by any other category. The same consideration applies to the rate of increase achieved by the "dominant" countries. Thus all four categories are considered to have achieved about equal performance, however, the "powerful-transition" is evaluated above all other categories. The disparity that does occur between the categories is primarily with the 1971 data, which is only an estimate and cannot be considered reliable.

TABLE D-7

Total Imports and Exports at 1963 Prices
(Millions of US $ CIF for Imports, Millions of US $ FPB for Exports)

Categories/Country		1960	1963	1966	1969	1970
POLITICALLY DOMINANT						
Average	(I)	90.6	125.7	168.1	185.1	203.7
	(X)	91.0	109.2	126.5	144.2	116.2
POWERFUL TRANSITION						
Bolivia	(I)	76.1	103.3	141.0	158.7	171.8
	(X)	61.2	67.4	89.9	119.2	109.9
Ecuador	(I)	113.6	128.9	173.5	248.6	261.5
	(X)	126.2	148.7	160.7	174.2	194.9
Panama	(I)	136.7	142.1	240.1	270.4	331.0
	(X)	29.8	59.2	81.6	97.0	102.5
Peru	(I)	391.4	551.8	706.1	559.5	573.3
	(X)	450.5	537.2	570.7	602.1	659.0
Average	(I)	179.5	244.0	315.2	309.3	334.4
	(X)	166.9	203.1	225.7	248.1	241.6
POWERFUL MODERN						
Argentina	(I)	1167.6	980.7	1018.1	1389.9	1428.5
	(X)	1090.1	1365.1	1517.3	1539.7	1646.4
Brazil	(I)	1564.6	1486.8	1457.0	2272.4	2599.7
	(X)	1074.8	1406.5	1674.4	2180.3	2288.2
Colombia	(I)	535.0	506.0	661.1	653.3	787.0
	(X)	422.4	446.1	474.4	599.1	604.2
Venezuela	(I)	1220.2	950.0	1140.2	1457.9	1516.1
	(X)	2167.2	2465.3	2573.6	2772.5	2879.4
Average	(I)	1121.9	980.9	1069.1	1443.4	1582.8
	(X)	1188.6	1420.8	1559.9	1772.9	1854.6
NON POLITICAL						
Average	(I)	543.9	524.5	645.9	788.4	887.9
	(X)	378.6	442.7	516.4	569.7	564.4

Source: See Appendix II.

TABLE IV-7 (Continued)

The "powerful-modern" countries during the period increased the value of their exports at a greater rate than that of their imports. Throughout the entire period, the value of their exports have exceeded the value of their imports, with the gap between the two becoming favorably larger (i.e. the value of exports is increasing more rapidly than the value of imports, thus a more favorable trade balance).

The increase in the value of imports for the "non-involved" countries has been slightly higher than the increase in the value of their exports. However, these countries have managed to keep the gap between the value of imports and exports less than either the "powerful-transition" or the "dominant" countries. The "powerful-transition" countries are experiencing nearly twice as great an increase in the value of imports over their exports, thus the trade deficit is becoming more pronounced each year. Yet, their trade balance is more favorable than that of the "dominant" countries, which are experiencing an extremely rapid increase in the value of their improts and a very modest increase in the value of their exports.

TABLE D -8

PER Capita GNP in constant 1971 Prices, US $

Categories/Country	1950	1955	1960	1965	1970	1971	1972
POLITICALLY DOMINANT							
Average	231	253	265	296	331	339	346
POWERFUL TRANSITION							
Bolivia			167	187	222	225	234
Ecuador	175	195	210	218	243	251	260
Panama	372	387	459	589	734	774	804
Peru	287	348	376	444	461	480	493
Average	278	310	303	335	416	432	448
POWERFUL MODERN							
Argentina	761	797	835	963	1085	1111	1138
Brazil	201	240	288	311	389	421	452
Colombia	221	248	258	275	307	315	328
Venezuela	517	655	774	948	1004	1004	1010
Average	425	485	539	599	696	713	732
NON POLITICAL							
Average	449	577	551	596	681	688	695

Source: See Table 3.9.

The greatest increase in per capita GNP was achieved by the "powerful-modern" countries, with a total increase of 72%. The "powerful-transition" countries achieved an increase of nearly 61%, followed by the "non-involved" countries 55%, and the "dominant" countries with about a 50% increase.

TABLE D-9

Trend of Gross Domestic Product
at Market Prices, 1950-1970
Percentage Average Annual Growth Rate

Categories/Country	Per Capita Rates		Overall Growth Rates	
	1950-1960	1960-1970	1950-1960	1960-1970
POLITICALLY DOMINANT				
Average	1.0	1.4	3.9	4.5
POWERFUL TRANSITION				
Bolivia	-1.6	3.2	0.4	5.6
Ecuador	1.8	1.2	4.7	5.4
Panama	1.9	4.6	4.9	5.0
Peru	2.9	1.7	5.3	4.9
Average	1.25	2.7	3.8	5.2
POWERFUL MODERN				
Argentina	1.0	2.1	3.1	3.7
Brazil	3.7	2.9	6.8	5.8
Colombia	1.4	1.8	4.6	5.2
Venezuela	3.6	2.4	7.7	5.8
Average	2.4	2.3	5.6	5.1
NON POLITICAL				
Average	2.0	2.1	4.7	4.9

Source: See Table 3.10.

The "powerful-transition" countries have more than doubled their per capita GDP growth rate, while the "powerful-modern" countries experienced no change. Considering all three categories, the "powerful transition" countries have achieved the greatest improvement. The "powerful-modern" and "non-involved" countries, considered about equal, maintained a constant rate, which was above the Latin American average. The "dominant" countries, although increasing their growth rate, have only been able to achieve a rate which is very small in comparison to the rest of the categories.

Although the "powerful-transition" countries recorded a significant increase in their overall growth rate during the past two decades, the rate achieved by the "powerful-transition" countries is about equal to the "powerful-modern" countries during the last decade. Slightly behind the rates achieved by these countries are the "non involved" countries, at a considerably smaller rate are the "dominant" countries.

TABLE D -10

Health

Categories/Country	Life Expectancy at Birth		Health Expenditures as Percent GNP 1964-1970					
	1950	1960	1964	1965	1966	1967	1968	1970
POLITICALLY DOMINANT								
Average	42.9	50.9	1.3	0.8	1.4	1.4	1.2	1.1
POWERFUL TRANSITION								
Bolivia	40.8	46.0	1.4	2.0	2.8	3.8	0.4	0.8
Ecuador	49.9	57.7	1.5	0.5	1.0	1.0	0.4	0.4
Panama	62.2	64.3	1.8	1.1	0.7	0.8	1.7	1.7
Peru	57.4	58.0	1.6	1.1	1.7	1.7	1.2	1.2
Average	52.6	56.5	1.8	1.4	1.3	2.1	1.0	1.1
POWERFUL MODERN								
Argentina	60.6	67.0	0.5	0.3	0.2	0.3	0.2	0.1
Brazil	42.3	53.0	0.8	0.6	1.5	2.3	0.3	0.4
Colombia	52.2	60.0	1.8	1.1	0.7	0.8	1.7	1.7
Venezuela	58.0	65.8	3.1	2.5	3.4	3.3	4.3	4.3
Average	53.3	61.5	1.5	1.1	1.5	1.7	1.6	1.6
NON POLITICAL								
Average	56.9	63.5	1.2	1.4	3.1	3.6	1.8	1.9

Source: See Table 3.11

The "powerful-modern" countries increased the life expectancy of their inhabitants by 8.2 years; whereas, the "powerful-transition" countries increased life expectancy by only 3.9 years. The "powerful-transition" countries increase in life expectancy was the lowest for all four categories. The rates for all the categories except the "powerful-transition" were about equal.

The "powerful-modern" countries had relatively little change in the proportion of their GNP expended on health, while the "powerful-transition" countries actually decreased the share of the GNP spent on health.

Considering all four categories, the "non involved" countries were the only ones which increased the proportion of the GNP devoted to health. The "powerful-modern" countries were relatively stable, with only a slight increase in the share of the GNP spent on health. The other two categories actually decreased the amount expended on health, with the greatest decrease noted among the "powerful-transition" countries.

TABLE D-11

Nutrition

Categories/Country	Per Capita Calorie Consumption 1955	1967	1970	Requirement	Percent of Requirement
POLITICALLY DOMINANT					
Average	2238	2163	2133	2246	94.96
POWERFUL TRANSITION					
Bolivia	1830	1980	1980	2400	82.50
Ecuador	1890	2020	1970	2320	84.91
Panama	2310	2500	2370	2280	103.94
Peru	2040	2340	2260	2370	95.36
Average	2018	2210	2145	2318	91.7
POWERFUL MODERN					
Argentina	3070	2920	3160	2550	123.93
Brazil	2560	2690	2820	2350	120.00
Colombia	1900	2200	2140	2320	92.24
Venezuela	1950	2490	2430	2350	103.44
Average	2370	2575	2638	2392	109.90
NON POLITICAL					
Average	2575	2805	2573	2443	105.32

Source: See Table 3.12.

The "powerful-modern" countries have increased their calorie consumption throughout the period, having exceeded the daily minimum requirements since at least 1967. The "powerful-transition" countries have increased their calorie consumption levels slightly, yet they still fall short of the daily minimum requirements by about 10%.

In comparing all four categories of countries, the "powerful-modern" countries have exceeded all others. The "non-involved" although maintaining a level of consumption above the daily requirements, have not increased their consumption levels from that of 1955. The "dominant" and "powerful-transition" countries have both failed to attain the daily requirements, with the latter countries furthest from this achievement. However, in view of the fact that the "dominant" countries have continuously decreased their level of calorie consumption throughout the period, their overall achievement is no greater than that of the "powerful-transition" countries. These two categories are considered about equal.

TABLE D-12

Nutrition

Categories/Country	Per Capita Protein Consumption 1955	1967	1970	NPU	Intake	Req.	Percent of Requirement
POLITICALLY DOMINANT							
Average	57.7	52.7	53.6		29	33.2	83.15
POWERFUL TRANSITION							
Bolivia	48.6	50.6	(NA)	59	30	36.2	82.60
Ecuador	47.5	51.5	46	59	28	32.4	86.11
Panama	60.5	62.9	59	64	38	33.0	114.55
Peru	50.5	54.1	55	58	32	34.4	92.73
Average	51.8	54.8	53	60	32	34.0	94.00
POWERFUL MODERN							
Argentina	96.9	88.0	105	62	65	42.8	152.10
Brazil	61.5	66.3	67	57	38	36.1	105.82
Colombia	42.9	48.9	50	62	31	34.4	90.12
Venezuela	51.3	65.9	60	60	36	37.2	96.77
Average	63.2	67.3	70.5	60	43	37.6	111.20
NON POLITICAL							
Average	73.3	76.8	71.5		42	37.3	112.33

Source: See Table 3.12.

The "powerful modern" countries have increased their level of protein consumption considerably during the period, raising their consumption level above the daily requirements. The "powerful-transition" countries have also increased their levels of consumption, but they still fall short of the daily requirements.

Considering all four categories, the "powerful-modern" countries have achieved the greatest results. The "non-involved" countries, although maintaining the daily requirements, actually decreased their protein intake during the period. The "powerful-transition" countries have increased their consumption levels, but remain below the daily requirements. The "dominant" countries not only have failed to attain the minimum daily requirements, but they have actually decreased their protein intake during the period.

TABLE D-13

Education

Categories/Country	Percent of Literate Population over the age of 15 years about			Percent of Population 5-14 yrs old enrolled in primary education	
	1950	1960	1968	1950	1968
POLITICALLY DOMINANT					
Average	37.4	46.1	46.6	30.9	45.2
POWERFUL TRANSITION					
Bolivia	32.0	48.4	39.8	24.0	54.7
Ecuador	56.0	68.4	72.0	41.0	55.5
Panama	70.0	76.1	78.3	54.0	60.6
Peru	42.0	74.4	67.0	43.0	68.7
Average	50.0	66.8	64.3	40.5	59.9
POWERFUL MODERN					
Argentina	86.0	92.0	91.4	66.0	73.1
Brazil	49.0	62.7	69.6	28.0	45.7
Colombia	57.0	74.8	72.9	28.0	45.5
Venezuela	52.0	68.0	85.0	40.0	63.0
Average	61.0	74.4	79.7	40.5	56.8
NON POLITICAL					
Average	75.3	82.7	85.6	53.8	69.4

Source: See Table 3.13.

The increase in levels of literacy was nearly equal for the "powerful modern" and "powerful transition" countries; however, the former have a much higher overall level of literacy. Both categories enjoyed similar increases in the proportion of the school age population enrolled in educational facilities.

Considering all four categories, only the "dominant" lags far behind the others. Even though the "dominant" countries have increased their levels of both literacy and school enrollment, the levels which they have attained are less than those of the other categories. Again the percentage increases must be considered with respect to the levels achieved. As higher levels are approached, each improvement becomes more difficult and thus the percentage change alone does not indicate the significance of the increase.

TABLE D-14

Education

Categories/Country	Primary Educational Establishments 1961-1968 (Public and Private)			Ratio Children 5-14 yrs old per school about	
	1961	1964	1968		1966
POLITICALLY DOMINANT					
Total	20,665	22,327	23,600	Average	277
POWERFUL TRANSITION					
Bolivia	5,866	6,812	7,994		140
Ecuador	5,666	6,486	6,534		191
Panama	1,372	1,503	1,519		224
Peru	14,860	17,407	20,588		153
Total	27,764	32,208	36,635	Average	177
POWERFUL MODERN					
Argentina	18,865	19,972	20,933		215
Brazil	99,677	124,946	134,909		102
Colombia	20,533	23,611	27,361		210
Venezuela	10,734	10,837	10,775		225
Total	149,809	179,366	193,978	Average	188
NON POLITICAL					
Total	44,674	49,146	55,272	Average	242

Source: See Table 3.14.

There is no apparent distinction between the "powerful-transition" and the "powerful-modern" countries in either the rate of increase in number of school facilities or in the ratio of the number of school age children per school facility.

In comparison with the other categories, both "powerful" categories have achieved higher rates of improvements, followed by the "non-involved" countries. The "dominant" countries have had the least improvement, as seen by the comparatively small increase in the number of school facilities.

TABLE D -15

Education

Categories/Country	Education Expenditures, as Percent of GNP				
	1961	1963	1965	1968	1970
POLITICALLY DOMINANT					
Average	1.87	2.04	2.21	2.40	2.64
POWERFUL TRANSITION					
Bolivia	2.9	2.7	3.8	3.6	3.5
Ecuador	1.8	2.5	3.0	4.0	4.3
Panama	4.0	4.0	4.1	4.7	4.9
Peru	3.1	3.4	5.2	4.3	4.3
Average	3.0	3.2	4.0	4.2	4.3
POWERFUL MODERN					
Argentina	2.4	2.9	3.3	3.6	3.1
Brazil	0.7	0.6	1.1	0.9	0.9
Colombia	2.9	2.7	2.1	3.1	3.1
Venezuela	1.8	3.8	4.0	4.1	4.5
Average	2.0	2.5	2.6	2.9	2.9
NON POLITICAL					
Average	3.30	2.85	3.38	3.80	4.55

Source: See Table 3.14

The "powerful-transition" countries, on the average, during the 1960's have devoted 3.7% of their GNP to educational expenses, while the "powerful-modern" countries have devoted about 2.6% of their GNP. The absolute amounts of money expended may be about equal since the latter category of countries has an overall higher level of GNP. Both groups of countries have increased the portion of their GNP devoted to education at about the same rate, 45% from 1961 to 1970.

Comparing all of the categories, the "dominant" countries, though steadily increasing the portion of their GNP devoted to education, remains far behind all of the other countries. This distinction would become more pronounced if absolute amounts were compared.

TABLE D-16

Housing

Categories/Country	Percentage of Dwellings (total) With Piped Water About		Average Number of Persons Per Room About		Average No. of Persons Per Household About
	1955	1960	1955	1965	1963
POLITICALLY DOMINANT					
Average	16.1	16.9		2.5	5.3
POWERFUL TRANSITION					
Bolivia					
Ecuador		37.5		2.5	5.1
Panama	44.4	46.2		2.4	4.7
Peru		21.1		2.3	4.9
Average		34.7		2.4	4.9
POWERFUL MODERN					
Argentina	46.7	53.1	1.9	1.4	3.7
Brazil	15.6	32.8	1.3	1.1	4.8
Colombia	26.0	41.3	1.9	1.9	5.8
Venezuela	30.2	67.1	2.1	1.6	5.3
Average	29.6	48.6		1.5	4.9
NON POLITICAL					
Average	74.5	55.5		1.6	5.1

Source: See Table 3.15.

The reliability of the data utilized in this table is very questionable, thus only broad generalizations may be made.

The "powerful-modern" countries have a higher proportion of their households with piped water than the "powerful-transition" countries. Similarily the number of persons per room is much smaller for the "powerful-modern" countries.

Considering all of the categories of countries, the "powerful-modern" countries are the only ones which experienced an increase in the number of households serviced with piped water. The "non-involved" countries, though having a slightly higher portion of households with piped water, have suffered a great decline during the period. The "powerful-transition" countries falling behind these two categories in the number of households with piped water, remain well above the "dominant" category. The number of persons per room for both of the "powerful modern" and "non-involved" categories is about equal. The "powerful-transition" and the "dominant" categories have about the same number of persons per room which is considerably higher than that of the other two categories.

TABLE D -17

Communications

Categories/Country	Availability of Newspapers Per 1000 Pop.			Availability of Radios Per 1000 Population	
	1950	1967	1971	1960	1970
POLITICALLY DOMINANT					
Average	23.6	30.9	37.9	55.3	62.6
POWERFUL TRANSITION					
Bolivia	23	23	42	73	288
Ecuador	50	44	41	41	279
Panama	111	81	106	159	157
Peru	40	100	118	101	134
Average	56	62	77	93.5	214.5
POWERFUL MODERN					
Argentina	154	169	179	167	370
Brazil	51	31	36	66	60
Colombia	59	53	109	139	105
Venezuela	71	31	93	186	164
Average	83.8	71	104	139.5	174.8
NON-POLITICAL					
Average	112.0	120.3	111.5	135	209

The availability of newspapers per 1000 inhabitants has improved about the same within both of the "powerful" categories, each increasing the number of newspapers by about 21. The number of radios available within the "powerful-transition" countries has increased by about 130%, compared to only a 26% increase in the "powerful-modern" countries.

In considering all of the categories, both categories of the "powerful" countries have shown the greatest increase in newspaper circulation. The "non-involved" countries, though experiencing no change, still have the greatest newspaper circulation. The "dominant" countries have less than 1/2 the number of newspapers available as any other category, even though they are steadily increasing the availability of printed material. The "powerful-transition" countries have shown the greatest increase in the number of radio receivers available to the population, increasing the availability by 130%. The "non-involved" countries increased the availability by about 55%; while the other two categories showed a much smaller increase, 26% for the "powerful-modern" and 13% for the "dominant."

Source: 3-16.

TABLE D -18

Communications

Categories/Country	Telephones per 100 Inhabitants						
	1959	1966	1967	1968	1969	1970	1971
POLITICALLY DOMINANT							
Average	0.39	0.55	0.67	0.77	0.83	1.00	1.02
POWERFUL TRANSITION							
Bolivia	0.54	0.60	0.80	0.70	0.80	0.90	0.90
Ecuador	0.56	0.80	0.80	1.50	1.60	2.10	2.40
Panama	2.40	4.10	4.30	4.20	4.30	5.50	5.50
Peru	0.90	1.10	1.20	1.30	1.30	1.70	1.70
Average	1.10	1.65	1.78	1.93	2.00	2.55	2.63
POWERFUL MODERN							
Argentina	5.91	6.50	6.70	6.80	7.00	7.50	7.70
Brazil	1.33	1.58	1.70	1.70	1.90	2.20	2.40
Colombia	1.60	2.30	3.80	4.10	2.70	3.80	3.90
Venezuela	2.00	3.00	3.40	3.50	3.70	3.90	4.20
Average	2.71	3.35	3.90	4.03	3.83	4.35	4.55
NON POLITICAL							
Average	2.43	3.25	3.63	4.05	4.20	4.43	4.78

The "powerful-modern" countries not only have more telephones per 100 inhabitants, but the increase during the period was greater (1.84 telephones per 100 inhabitants) than for the "powerful-transition" which increased the number of telephones per 100 inhabitants by 1.53.

The "dominant" category has fewer telephones and made only a slight improvement during the period. The "non-involved" countries not only have more telephones available, but the increase in the number available during the period was the greatest (2.35), followed by the "powerful-modern" and then the "powerful-transition."

Source: 3-16.

TABLE D-19

Consumption and Inflation

Categories/Country	Per Capita Consumption ($ at 1960 Prices)			Inflation, changes in Consumer prices from 1960 to 1969 (Percentages)
	1954-59	1967-69	Variation	
POLITICALLY DOMINANT				
Average	178.4	222.9	21.48	1.98
POWERFUL TRANSITION				
Bolivia	139.1	152.2	9.4	5.6
Ecuador	201.5	229.0	13.6	4.2
Panama	302.7	431.1	42.4	1.2
Peru	214.2	297.5	38.9	10.1
Average	214.4	277.5	26.1	5.3
POWERFUL MODERN				
Argentina	562.2	676.5	20.3	22.2
Brazil	183.4	258.8	41.1	47.2
Colombia	229.9	292.0	27.0	11.7
Venezuela	344.0	370.9	7.8	0.7
Average	329.9	399.5	24.1	20.5
NON POLITICAL				
Average	403.0	471.0	25.2	19.4

The "powerful-modern" countries increased their dollar value of per capita consumption by about $69.6, while the "powerful transition" countries increased by $63.1, a difference of insufficient magnitude to warrant distinction. The rate of inflation averaged about 2.2% for the "powerful-modern" and about 0.6% for the "powerful-transition". It will be recalled that a moderate rate of inflation is desirable.

In considering all of the categories, the change in per capita consumption was about equal for the "non-involved" and the two "powerful" categories, and least within the "dominant" countries. The rates of inflation were favorable in both the "non-involved" and "powerful-modern" countries. The "dominant" and "powerful transition" countries experienced very small rates of inflation, 0.2% and 0.6%, respectively.

Source: 3-17.

TABLE D -20

Land Distribution

Categories/Country	Gini Index 1960	Wien's Index 1963
POLITICALLY DOMINANT		
Average	.810	42
POWERFUL TRANSITION		
Bolivia	.938	41
Ecuador	.864	67
Panama	.737	35
Peru	.933	67
Average	.868	52.5
POWERFUL MODERN		
Argentina	.867	54
Brazil	.845	67
Colombia	.864	67
Venezuela	.909	67
Average	.869	63.8
NON POLITICAL		
Average	.838	47

The distribution of land as a measure of inequality is about the same for the two categories of "powerful" countries when using the Gini Index. However, Wien's Index suggests that greater inequalities exist within the "powerful-modern" countries. Since the reliability of the two indexes cannot be adjudged, the two "powerful" categories will be considered equal.

The "dominant" countries, using either index, have lower levels of inequality, followed by the "non-involved", with the two "powerful" categories having the greatest land distribution inequalities.

Source: See TABLE 3.18.

TABLE D-21

Military Expenditures

Categories/Country	As Percent GNP 61-62	63-64	65-66	67-68	69-70	Arms Imports	Manpower Ratio
POLITICALLY DOMINANT							
Average	1.89	2.00	1.95	1.73	1.80		7.63
POWERFUL TRANSITION							
Bolivia	1.15	1.75	2.40	2.95	2.85	33	7.70
Ecuador	2.20	1.90	2.20	1.90	1.50	49	7.20
Panama	0.10	0.20	0.15	0.10	0.15		4.30
Peru	2.70	3.15	2.80	3.65	3.75	185	8.10
Average	1.54	1.85	1.89	2.15	2.06	89	6.87
POWERFUL MODERN							
Argentina	2.80	2.25	2.05	2.25	2.20	139	9.30
Brazil	1.65	2.50	2.30	2.45	2.70	294	4.50
Colombia	1.70	1.80	1.65	1.65	1.55	85	6.60
Venezuela	2.35	1.95	2.25	2.20	2.00	75	6.70
Average	2.12	2.12	2.06	2.14	2.11	149	6.80
NON POLITICAL							
Average	1.28	1.38	1.65	1.19	1.25	65	5.60

Source: See Table 3.19.

The "powerful-modern" countries, although having a larger portion of their GNP expended on military related materials, have maintained a constant level throughout the sixties. Whereas the "powerful-transition" countries have substantially increased the share of their GNP expended on military materials. Considering the size of the countries in the "powerful-modern" category to those in the "powerful-transition" category the arms importation appears about equal.

In comparison with the other categories the "non involved" category devotes the least amount of their GNP to military expenses, followed closely by the "dominant" countries. The two "powerful" categories expend a larger portion of their GNP on the military, with the greatest increase during the past decade having occurred within the "powerful-transition" countries. Both "powerful" categories import a larger amount of arms than the "non-involved" countries. The "non-involved" category, excluding Costa Rica, has a smaller manpower ratio than the other categories. The "dominant" countries have the largest manpower ratio. Both "powerful" categories fall about mid-way between these two extremes.

TABLE D-22

Conflict

Categories/Country	No. Protest Demonstrations		No. Riots		No. Armed Attacks		No. Governmental Sanctions	
	1950-1959	1960-1967	1950-1959	1960-1967	1950-1959	1960-1967	1950-1959	1960-1967
POLITICALLY DOMINANT								
Average	8	11.9	13.4	23.3	36	75.7	70.4	74.6
POWERFUL TRANSITION								
Bolivia	10	21	37	58	83	143	119	83
Ecuador	8	21	29	44	39	38	63	53
Panama	17	18	47	51	28	28	107	30
Peru	13	14	22	19	25	122	96	51
Average	12	18.5	34	43	49	83	96	54
POWERFUL MODERN								
Argentina	48	51	48	50	202	186	816	209
Brazil	11	17	59	36	59	58	153	170
Colombia	25	28	45	80	274	278	170	42
Venezuela	11	29	79	91	71	438	162	268
Average	24	31	58	64	152	240	325	172
NON POLITICAL								
Average	7	12	30	25.2	22.8	17.8	64	28.2

Source: See Table 3.20

Both "powerful" categories experienced an increase in the number of protest demonstrations during the period; however, the number of such events was almost twice as great in the "powerful-modern" countries. Considering the differences in the size of countries in each category, the actual difference becomes less significant. Similar results are seen in the occurrance of riot events. The increase in the number of armed attacks has been slightly greater (70%) in the "powerful-transition" countries than in the "powerful-modern" (60%); however, the latter have a much higher overall rate. Again the factor of size must be considered, suggesting no apparent distinction between the two categories. Both of the "powerful" categories have decreased the number of governmental sanctions by about 45%.

TABLE D -22 (Continued)

Considering, all the categories, the "non involved" and "dominant" countries have both maintained a low level of protest demonstrations. Only the "non-involved" countries experienced a decrease in the number of riots during the period, while all other categories experienced an increase. In only the "dominant" countries did the number of governmental sanctions increase. In all other categories an actual decrease occured, with the largest noted among the "non-involved" countries, 60%, as compared to about 45% for the two "powerful" categories.

TABLE D -23

Deaths Due to Domestic Violence

Categories/Country	Total number of deaths for each two year period								
	50/51	52/53	54/55	56/57	58/59	60/61	62/63	64/65	66/67
POLITICALLY DOMINANT									
Total	38	48	171	256	635	193	209	4097	273
	1950 to 1959: 1148					1960 to 1967: 4772			
POWERFUL TRANSITION									
Bolivia	16	3040	3	8	112	296	23	441	61
Ecuador	2	6	0	6	59	43	3	4	6
Panama	31	0	3	0	14	0	0	45	2
Peru	292	0	1	7	5	8	17	530	10
Total	341	3046	7	21	190	347	43	1020	79
Total	1950 to 1959: 3605					1960 to 1967: 1489			
POWERFUL MODERN									
Argentina	5	19	6606	42	0	22	75	16	2
Brazil	26	18	14	6	2	22	8	1	22
Colombia	183	872	765	1654	383	280	277	806	72
Venezuela	12	82	2	30	710	62	682	62	31
Total	226	991	7387	1732	1095	386	1042	885	127
Total	1950 to 1959: 11,432					1960 to 1967: 2440			
NON POLITICAL									
Total	26	50	147	43	24	136	25	44	71
Total	1950 to 1959: 290					1960 to 1967: 276			

Source: See Table 3.21.

Although the number of deaths related to domestic violence has decreased more in the "powerful" countries, the actual number, even during the period 1960-1967, is more than 1.5 times greater than in the "powerful-transition" countries. Again size may be a factor; however, since the rates fluctuate so greatly from one year to the next, any evaluation is somewhat arbitrary. The "powerful-modern" countries are considered to have the highest rate.

TABLE D -23 (Continued)

The "non-involved" countries have maintained a very low number of deaths resulting from domestic violence throughout the 50's and 60's. All other categories have experienced a high number of such deaths, with the largest number occuring within the "powerful-modern" countries. The number of violence related deaths are similar in the "powerful-transition" and the "dominant" countries.

TABLE D-24

Voting Patterns and Competitiveness of Elections

Category	Percent of total population voting in Presidential elections			Competitiveness and free elections
	1946-50	1951-59	1960-68	
POLITICALLY DOMINANT	20.03	26.56	26.67	2.33
POWERFUL TRANSITION	13.90	21.80	26.90	1.25
POWERFUL MODERN	15.90	34.80	26.10	1.70
NON POLITICAL	13.08	23.38	32.39	1.00

Source: See Table 3.22.

The pattern of voting behavior is not distinctively different within the two "powerful" categories, both having increased the proportion of the population voting about equally. Surprisingly the level of competitiveness of elections was higher for the "powerful-transition" countries than for the "powerful-modern" countries. Perhaps an explanation for this is that the military has not fully decided whom to support, thus they are waiting to determine where the political power lies. Once determined, they may become more active in restricting free elections.

The voting patterns are quite similar for all four categories of countries. The "non-involved" countries clearly have the most competitive and free elections, followed by the "powerful-transition" countries. The least competitive and free elections are found in the "dominant" countries.

THE EFFECTS OF POLITICIZED MILITARIES ON THE SOCIO-ECONOMIC RATES OF DEVELOPMENT OF "THIRD WORLD" COUNTRIES

by

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This study is a comparative analysis to determine the effects of politicized militaries, of the 'Third World' nations, upon the socio-economic rates of development. It is hypothesised that those countries in whith the military intermittently intervenes in the political process will develop socially and economically at rates nearly equal to those countries with non-politicized militaries. Further, in those countries where the military dominates the political process, the rate of socio-economic development will be significantly slower.

Initially, nineteen of the Latin American countries were classified into one of three categories (politically "dominant", politically "powerful", and "non-involved") according to the level of participation of their militaries in the political process. The thesis involves a comparative analysis to determine the achieved rates of development during the 1960's in three major areas: economic development, in which 14 variables were analyzed; social development, indicated by nineteen variables; and military related, utilizing 10 variables which were indicative of the consequences of military intervention in terms of societal cost.

The initial analysis revealed that the "powerful" category was not a homogenous group. This category subsequently was divided into two groups, "powerful-transition" and "powerful-modern" based upon the level of societal participation. It was hypothesised that the "powerful-modern" countries would achieve a higher rate of development then the "powerful-transition" countries. This dichotomization permitted the analysis of four distinct groupings of countries; politically "dom-

inant," "powerful-transition," "powerful-modern," and "non-involved."

The rate of economic growth between the four categories did not differ significantly; however, the rate achieved by the "dominant" group was the lowest of the four. A significant variation in the rate of social development was noted. The "powerful-modern" and "non-involved" countries attained higher levels of social development than did those countries classified as "powerful-transition" or "dominant." The latter category had the lowest rate of social development. Overall, the "powerful-modern" and "non-involved" countries achieved nearly equal rates of socio-economic development during the 1960's. However, the "powerful-modern" countries achieved their high rates of development at an extreme cost to the society in terms of the frequent occurrances of conflict and violent events, the large numbers of deaths resulting from the same, the imposition of governmental sanctions, and the expenses in maintaining their military machine. Those countries with non-politicized militaries achieved nearly equal rates of development at a negligible societal cost.