Regionalism in South East Asia

A Factor Analysis Approach

by

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(ABSTRACT)

The concept of regionalism has been the subject of vast research. However, there have been few empirical studies of South East Asia. Although several authors have examined regionalism on a global scale (Russett 1967), the theoretical constructs have been primarily based on regionalism in Western Europe (Haas 1964). Few of these theories have been applied in the context of South East Asia.

The current members of ASEAN were chosen for my research paper. ASEAN includes Indonesia, Malaysia, Thailand, Singapore and the Philippines, with the later addition of Brunei in 1984. The research paper was an attempt to analyze the following questions:

- What degree of regionalism do the ASEAN countries show with regard to each variable defined as measuring regionalism. An analysis of the usefulness and limitations of each variable will be considered in the study.

- What is the significance of regionalism in South East Asia, in terms of current theories in the field of Political Science/International Relations.

1 ASEAN stands for the Association of South East Asian Nations.
Data was used from a variety of secondary sources including UNDEX United Nations documents, International Trade Directory and the World Handbook of Political and Social Indicators. The variables were then correlated to check the extent of regionalism in the ASEAN countries.

Factor Analysis and Pearson's correlation statistic were used to determine the relationship between variables used to measure regionalism. From the study, the concept of regionalism was defined and measured by multiple indicators. The results indicated that some of the variables used to operationalize and measure regionalism may be inappropriate in an Asian setting. My study found that regionalism in terms of observable cooperation, in domestic and international policy had increased but has not reached the stage of political and economic integration among the ASEAN members.
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Finally, I wish to dedicate this thesis to a special brother, STUART.
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1.0 Introduction

Musjawarah is an Indonesian word that has its roots in traditional village society. Musjawarah means unanimity and consensus not between opponents but between friends and brothers. It has been used to describe the interstate relations among the countries of South East Asia. Does this accurately reflect the possibilities and limits of cooperation and integration within South East Asia? The frequent references to the Musjawarah ties of kinship and common traditions indicate the existence of communal sentiments, but their strength and significance can only be assessed in the light of other evidence such as the quantitative measure of the degree of regionalism in the context of South East Asia.

This study is concerned with the measurement of the degree of regionalism in South East Asia. Regionalism is defined in this study as observable cooperation in both domestic and international policy, with the final implication of political and economic integration. The research on regionalism has been predominantly on European prospects for regionalism and integration. The reason for focusing on an area such as South East Asia, is due to the fact that it has not achieved the same prominence or theorizing accorded to Western Europe.

Regionalism is not directly measurable but is inferred from observable properties. In order to measure regionalism, it is necessary to operationally define regionalism. The measurable
characteristics selected for analysis are based on Russett’s model outlined in his book *International Regions and the International System A Study in Political Ecology*. (1967). The variables operationalized are socio economic homogeneity, geographic proximity, political and economic interdependence. Data for socio economic homogeneity are taken from the World Handbook of Social and Political Indicators. The selection of indicators for this construct are outlined in the study. An alternative source of data is available for economic interdependence. Trade data from the I.M.F. trade data set are used to measure this variable. For political interdependence, the U.N. roll call votes from a recent General Assembly, the 38th Assembly of 1982 are operationalized to measure this indicator. For geographic proximity, the data are from a recent survey, Direct Line Distances. These variables used to measure regionalism are discussed together with their reliability and validity. This is of crucial importance in order to evaluate the logical consistency between the theoretical assumptions and empirical measurements.

### 1.1 Object of the Study

This study is an attempt to measure the countries of South East Asia (more specifically ASEAN), in terms of their degree of regionalism. The relationship between their political systems and their social and physical environments is examined. Although this study utilizes Russett’s methodology and variables, the lack of explanatory theory about the determinants of regionalism, means that the significance of regionalism in terms of current theories is drawn from alternative literature.

Factor analysis is chosen to analyze the data. It is designed to separate the interrelationships among the variables so that independent influences or causes can be recognized. Furthermore, there is no

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restriction on the content of the data to be analyzed, so that it could be applied to all the variables chosen to measure regionalism in South East Asia.

Factor analysis is the method adopted by Russett in his study. In order to test the reliability and validity of my results, the same methodology was adopted. However, this study is not interested in Russett’s research question, which was to group all countries in terms of subsystems of the international system. He aggregated nations in terms of their socio cultural similarity, trade transactions, geographic proximity and common political orientations. In contrast my study is an attempt to answer the following research questions:

- What degree of regionalism do the ASEAN countries show with regard to each variable defined as measuring regionalism. An analysis of the usefulness and limitations of each variable will be considered in the study.

- What is the significance of regionalism in South East Asia, in terms of current theories in the field of Political Science/International Relations.

### 1.2 Selection of Countries for the Study

The states chosen for the analysis are the six members of the Association of South East Asian Nations (ASEAN). These are Indonesia, Malaysia, the Philippines, Thailand, Singapore and the later addition of Brunei in 1984. The members of ASEAN are chosen since they share certain attributes that suggest that they are a region. The degree of commonality can be traced to the predominantly Malay ethnic origin in South East Asia. The movement of Malays through the area linked the countries by trade and cultural movements, long before the arrival of the European
colonialists. Consequently a network of relationships among Islamic traders fostered links between the South East Asian nations.

The similar ethnic background suggests that cultural and social relations within ASEAN may distinguish them as a region. According to Warren, a complex variety of tributary relations prevailed in the region, ranging from collective services and tributes to personal patron-client relations.\(^4\) The pre-colonial period was one of similar communal orientation and social structure that emerges from regional historical studies. This degree of commonality, in the structure of relations among the South East Asian countries, indicates a degree of regional consciousness. Regional consciousness is the sense of common identity, self awareness and shared mutual interests.

This regional consciousness is present among the ASEAN members, since they share a relatively similar vision of economic growth. This recognition of shared interests is indicated by their common strategy in economic relations with third countries and their stress on export oriented development. In suggesting that there exists a common regional consciousness, the establishment of a regional organization ASEAN, indicates a degree of regionalism among the ASEAN members. The establishment of an institution to implement joint decisions indicates that there is a consciousness of common interests among the six member countries. The ASEAN organization itself is important in the measurement of the degree of regionalism in South East Asia.

ASEAN was formed in 1967 as a developmental regional organization. Several previous attempts at regional cooperation had laid the groundwork for later regional cooperation and integration. The history of regional organization and cooperation in South East Asia can be divided into three periods.\(^5\) In the first period from 1945-1959, most of the initiatives originated outside the region, with the lead being provided by such non-Asian powers as the U.K. and U.S. Several precursors

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towards regional cooperation emerged during this period, most notably the ECAFE and Columbo Plan.

In the second period from 1960-1967, there was some movement from the South East Asian members themselves towards regional organization and cooperation. The Association of South East Asian Nations (ASEAN) reflects the heritage of the Association of Southeast Asia (ASA) 1961-1967, an organization consisting of Malaysia, the Philippines and Thailand for social and cultural cooperation. A second regional organization Maphilindo was formed in 1967. Maphilindo whose members were Indonesia, Malaysia and the Philippines combined in a loose association to work together in close harmony in economic, social and cultural fields. The organization was terminated by the friction between Malaysia and the Philippines over the territorial issue of Sabah. The importance of these organizations is that the initiative was from the South East Asian countries themselves, and the organization was indigenous to the region.

ASEAN is the latest stage in an evolutionary process of community formation and regional consciousness in South East Asia. It is a culmination of previous attempts to increase cooperation, integration and regionalism. The aims and purposes of ASEAN are the economic growth, social progress and cultural development of the region. The preamble of the ASEAN Declaration also refers to the promotion of regional peace and stability. Yet the tangible progress towards these aims and objectives has been the subject of considerable debate. Between 1967-1975 ASEAN appeared to be simply rhetoric. However, in 1975 due to the fall of Indochina to Communism, a significant momentum developed that indicates a degree of common perception and concern for security among the ASEAN countries. As a result of the Bali Summit in 1976, ASEAN proceeded to increase collaboration in terms of economic and foreign policy postures. The recognition of shared interests and the development of a regional organization to implement joint decisions, suggests a degree of regionalism is recognizable amongst the ASEAN members.

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6 ECAFE is the United Nations Commission for Asia and the Far East.
However common perceptions and attitudes in ASEAN are difficult to measure and verify, but there is reason to believe that the ASEAN countries are a region. As a result, the present condition of the ASEAN countries and their regional organization are measured in terms of socio economic homogeneity, geographic proximity, political and economic interdependence using factor analysis. In using factor analysis the degree of regionalism among the ASEAN countries can be tested. The results of the analysis can then be used to answer the research questions outlined in this study. In the analysis additional countries are selected, in order to distinguish if the patterned variation is greater among the ASEAN countries themselves or whether the relationship in terms of geographic proximity, socio economic interdependence, political and social interdependence is affected by other countries in the international system. The selection of countries is based on a priori reasoning, that those countries that are geographically proximate (e.g. Laos) may be influential in terms of the behavior of the ASEAN countries. Furthermore, the selection of countries includes those that have historically a presence there whether militarily, economically, socially or politically. This warrants the inclusion of such countries as the U.S., U.K. and China for example. The inclusion of Middle Eastern countries is due to the importance of religious ties and has been recognized as a basic indicator of analysis of political behavior in the United Nations. The study does not include the universe of states. It is recognized that the exclusion of certain countries will affect the analysis. While additional countries could be included in the analysis, the present study is concerned with the question of regionalism in South East Asia, rather than regions in general. Hence the number of countries was felt to be representative enough to distinguish variations or relationships in the data, and whether the ASEAN countries produce a single dimension, indicating a high degree of regionalism.

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7 United Nations voting behavior is used in this study as a measure of the degree of political interdependence. Russett and Alker in their study World Politics and the General Assembly (New Haven and London: Yale University Press, 1965) recognize the importance of religious affiliation.
1.3 Summary of Contents

My study is composed of eight chapters. Chapter 1 outlines the problem being studied, the purpose of the study and its limitations. Chapter 2 reviews current literature on the subject, in terms of general theories outlining the topic of regionalism and specifically on the literature concerned with regionalism in an Asian setting. Chapter 3 is concerned with the methodology to be used. This includes the source of the data, the operationalization of various indicators defined as measuring the concept of regionalism and the analysis techniques to be used. Chapters 4 to 8 are concerned with the analysis of the data collected and the results of the analysis. Each chapter uses the results of the data, to generate discussion and establish conclusions about the research topic. The conclusions of the study indicates what direction future research should take.
2.0 Literature Review

This chapter is concerned with different theories and empirical studies undertaken in the comparative field over the definition of a region. First, a brief review of regions is outlined in terms of varying definitions and measurement. Second, the review outlines the various theories associated with the concept of region. Regionalism in an Asian setting will then be discussed by reviewing the few authors that have analyzed the concept in this particular area. Finally, the economic, social and political variables associated with regionalism will be outlined by a brief literature review.

2.1 The concept of region

The concept of region has been the subject of widespread interest and study. Many authors attempt a definition of region. As Jorgenson-Dahl remarks the empirical diversity,

is reflected in the academic literature on the subject in which reasons for regarding a group of states as a region vary from writer to writer according to interests and purposes. (8)
The study is not an attempt to prejudge the issue of whether South East Asia may be regarded as a region. The use of the term region to designate the countries of ASEAN implies that the area has some commonalities. The importance of perceptions by outsiders, of whether the area constitutes a region is equally as important, as perceptions of the government and people within the area, since it adds legitimacy to the claim that the area can be classified as a region.

2.2 Definitions and measurement of regions

2.2.1 Definitions

In this study regionalism is defined as observable cooperation in both domestic and international policy, with the implication of political and economic integration. Unavoidably, a selective judgement has gone into this definition. A review of alternative definitions indicates the ambiguity in the term regionalism and the necessity of a precise definition for the purpose of this analysis. Various definitions in the literature of the term region results from the researcher's purpose, needs and method of measurement. The different conceptual foci of the researchers such as regional organizations, blocs or subsystems has resulted in varying definitions and measurement indicators.

Thompson (1970), states that 22 published analysts (1958-71) have produced approximately 21 attributes to describe a regional subsystem. Although different authors stress particular attributes, there is some common ground among the definitions. It is generally agreed that geographic contiguity is a necessary attribute of a region. As Nye states "geographic proximity seemed to be

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8 Jorgenson-Dahl Regional Organization and Order in South East Asia (New York: St Martin's Press 1982), p. XI.
the dominant influence in the structuring of most subgroups." In agreeing, Thompson (1970) states that the proximity or primary stress on geographic region is implied by the term regional subsystem. This focus on an physical unit is necessary according to Oran Young since, "a conception of region that abandons geographic contiguity as a necessary condition means that the term "region" is apt to be so inclusive that it is useless."10

Unless this distinction is made the area of study could encompass such groups as multinational companies or organizations, which could be functional units of analysis rather than the homogenous region, with common interests and interaction that is classified as a region (Russett 1967). Russett’s emphasis on factors other than geographic proximity is supported by Nye (1973). Nye believes that historical, psychological and anthropological factors are important in establishing regional links. The links between countries comprising a region that show some degree of ethnic, linguistic, cultural, social and historical bonds is shared by Thompson (1970) and Yalem (1973).

These agreements on the attributes of a region view the perception of belonging as an important factor in distinguishing a region. As Jorgenson-Dahl (1982) alludes to earlier, and Thompson classifies as internal and external recognition, the concept of region to be useful must involve some awareness of subsystem distinctiveness (1970). For the regionalists according to Nye, the sense of belonging is primarily the result of concern for status or defense, which has resulted in combined power at high/low levels of integration. Binder would agree with this conception of regionalism, that the smaller powers are attempting to insulate themselves from the great powers or are attempting to manipulate the bipolar situation to their own advantage (Binder 1958).

Yet in finding agreement on various attributes to define a region, the problem of minimal size is widespread in the literature. Researchers suggest minimum thresholds from one to twelve


10 Young O. Professor Russett: Industrious Taylor to a Naked Emperor World Politics XXI vol 3, 1969 p. 488.
Brecher (1973) advocates at least three actors in his concept of a subordinate regional system of South East Asia. While all contemporary regional subsystems have at least three actors (Thompson 1970), there is no reason to confine this attribute in this way. It also illustrates a nation state bias in defining the concept of regionalism thus limiting its use as Young (1969) proscribed.

### 2.3 Measurement

For the purpose of this study, regionalism is measured by the list of attributes outlined by Russett in his study *International Regions and the International System: A Study in Political Ecology*. These attributes namely socio economic homogeneity, geographic proximity, political and economic interdependence are operationalized using factor analysis. Factor analysis is only one method of measuring regionalism. There are a number of definitions and techniques available which are discussed because of their contribution to understanding the concept of regionalism. This conceptual disparity in defining a region is similarly found in the means of measuring the construct. Researchers often look at similar behavioral patterns such as voting in international bodies to operationalize the concept of region. This assumes that the similarity of nations in a given region are based on the similar behavior of individuals who comprise the nations under study. Deutsch (1953) uses intragroup transactions as a measure of commonality. Thus, if the population shares values, preferences, life styles and identifications, there is a distinct possibility that they will communicate through cultural, social and economic transactions. Puchala (1968) uses opinion poll data, rather than descriptive statistics for his study of regionalism. He undertook a comparative study of Western European attitudes to measure the peoples’ consciousness of being a regional and political entity.
In contrast to the behavioral approach, Russett (1967) uses factor analysis looking at the national variation on variables, hoping that some pattern of social/cultural variation will emerge which is relevant to his theory of regionalism. By looking at the social/cultural variation, he finds which correlations of the broadest factor load with particular variables. His description of region is contingent on the variables he extracts. Similarly, Berry’s (1960) factorial approach is to select countries based on economic development and demographic variables.

Kegley and Howell (1975) also use factor analysis in relation to South East Asia, but they suggest that the hierarchical clustering technique or multidimensional scaling procedure may provide alternatives to measure regionalism. Thus, the measurement of regionalism focuses on the study of political behavior patterns between individuals or groups, to determine their similarities or measures the degree of regionalism in terms of non behavioral data such as trade transactions or socio/cultural variation. As far as the measurement of regionalism is concerned there seems to be no dominant approach to measure it. The importance is in justifying the indicators chosen, and in formulating links among the variables classified under the concept of region.

2.4 Variables relating to Regionalism

The literature indicates that a variety of variables have been used to test regionalism. In order to justify the variables chosen this study relied primarily on Russett’s classification in his book International Regions and the International System: A Study in Political Ecology. It should be noted that Russett is not the only researcher to operationalize these variables. Russett draws upon other researchers to justify his choice of variables. In keeping with this pattern my study reviews the variables chosen by Russett. These include: socio cultural homogeneity, political attitudes and behavior, geographic proximity, economic interdependence, political interdependence (through
intergovernmental organizations and institutions). Furthermore, an analysis of the usefulness and limitations of each variable will be considered in the study.

2.5 *Socio Cultural Homogeneity*

The relationship between socio cultural factors and regionalism has been extensively cited by researchers. Some authors argue that a positive relationship between socio cultural homogeneity and regionalism is necessary (Deutsch 1954; Haas 1964). For the regional integration theorists, Russett (1967) states that some degree of cultural similarity is a prerequisite. Russett tests the similarity of nations, by looking at multiple indicators of socio cultural characteristics. He includes such variables as percentage of Muslims in the country, female workers as a percentage of the labor force and percentage of Adults literate.\(^{11}\)

Relatively, Cantori and Spiegel (1970) are concerned with the nature and level of cohesion between nations. The cohesion of nations is similar to the concept of integration (Haas 1964) measured by socio cultural homogeneity. Cantori and Spiegel measure social cohesion in terms of ethnicity, language, religion, culture and history. Their study shows a fairly ethnic homogeneity amongst the maritime South East Asian countries. In terms of religion, the area is mixed with Catholicism, Islam, Hinduism and Buddhism as the dominant religious groupings. Each area contains a mix of ethnic groups with Chinese and/or Indian workers being the largest two groups.

Yet regionalism in terms of history and culture is difficult to measure. Therefore, this study assesses social similarity using such indicators as birth rates, composition of the workforce and population figures. In addition this study adds an economic dimension to the measurement of regionalism in terms of socio cultural homogeneity. Indicators such as domestic expenditure, income and Gross

\[^{11}\text{All Russett's indicators are illustrated on page 18/19 of his study (1967).}\]
National Product (GNP) measure similar levels of economic development which would be one indication of social similarity or homogeneity.

However, this emphasis on some form of linguistic, historical or language bond is rendered unnecessary by Thompson, who feels they may be frequently present and of limited significance (Thompson 1970). Yet Thompson is not concerned with socio cultural homogeneity in order to measure integration but solely for indicating interaction among regional subsystems.

Not all research on South East Asia has suggested a positive relationship between regionalism and socio cultural homogeneity. Studies have argued against socio cultural homogeneity in South East Asia (Brecher 1973; Gordon 1968; Indorf 1982) due to racial, linguistic and historical antagonisms. Due to the various different results and measurements of socio cultural homogeneity, this study utilizes many of Russett’s indicators but adds an economic dimension to the analysis. This was because the economic indicators can be measured accurately along with the usual social indicators such as ethnicity, language and religion, rather than such operationally difficult measures as culture and history. Due to the modification of this variable it is more accurate to label it socio economic homogeneity in the analysis.

2.6 Political Attitudes And Behavior

Studies have been undertaken to indicate similar political attitudes or external behavior as a measure of regionalism. Researchers have used United Nations (U.N.) voting as an indicator of similar political attitudes and behavior (Russett 1967; Cantori and Spiegel 1970; Schubert 1978). This study of voting behavior is taken to indicate political attitudes and behavior of a country due to the difficulty of survey research of the general population. Yet the use of this indicator has been severely criticized (Haas 1973; Young 1969). This is due to the difficulty in equating the behavior
of the government with the attitudes of the populace. Secondly, systemic factors such as political allies are perceived as more important in measuring political attitudes than internal factors such as personality of individuals (Young 1969). Russett (1967) uses each roll call as a variable that was an issue of conflict, since the votes with high consensus will not distinguish differences among countries. Yet there is no distinction between more/less important issues using this methodology.

Despite these criticisms of the use of U.N. voting as an indicator of political attitudes several researchers have related regionalism with similarities of votes. Russett found that analyzing basic issues in the 1963 General Assembly produced five major groupings of Resolutions upon which votes were taken. These included the Cold War and Intervention in Africa dimensions. The Philippines, Thailand and Malaysia grouped on the issues of Cold War with the Brazzaville Africans cluster, whilst Indonesia voted with the Afro Asian group (non aligned neutral grouping).

2.7 **Geographic Proximity**

Geographic proximity is another variable operationalized in this study since the vast majority of literature reviewed made some reference to proximity or primary stress on a geographic region (Thompson 1970; Russett 1967; Cantori and Spiegel 1970). Thompson states that this factor in defining "regional" is the most consistently cited in the literature (Thompson 1970). The studies are concerned with whether South East Asia/ASEAN countries can be classified as a region by empirical analysis.

12 Singapore was grouped with Malaysia in Russett's study and Brunei was not included in his analysis since it was not yet an independent nation.
Russett operationalized geographic proximity by finding clusters of geographical distance measuring the straight line mileage between the capitals of any two countries. From his results Russett found South East Asia area as a specific geographic area, with the ASEAN countries being the core of the region. Yet in comparison to Europe it was not as geographically proximate. Russett did use more countries whereas the ASEAN countries may be more regional in terms of geographic proximity when tested.

The literature is consistent in suggesting that geographic proximity is a feature of regionalism. However, the regional subsystems approach (Thompson 1970; Modelski 1969; Young 1969) already implies geographic proximity by the term regional subsystem. Regional subsystems need not be geographical regions per se but actors rather than political units such as multinational corporations. By choosing ASEAN as an area of study, this implies that spatial homogeneity or proximity can be used as a measure of regionalism in this area. The necessity of measuring geographic proximity in order to classify as a region is not consistent throughout the literature. Although common to most though not all definitions, is the notion of geographic contiguity (Brecher 1973) which is necessary in order to limit the definition less it becomes too inclusive to be meaningless. Some studies simply assume that South East Asia constitutes a region (Jorgensen-Dahl 1982). The advantages according to Jorgensen-Dahl is that it does not prejudge the issue of how South East Asia may be regarded as a region.

Yet this does little to define the boundaries for study purposes, since South East Asia can be taken to include any area east of India and South of Japan and China for example. This results in ambiguity in the scope of the label South East Asia. Geographic proximity alone does not fully indicate whether South East Asia is a region, since the notion of region depends upon common interests and perceptions of being a distinct area (Nye 1973; Jorgensen-Dahl 1982; Thompson 1970). This distinguishes a homogenous region from a functionally interdependent “community area” (Russett) and necessitates its measurement as a multidimensional phenomenon.
2.8 Economic Interdependence

A review of the literature exploring the relationship between economic interdependence and regionalism generally indicates that transactions are the most common measure to illustrate economic interdependence. Transactions are contacts or dealings that are both governmental and nongovernmental between states (Puchala 1971). By convention, transaction analysts have tended to use foreign trade data to index ranges of economic transactions and international mail deliveries and newspaper circulations to index information exchanges (Russett 1967; Puchala 1971; Cantori and Spiegel 1970). In terms of cultural interaction, educational exchanges have been studied in terms of regionalism (Puchala 1971).

The measurement of transactions has been the subject of much controversy over its relevance to the study of regionalism (Inglehart 1968; Deutsch 1960; Haas 1973). Transaction flows have been recognized as limited, since they are simply descriptive rather than causal indicators of regionalism. Transaction flows reflect regional integration by monitoring the level of integration between governments, groups etc. but do not explain the progress towards regional integration.

Rather than limit transactions solely to trade areas several studies have used a variety of transaction indices. These include movements of labor, students and mail (Russett 1967; Puchala 1971; Deutsch 1960). Russett qualifies these indicators by stating that fewer than twenty countries could be compiled for student exchanges. This measure has improved since 1963 as a reliable indicator (Indorf 1985). In terms of mail, the data are existent and a good indicator of personal contacts at many levels (both elite and mass) from the World Handbook of Social and Political Indicators (Taylor et al 1985). In accordance with Russett's view, this study operationalizes trade transactions as the most appropriate in the South East Asian context. This is because trade data indicates the range of economic interaction, whilst the other measures such as international mail deliveries are more representative of social interaction and communication which is a better measure of socio
economic homogeneity. Other measures of transaction analysis such as periodical and newspaper circulation are rejected due to the language barriers in South East Asia which would limit the levels of measurement of this transaction. The possibility of labor movement as a description of economic transactions is felt to be inappropriate in the South East Asian context. The recorded transactions do not indicate if the movement is temporary or permanent nor does it record those who find work illegally, many of whom work in the informal sector.

Several different methodologies are adopted according to whether the researcher is concerned with intensity, interdependence or direction in the transaction relationship. Studies that are measuring the degree of penetration in a region employ the foreign to domestic ratio of transactions (Cantori and Spiegel 1970; Deutsch 1960). Cantori and Spiegel look at the external and internal transactions in terms of trade, economic investment, and materials. Their results suggest there is little intra core/regional core since the major exports are all raw materials and are of similar type. Russett is concerned with the interdependence among nations measured on the basis of a ratio between trade (exports plus imports) and Gross Domestic Product (Russett 1967). All of the ASEAN countries grouped in the Asia trade group with Malaysia also incorporated into the Commonwealth trading group. The data was based on 1963 figures.

In analyzing the variety of analytical techniques for transaction analysis, this study is concerned with the relative direction of trade flows in order to measure the interdependence among the nations in the study. Thus, the methodology most appropriate is based on Russett’s survey that measured the direction of nation’s relative transaction preferences.
2.9 Political Interdependence

Political interdependence has been associated with regionalism in the literature. It is reasonable to assume that increasing amounts of political interdependence would be an indication of regionalism. Some empirical evidence supports the notion that political interdependence is one indication of a region (Russett 1967; Nye 1968). In his global study, Russett has analyzed political interdependence in terms of common membership in international organizations. He wanted to see if the countries share similar political attitudes. Russett found a large group readily identified as Asia. The majority of members were from the non-communist states of East and South Asia. Russett included Australia and Great Britain within this grouping, with the former loading highly, indicating the degree of political interdependence to which the Australian government expresses towards its Asian neighbors (Russett 1967).

Schubert (1978) also used membership of organizations as an indicator of political interdependence. He found between 1950-1975 a growth in intergovernmental organizations to twenty four. Schubert not only counted the number of organizations but looked at political interdependence in terms of the scope of regional authority. This refers to the problems or issues addressed through collective action. Schubert using multidimensional indicators to measure political interdependence, looked at the growth in capabilities of organizations in terms of finances and staff.

Schubert’s conclusions were based on all the intergovernmental organizations but focusing solely on the ASEAN countries may produce different results. Schubert found the rate of organizational growth increasing with a shift from a macro regional organization such as the Afro-Asian Productivity Organization (APO) and the Colombo plan to micro regional organizations such as ASA and ASEAN.13 His findings clearly link to the Functionalist theory since the organizations

13 ASA is the Association of South Asia.
were primarily focusing upon socio-economic problems through collective action, rather than political activities.

2.10 Theories of regions

The justification of the variables chosen is designed to indicate the various approaches to measure regionalism in the literature. In operationalizing socio-economic homogeneity, geographic proximity, political and economic interdependence, this study draws upon the work of Russett. However, one of the criticisms with Russett's approach is the lack of theoretical formulations concerning links among the variables classified under the concept of regionalism (Young 1969). In order to overcome this problem, this study is explicitly concerned with the theoretical significance of regionalism in South East Asia, in terms of current theories in the literature. In reviewing the literature the theories fall into three broad categories: Subsystems theory, Functionalist theory and Communications theory. Subsystems theory is the application of broad categories of systems theory to regional studies. Researchers concerned with this theoretical approach include Thompson 1970; Brecher 1973; Cantori and Spiegel 1970. These authors use different terms to identify their focus of interest. The Functionalist theory is divided into two related branches, one of which is termed Neofunctionalism. The Neofunctionalist theory analyzes actor perception and behavior which is felt to coincide with behavior at the regional level. Neofunctional approaches are adopted by Haas (1964) in the notion of spillover and Barrie and Freidrich (1954) in terms of federalism. Spillover is the integrative process by which cooperation between political units in one issue area leads to further cooperation in other areas. Functionalist is based on the belief that flexible creation and adaptation of institutions will emerge in response to social and economic needs.

Communications theory is the interest in patterns of communications between units of analysis that result in closer union. Researchers who utilize the Communications theory approach include
Deutsch (1954, 1960) and Russett (1967). However, the boundaries between the communications and functionalist theory are not clear cut, since there is some overlap in the variables used by the researchers.

2.11 Systems Theories

Each of the three main approaches -Subsystems theory, Communications theory and Functionalist theory- adopt a systems approach. The Systems framework of analysis enables the system under study to be separate from its environment. The Systems model experiences inputs in the form of expectations, demands and supports which it must convert into output, namely policy and behavior, that will enable the system to survive as a political entity. The three theories have modified and conceptualized Systems theory in different ways. This study assesses the applicability of each of the three approaches (Communications, Functionalism and Subsystems theory) in the context of contemporary South East Asia.

2.11.1 Thompson’s Regional Subsystem

The Subsystems approach is an attempt to explain how discrete geographical groupings of states may form subsystems of their own within a larger system. This approach is adopted by Thompson and Brecher who conceive of South East Asia as a regional subsystem. Thompson proposes a “conceptual explication and propositional inventory”14 of a regional subsystem. His explication comprises four conditions:

14 Thompson ibid p. 95
• The interrelations are regular and frequent to the extent that a change at one point in the system affects other points.

• The actors are generally proximate.

• There is an internal and external recognition of the subsystem as a "distinctive area".

• The subsystem comprises two or more actors.

He has attempted to construct a general definition of regional subsystems. The usefulness of his definition will depend upon its acceptance or rejection by the researcher. The list of inventories under themes of intersystemic interaction or intrusive-penetrative behavior are multiple, often with internal disparity due to the variety of existing generalizations on the subject of regionalism. Despite the plea for greater conceptual clarification Thompson's approach is little more than a list of current views in the literature. The theories could be tested empirically, but the multiple inventories account for only some of the findings in the literature and not all are data based or have been subjected to verification and reliability.

2.11.2 The Subordinate State System Theory

The subordinate system of Brecher (1973) and Cantori and Spiegel (1970) focuses on the systems level, rather than the nation state as a case study approach. These authors are concerned with the interaction among states. Brecher examines the interdependence between local ties and interests and the global system. His analysis recognizes the constant penetration from outside by a dominant system such as the U.S. or Soviet bloc. Similarly, Cantori and Spiegel focus on the total interaction of relations within a region. Yet they do not view the subordinate system solely in terms of the dominant system. They recognize that outside powers often define the subordinate system and
describe different types of intrusive systems by outside powers. However, this intrusive system is examined in terms of the effects it has upon social, economic, political and organizational factors that foster or hinder cohesion in the region.

Thus, both authors place the subordinate region as the main focus of study, rather than external power relationships. By focusing on regions as units of analysis, Cantori and Spiegel use systems level vocabulary that has previously been used to describe the global dominant/subordinate relationship to the region itself. Cantori and Spiegel discuss regions in terms of core/periphery which is an interesting approach to the systemic study of regions. The core/periphery terms usually being applied to the international system but used by Cantori and Spiegel to describe relationships at the subsystems level. Similarly, this study wishes to focus upon relations among states in a given geographical area to measure their degree of regionalism. Yet in dealing with a distinct South East Asian subsystem, this study is concerned with the pattern of interaction both inside and outside the subsystem to see if the ASEAN countries constitute a distinct "community".

2.12 Communications Theory

Communications theory summarized by Haas (1973) is the transposition of laws from cybernetic theory, to the relationship between groups of people. This group may be nations, regions or social organizations using the volume of transactions as its major indicator. The communications theory suggests that intensive communication patterns will lead to political union or what Deutsch terms a security community. A security community is considered to be a group which has become integrated, whereby integration is defined as the attainment of a sense of community accompanied

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15 A community is a distinct group in which common or coordinated facilities for the making of decisions are supplemented by habits of compliance that are sufficiently widespread.

by formal institutions or practices, sufficiently strong and widespread to assure peaceful change among members with reasonable certainty." Communications theorists aim to demonstrate covariance among variables at the systems level. The theory assumes that the communications transactions replicate the relationship between nations or regions being researched. Yet according to Haas, the communications theorists do not indicate which of the transactions are more important in measuring the concept of regionalism. Deutsch (1960) assumes that the transactions measure human behavior, but it may be more realistic to focus not on transactions but the behavioral aspect, i.e., perceptions of actors involved in the decision-making process. Thus, the theory is more suggestive but difficult to link the indicators chosen with the concept being measured. Used in isolation, these variables are problematic in the context of South East Asia. The theory was designed to measure European regional integration in terms of the increase in the rates of transactions such as trade, mail, and tourist flows. The variables seem suited to a well-developed region due to the availability of data. Where possible, these variables may be used as primary indicators of regional interaction.

In addition to these methodological problems, the Communications approach has also been subjected to theoretical criticisms. As Harrison argues, "there is no way of proving that an intensive pattern of communications between states will result in a closer community, or conversely that a developing sense of community will give rise to a greater volume of transactions." The Communications theory is a retroactive model not a predictive one. The theory was not designed to prove that an intensive pattern of communication will result in a closer community. The attack on the behavioral assumptions of the Communications model is made indirectly by Rosenau (referring to opinion poll data). He argues that, "attitudinal and behavioral consensus does not frequently flow from frequent interaction and shared experiences." Although there is no way of


proving that intensive patterns of communications between countries will lead to a greater sense of regional consciousness, the transaction variables will be operationalized in this study. Using statistical measures, the relationship between attitudes and cross cultural contacts can provide important indications of regional behavior. Although transaction measures will not prove that regionalism is evident, if the ASEAN members show a high degree of interaction then the impediments to regionalism such as economic nationalism and historical antagonism (Gordon 1968; Brecher 1973) may not be conclusive.

2.13 Functionalist Theory

Functionalist theory is best illustrated by Mitrany’s book A Working Peace System (first published in 1946), and a later exposition by Ernest Haas titled Beyond the Nation State Functionalism and International Organization (1964). Functionalis t view cooperation as a necessary outcome due to increasingly complex socio-economic problems that engage all countries in the international arena. The Functionalis t s see that cooperation in one particular area will lead to a "spillover" process in other areas. This spillover occurs primarily in areas where politicization is minimal and least controversial. Nye sums up the theoretical assumption by stating that organizational growth or collective action will be fostered, since the less important the task politically either because of its technical nature or limited impact, the greater the prospects for the growth of the organization's authority vis à vis the member states.20

The Functionalis t s assume that "low" priority sectors that are least controversial will initiate cooperation. Thus, cooperation will proceed at an incremental pace. These low priority policy sectors will be numerous to cope with multiple areas of specific functional activity. As a result there

will be diffuse regional organizations. The proliferation of areas of activity limits the politicization as there are smaller numbers involved in decision making. The numerous decision making bodies do not replace the nation state, but proceed on an intergovernmental basis. The functionalist proposal is to limit politicization by structural constraints upon cooperative activity (Schubert 1978). The level of analysis by the functionalist theories can be regional, global or national. Mittrany concentrates on global level organizations. Neofunctionalists such as Haas see regional cooperation as an important feature in promoting peace and reducing conflict.

The theory is problematic since it assumes that there are common initial concerns over narrow issues. These concerns may be short term, temporary or permanent which the Functionalist theory does not account for. Secondly, incremental decision making may not be adopted by all the actors involved. This reduces the importance of overlap between policy areas and long range planning as a function of the decision making process.

A further criticism is that the concept of spillover is ambiguous since it is difficult to measure. The model has been unsuccessfully applied to developing countries where it is used only to predict impediments to regionalism, rather than successful results (Haas 1973). In this study it is applied to South East Asia as the measurement of economic and political interdependence links to the Functionalist concern with collective action. The results of the analysis may give some indication of the relevance of the Functionalist approach if economic and political interdependence exists among the ASEAN countries.

This study is interested in assessing the applicability of Subsystems, Communications and Functionalist theory in the context of South East Asia. A brief review of how regionalism is conceptualized and measured illustrates the conflicting results obtained by the researchers.


2.14 Regionalism in South East Asia

A few studies are reported in the literature which investigate the specific application of the concept of regionalism to South East Asia. The academic literature is divided between two approaches (Jorgensen-Dahl 1982). The first method is concerned with examining the conditions and impediments of regionalism in South East Asia. The results are then related to the wider body of theories developed about regionalism, integration and cooperation. The second method is usually a quantitative study that seeks to use hypotheses/generalizations from the current literature on regions, and test them in the context of South East Asia (Kegley 1975).

The first approach is more popular among researchers (Indorf 1982, Jorgensen-Dahl 1982). One reason is that the second method has been drawn from generalizations based on situations in Western Europe, whereas little of the theoretical understanding has been drawn from the experience of South East Asia (Jorgensen-Dahl 1982). This criticism is also shared by Kegley and Llewellyn (1975). Secondly, the "ideal" outcomes of regionalism, integration and cooperation are based on conditions and processes that have not reached this level of development in South East Asia. Despite these criticisms concerning the relevance of current theories, the purpose of this study is to provide empirical verification for the theoretical assumptions. This is tested by operationalizing the variables designed to measure the degree of regionalism in South East Asia.

The second approach by Schubert includes a lesser number of countries than this study encompassing other Asian countries such as Nepal, Burma, and India (Schubert 1978). In contrast, Brecher (1973) and Gordon (1968) look specifically at the ASEAN countries. Studies exploring the relationship between regionalism and South East Asia have produced varying results.

Schubert used a KYST multi-dimensional scaling analysis to model structural integration in an organizational system (Schubert 1978). He found that Asian organizational systems are highly fragmented along geographic regions. The analysis produced a South East Asian cluster. Schubert's
empirical study found that regional cooperation through the measurement of regional organizations increased in the period 1960-75. The scope, level and capability of regional organizations had increased. Schubert's study views the prospects of regionalism as positive due to the specific functional activities of the organizations which is the hallmark of the functionalist approach.

An important study by Kegley and Llewellyn (1975) uses factor analysis to measure the degree of regionalism in South East Asia. Utilizing Lindberg's thesis that regionalism is a multivariate dimension, the authors test Nye's construct of regional integration in relation to South East Asia. The authors' sample of countries is derived from the study by Cantori and Spiegel. The members of ASEAN comprise the core countries and neighboring polities constitute the periphery (for example Burma and Laos). The shortcomings of this approach are due to the fact that in operationalizing societal, economic, and political interdependence in relation to countries not geographically proximate, the relative transactions between pairs of countries, measures the direction and intensity solely in terms of the seventeen geographically proximate South East Asian countries. No indication is gained from the sample about the actors relative transaction preferences (Puchala 1971).

Not all of the research has demonstrated such a positive prospect for regionalism in South East Asia. In fact researchers have suggested that regionalism in South East Asia is hindered by specific factors (Brecher 1973; Gordon 1968) such as low intensity of communications and economic nationalism. These studies illustrate that cooperation and integration is negligible due to the limited interaction between the states (Brecher) and disputes or conflicts over territory and political ideologies (Gordon).

In contrast to Schubert, Gordon and Brecher found the incompatibility between nations as a hindrance to regionalism. This conflict may be the result of methodological differences between the studies. Schubert's empirical study that incorporates all of the South Asian nations uses data from intergovernmental organizations, to produce a positive relationship between regional variables and South East Asian nations. The studies by Brecher and Gordon, which rely on descriptive accounts
of individual events and concentrate solely on ASEAN countries demonstrate a negative relationship between regional variables and ASEAN nations.

### 2.15 Summary

Regionalism has been a concept of intense and often contentious semantic discussion especially since the 1950's. Despite such interest in the topic few studies have considered regionalism in terms of South East Asia and even fewer have researched regionalism among the ASEAN countries. Regionalism in South East Asia and ASEAN has been considered in terms of descriptive studies with little empirical investigation by researchers in political science and international relations.

One of the most important studies in empirical research utilized eighty two countries (Russett 1967). This study allows few generalizations regarding regionalism to the ASEAN countries as a specific entity. Secondly, the approach has been the subject of much criticism over definitional and measurement problems (Young 1969). Although my research uses Russett’s indicators, this study includes theoretical formulations to test their significance in the context of South East Asia. The theories are Subsystems, Communications and Functionalism. The indicators chosen are socio economic homogeneity, geographic proximity, political and economic interdependence. The results of the study are analyzed in chapters 4 to 8 to see if generalized conclusions pertaining to the concept of regionalism (in ASEAN) can be made.
3.0 Methodology

Order is a lovely thing,
On disarray it lays its wing,
Teaching simplicity to sing,

Anna Hampstead Branch. The Monk in the Kitchen.

As Chapter 2 indicates, the study of regionalism has been the subject of conflicting opinion and controversial research. The cause of the problem is often due to the varied methods that researchers have utilized in their research design. As Young has suggested, there is a serious lack of theory that gives precise meaning to the concept of regionalism. This has led to the problem of puristic induction, whereby empirical data are collected as an end in themselves (Young 1969). There is no conceptual or theoretical reasoning to state why these indicators were chosen to measure regionalism. Therefore, the theoretical formulations that identify the linkages amongst the variables must be fully explained. In order to refute Young's criticism, this study outlines the reasons why the indicators were chosen in terms of current theories.
3.1.1 Comparability

The methodological problems indicated have been noted by this research paper. In order to overcome some of the problems the present study uses methodology that resulted in comparability. As a result, the methodology adopted is similar to Russett (1966) in his study with additional variables from Schubert (1978) and Cantori and Spiegel (1970). Thus, the indicators outlined in the literature review in Chapter 2 are chosen to measure the concept of regionalism and operationally define what constitutes a region.

3.1.2 Validity

The validity of these indicators was outlined by Russett in his study. Studies finding similar results to Russett included Robinson (1965) using political variables from Banks and Textor (1903). Although Berry (1960) was concerned with economic development, one of his dimensions was consistent with Russett's findings. Finally, Gregg and Banks (1963) using both ecological and political variables, had findings consistent with Russett on one dimension, namely that of economic development.

3.1.3 Construct Validity

Construct validity will be based on how well the results in my research conform to the theories outlined in Chapter 2. These are Communications, Subsystems and Functionalist theory. The Jorgensen-Dahl study concluded that amongst the ASEAN five is emerging what Deutsch termed
a “sense of community”. Jorgensen-Dahl relates the Functionalist theory to the history of ASEAN with the prospect of future cooperation in areas of economic development and foreign policy. The present study is concerned with analyzing the results of the factor analysis and related these to relevant aspects of Communications, Functionalist and Subsystems theory.

With regard to the present study, regionalism is conceptualized and measured by a variety of indicators as the literature review outlines. Each indicator chosen to measure regionalism amongst the ASEAN countries is subjected to the factor analysis technique. Factor analysis is a type of multivariate analysis which,

isolates a series of underlying dimensions of individual differences, and makes it possible to describe a large set of data in terms of a relatively small number of such dimensions (Cattell 1966).

### 3.1.4 Data Collection

The data for this study have been gathered on forty three nations including the ASEAN members. The number of countries chosen is smaller than that by Russett in his original study. This is due to the focus on ASEAN rather than the broad categorizations of regions that Russett delineated. The number of countries in the data analysis is assumed to be broad enough to delineate a statistical relationship, if evident between the ASEAN countries, and to distinguish them from the other regional groupings. The selection of countries is fairly representative, to insure major patterns of variation between the countries and to determine the major dimensions of regionalism.

Principal component analysis is used to verify the assumption about the pattern of relationships (loadings) between the factors and the ASEAN countries. Figure 1 shows the general research design. If the ASEAN countries constitute a region in terms of the variables operationalized to measure regionalism, they would group together on one particular dimension. The remaining

21 Jorgensen-Dahl (1982) did not refer to Brunei, since at the time of writing Brunei was not a member of ASEAN.
countries would form other distinctive dimensions illustrating different characteristics from the ASEAN countries.

Principal components analysis is used since it can analyze large amounts of data. The advantage in using this method, is that it disentangles complex interrelationships among the data, so that independent patterns or relationships can be identified. Factor analysis examines the variation in the data, and links into a pattern those countries that vary uniformly with each other in terms of socio economic homogeneity, political interdependence, economic interdependence and geographic proximity. In this study the patterns of behavior of the ASEAN countries are treated as most important in order to assess the degree of regionalism in South East Asia.

In interpreting the results of the factor analysis, several rules established by Kim and Mueller (1978) were utilized. Firstly, at least two variables are required to load at 0.40 or higher to be interpreted, since small loadings explain a minimal amount of variance in the factor. The variables with the highest loadings are given greatest weight in the interpretation of the factors. Secondly, the eigenvalue is required to be greater than or equal to 1.00 This is based on Guttman’s lower bound (Rummell 1967), that it is necessary for the reliability of a factor that its eigenvalue be greater than unity.

The final criterion in the analysis is that of simple structure. This means that the rotated factors are distinguished in terms of distinct clusters of intercorrelation. (Thurstone 1947 Chapter 14). Thus, each factor should have some variables with relatively high loadings (approaching 1), with the remainder of the variables with fairly low loadings (near 0). This criterion is based on the assumption that a small number of factors can illustrate the cluster of relationships among the variables.
Figure 1. Research Design.

Methodology
3.1.5 Geographic Contiguity

Data for this variable are obtained from the Direct Line Distances. The direct line distance in miles between capitals, is coded and then input into a matrix format, in order to perform the factor analysis technique.

The number of countries used in the data matrix is smaller than that used for the other variables due to substantive sufficiency. Substantive sufficiency means that only a limited number of countries are selected from the universal number of countries possible, since it is a sufficient measure of the area of concern (geographic proximity). The six ASEAN countries are included and the remaining countries are chosen on the basis of their visual contiguity. This is based on a priori assumption that these countries have at various stages been classified as South East or South Asian. The inclusion for example of Mexico as a variable is rejected since general knowledge assumes it is not proximate to the ASEAN countries.

The capital cities are chosen as the fixed points to measure geographic distance between countries on the assumption that they represent the central focus in countries, both political, administrative and usually geographic. The distance is computed from the mathematical formula known as geodesic distance. This measures the shortest distance between two points on the spheroid. The distance is based on geographic coordinates of two points, which is similar to the air distance between two places which Russett utilized in his study.

A square symmetrical matrix of the geographic distances is obtained. The matrix is scaled using a bounding transformation. All the values are divided by the largest distance in the matrix and subtracted from one. The diagonal of each country to itself is unity, since zero indicates the furthest distance and unity the closest distance. Thus, the proximity of a country to itself equals 1.0.

23 ibid page V111
The equation below explains the bounding technique.

\[ D_{ij} = 1.0 - \frac{D_{ij}}{D_{\text{max}}} \]

where \( i \) represents the \( i^{th} \) row and \( j \) represents the \( j^{th} \) column of the matrix.

The purpose of this technique is to allow easier analysis of the data. Instead of transforming the data matrix to a correlation matrix the results are then subject to direct factor analysis. The values of the data matrix are similar to the correlation coefficient, so that factor analysis can be performed. The principal component analysis model is used with the resulting factors orthogonally rotated. The results are in the form of a factor matrix in order to compare with the results from economic interdependence, socio economic homogeneity and political interdependence.

### 3.1.6 Political Interdependence

To measure political attitudes in order to find out if the ASEAN countries demonstrate a degree of political interdependence is highly problematical. The sheer volume of surveys that would need to be conducted in each country would encounter problems in comparability. To collect data on political attitudes, relies on uniform definitions and measurement that may be difficult to collect in certain countries or be interpreted differently within different cultural contexts.

As a result, an analysis of voting behavior by individual nations in the United Nations General Assembly is substituted as a measure of political interdependence. The roll call votes of the United Nations provide a range of issues on which the individual countries display their political attitudes.
From this analysis of roll call votes, the voting behavior is used to delineate similar political attitudes.

The study of United Nations voting behavior has previously been applied to identify the distinctive issues in the United Nations and the alignments of states on these issues. Using resolutions from the United Nations does have some drawbacks. The resolutions focus on global issues that may be of secondary importance to the ASEAN countries. The resolutions do not give a clear indication of the political cohesion of the ASEAN countries compared to their Asian neighbors, on regional or local issues rather than global. Therefore, the issue of Kampuchea (Resolution I), as the only example of a regional issue is an important example in determining the political unity or cohesion of the ASEAN countries (see later results).

Data for the issues in the Thirty-Eighth Session of the United Nations are collected from the voting chart of resolutions and decisions adopted by recorded or roll call vote. In the Thirty-Eighth Session of the General Assembly one hundred and sixty four resolutions are subject to a vote. The number of roll call votes used in the analysis is lower than this total, since all resolutions with nearly unanimous (over 90%) of the vote on one side are disregarded. This is due to the fact that the correlation coefficient is distorted by a distribution over 90 per cent. This retention of near unanimous votes may "hide a small group that is virtually always with the majority or consistently in the minority". However, it is noted that roll call votes cover only about one fifth of the U.N. General Assembly and more than half of the decisions are made without voting at all.


Data are coded for fifty-three resolutions for all of the forty-one countries. The original and modified listing of the United Nations Resolutions of the Thirty-Eighth Assembly are presented in Appendix A. The votes are coded in the following way:

0 = Negative
1 = Abstention
2 = Affirmative

As some of the votes are missing, the position of the country is recorded as an abstention. Although the country did not specifically express an opinion on the resolution, an abstention would not distort the polarizations of countries on particular issues. However, some countries displayed a higher degree of abstention, so that their scores on the factor loadings should be treated with caution. These countries are marked by an asterisk *** in Table 6.

The data matrix is factored using the R factor technique. Each roll call (resolution) is treated as a variable. This method is used to classify the fifty-three resolutions into major issues which are of most prominent concern in the Thirty-Eighth Session of the United Nations General Assembly. The factor analysis results are discussed in the following chapter.

Having used factor analysis to describe the major issues in the United Nations, the roll call votes can be used again to determine the grouping of countries in terms of similar political attitudes in the United Nations. In order to delineate voting groups, the matrix is transposed. The entities become the columns (cases/countries) and the characteristics (resolutions) become the rows. The entities are now subject to factor analysis. The operationalization of the transposed matrix is termed Q factor analysis.

Q factor and R factor analysis both use data for the same occasion (time period). R factor analysis consists of factor analyzing a matrix with the variables (columns referring to the characteristics of the entities (countries). This determines the major dimensions of characteristics such as roll call votes. However, the research question is also concerned with the grouping of countries on each
particular dimension. As a result, Q factor analysis is employed since it transposes the countries, to become the columns, which are then the variables factor analyzed. This identifies and differentiates different voting groups in order to tell whether the political characteristics of ASEAN are similar. The results are recorded in the following chapter, with a discussion of the major groupings of countries in terms of political interdependence.

The methodology employed is similar to Russett's study. The results could be compared to see if the major issue dimensions had changed since Russett's initial study in 1963. Secondly, the effect that this may have on the grouping of countries in terms of similar political attitudes. Although, Russett used additional cases (countries), the procedures employed are similar, so that comparisons can be made.

3.1.7 Economic Interdependence

Data for this variable are obtained from the Direction of Trade data set Years 1950-1981 published by the International Monetary Fund (IMF). Initially there are forty three countries, which is in accordance with the cases used to measure political interdependence and socio-economic homogeneity. The latest data available is for the year 1977 but when accessed, over 50% of the values are missing. To cope with missing data in the data matrix several alternatives are possible. Factor analysis could not be performed directly on the data, leaving the missing value cells as blank so no correlation matrix is performed. One alternative is to use general knowledge to estimate for the missing data. Due to complexities with trade pattern flows amongst certain countries, partial estimates of the missing values is rejected. Another alternative is to exclude countries with any missing values. But the values missing are not consistently for the same countries. Thus, the alternative of matrix reduction is rejected since it would entail removing a large number of cases.
In order to avoid the bias inherent in estimating missing values, a regression analysis on the missing data is performed instead. Using data available for the previous years (prior to 1977), an estimate of trade figures is obtained. After applying regression analysis, additional data is obtained resulting in less than twenty per cent missing values. This is acceptable since comparison with other studies increases the independence of the results from the possible distorting effects of missing data.\(^{28}\)

The raw data obtained is then input into a matrix with the values in each cell being the total trade between two countries. A Fortran program illustrated in Appendix B is used to produce a symmetrical matrix. The original distribution of the data is highly skewed. The profile of the distribution indicates that the data is highly skewed with a reverse J shaped distribution. Several different transformations are performed, until a graph approaching the normal distribution is obtained. Log transformation on the data tends to normalize the distribution. Having transformed the distribution, the logged data is then bounded so that clusters of cases could be determined from the factor analysis results. This bounded data would then facilitate easier delineation of interdependent countries, in terms of patterns of trade.

The transformed matrix is then subject to direct factor analysis. The bounded values between 0 and 1 are similar to a correlation coefficient. The resulting factors from the data matrix are rotated orthogonally to determine the economic interdependence/trade links between the countries. The results of the analysis are presented in the following chapter.

### 3.1.8 Socio Economic Homogeneity

The literature review indicated the numerous studies that have grouped countries according to some socio/cultural/economic criterion. Several authors (Russett 1967; Nye 1968) employed similar indicators to measure the notion of socio economic homogeneity. The present study utilizes a

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similar approach in choosing a number of variables that will group nations on their social and economic characteristics. However, there is no general model in measuring the interrelationship between social, economic, and cultural variables and countries. The reason for choosing a large number of variables is due to their availability. Furthermore, the rejection of alternative models is due to their paucity in indicating both the social and economic dimensions in measuring the homogeneity of a region. The problems with several of the models are discussed below.

The grouping of countries according to per capita income is rejected since it measured only an economic dimension. The model proposed by the Overseas Development Council in 1977 is rejected. This quality of life index measured a nation's socio-economic well being by using literacy rate, infant mortality and life expectancy. All three variables are weighted equally in ranking countries on a scale 1-100. However, the variables are highly intercorrelated resulting in a measurement that is nearly unidimensional. Since any one of them can serve to classify countries, in effect what is being measured is reducing mortality rates and increasing the literacy rate, which cannot replace the economic variables needed to classify countries in terms of socio economic homogeneity. Hence, the present study felt that socio economic homogeneity is a multidimensional concept that needs a set of preselected economic, social and demographic variables to measure the variation between countries. The data is collected from the World Handbook of Social and Political Indicators.29

Indicators concerned with social homogeneity include variables measuring the composition of the workforce in terms of the percentage employed in agriculture, industry and services. These measures of social homogeneity are complemented by indicators of economic development such as GNP growth rates and Private consumption/GDP. This is because economic indicators can be measured accurately along with such social indicators as ethnicity and language rather than the more difficult measures such as culture and history. Furthermore, economic and social variables are interdependent. A certain level of economic performance or development is related to levels of

literacy, percentage employed in primary activities etc. Conversely, the social variables (e.g. literacy, number of doctors) influence the rate of economic development. Demographic variables are also assumed to contribute an additional dimension to socio cultural homogeneity. Indicators concerned with religious homogeneity are excluded from the analysis due to the unavailability of this variable on the data set. Despite the exclusion of a religious dimension in the study, the ethno-linguistic homogeneity of the ASEAN countries is included, since it would show if the countries displayed similar features of ethnically mixed or homogenous societies.

The socio economic indicators are subject to factor analysis to determine the plausible collinearity and indicate the dimensions of socio cultural homogeneity. Each indicator for the countries is used as a variable. The results of the factor analysis are discussed in the following chapter.

Those variables that have missing data are initially subject to regression, in order to obtain values for the variables so that they can be included in the factor analysis. This is over a period of twenty years since the database contained data for the years 1960, 1965, 1970, 1975. However, in those variables with a large amount of missing data (example Maldives), no additional values are gained by this method. Thus, those variables with little or no data are dropped from the analysis, prior to the calculation of the correlation matrix and factor matrix. This is because the amount of variance accounted for in a data matrix with missing values is inaccurate. This would inflate the variance in the data producing inaccurate results.

In examining the data, it is found that certain countries have a high percentage of missing values. These countries, namely North and South Vietnam and Kuwait are discarded. Although, the variance explained would be relative to the reduced number of indicators and countries, it is preferable to discard those with high missing values. This is based on the belief that reliable estimations on the missing values could not be made.

R factor analysis is performed on the socio economic variables to reduce the number of variables to more distinct relationships. Having conducted the above analysis, the socio economic indicators
can be used to determine the groupings of countries on this dimension. The data is transposed so that the countries are now the variables factor analyzed (See Appendix B). In accordance with the methodology employed by the previous indicators of regionalism, the data is subject to a bounding transformation.

However, the bounding transformation that divides the values in each cell by the maximum is rejected. This is due to the fact that the measures for the variables are not uniform. This is shown by the fact that economic and socio demographic variables are measured in different units such as dollars and percentages. As the same transformation on each variable is preferred, the procedure that is employed is to bound each column to produce values resembling the correlation coefficient and thus be expressed in the same unit. The bounded matrix is then subject to principal components analysis to determine the country groupings. The results of the analysis are discussed in the following chapter. The data and factor models are similar to Russett’s, but the methodology employed varied slightly from his original study. However, the similar cases and variables that are used means that the results could be compared.
4.0 Data Analysis

Thus the unfacts, did we possess them, are
too imprecisely few to warrant our certitude.

James Joyce, Finnigen's Wake.

This chapter is concerned with analyzing the results of the previously described factor analysis. The primary objective of this study, is to investigate the degree of regionalism which is measured as a multidimensional construct. The analysis of the results are compared to those of Russett's original study (1967) in order to establish the validity of the construct. The validity is based on comparisons of the findings of this study with the results of Russett. The mode of comparison is intuitive in visually comparing the factor loadings and making a judgement as to their similarity. The percentage of variance and eigenvalues for each factor analysis are included. The analysis describes the interrelationship among the variables, which is discussed in the following chapters in terms of the relationship with current theories about regionalism and in terms of the degree to which the ASEAN countries constitute a region. **Data is not available for Brunei except in the case of trade transactions (economic interdependence). The results of the analysis are discussed with only brief references to Brunei.
4.1 Geographic Contiguity

The rotated factor matrix is presented in Table 2. The columns of the matrix refer to the common factors whilst the rows indicate the variables. From Table 1, there are three factors which indicate that there are three statistically independent patterns of relationship in the data. This illustrates that there are three categories which need to be classified in terms of geographic regions.

The loadings are correlation coefficients (beta weights) between the factors and variables. This measures the degree by which each variable (country) is involved in what factor and to what extent. The unrotated factor matrix illustrates the general pattern of relationships in the data whilst the rotated factor matrix simplifies the relationship. The rotated factor matrix minimizes the number of variables that have high loadings across several factors which draws easier delineation of clusters.

From table 1, it can be shown that the three common factors account for 85% of the data's variance. A breakdown of the variance to indicate a factor's comprehensiveness and strength shows that Factor 1 accounts for 59% of the variance, Factor 2 accounts for 17% and Factor 3 accounts for 8% of the variance. When the factors are rotated, three factors have more than one loading greater than \( \pm 0.40 \). The results are illustrated in Table 2. Factor 3 has only one loading above the threshold level (0.40). Despite the fact that it explains a higher % of the variance within the data than Factor 2 it is discarded, since the analysis requires more than one loading on each factor. Furthermore, Factor 3 does not exhibit simple structure. Most of the factor loadings are negative or zero. (see Table 2). The remaining two factors are named to define clusters of countries indicating their intercorrelation.

The first factor includes the ASEAN countries with high loadings. As thirteen of the seventeen countries load highly (above 0.40), on this factor the label ASEAN could not be used to delineate this geographic region. However, in examining those countries excluded by this factor -Japan, Laos
Table 1. Geographic Contiguity: Rotated Factor Matrix Final Statistics.

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<td>Factor 3</td>
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Table 2. Geographic Contiguity: Rotated Factor Matrix.

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<td>Malaysia</td>
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<td>Taiwan</td>
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<td>Bhutan</td>
<td>0.715</td>
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</table>

Figure 2. Geographic Contiguity: Scree Plot.
and North Korea, some geographic bounds on the region identified by the countries on Factor 1 can be determined. Because of the configuration of countries on this dimension, it is labelled the "South East Asian" dimension. The naming of factors is to describe the interdependence among the data and produce a descriptive label.

The fact that China, Korea, and Japan load on two factors indicates that the core of the region is predominantly ASEAN since they have the highest scores on this dimension. Factor 2 accounts for 3% of the total variance. The second factor is labeled "Indochina" since these countries have the heaviest loading. This means that the second factor predicts these countries as geographically proximate better than the remaining countries.

In comparing these results with Russett's study, the factor matrix loadings from this study are used. This is possible since several of the variables and cases are similar to Russett's analysis. The results are compared in terms of the factor loading matrices. Russett's findings grouped the countries that this study examines into a single cluster that he termed "Asia". The factor loadings were generally higher, but only one country China, loaded on two dimensions. The difference is probably due to the number of cases in his analysis, since similar measurement of the variables and transformation procedure is performed.

4.1.1 Discussion

Geographic proximity is commonly defined as a necessary and sufficient condition for the identification of a region (Russett 1967, Thompson 1973). Using Russett's construct, the concept of regionalism was divided into four basic dimensions: economic interdependence, political interdependence, socio economic homogeneity and geographic proximity.

In order to delineate the system, so as to characterize the internal relationships of the countries to each other and their external relationships, and to determine the degree of regionalism of the
ASEAN countries, it is necessary to verify that the area chosen is a region. Due to the ambiguity in the use of the term region, factor analysis is employed to measure geographic proximity. This measures the association of the countries. The disparity in the literature has led to South East Asia, being described as the region lying between the "Indic" subcontinent and China (Lee Yong 1982) or used to designate the area North of Australia, East of India and Bangladesh, and South of Japan and China (Jorgensen-Dahl 1982).

From the results of the factor analysis, a distinct geographic region that included the ASEAN countries emerges. The ASEAN members comprise the core of the South East Asia region due to their higher factor loadings. The remaining countries on this factor such as Burma, are classified as the periphery in terms of the geographic boundaries of the region.30

By examining the countries excluded from Factor 2, the results are found to be coterminous to those of economic and political interdependence (See later results). Japan does not appear as an Asian nation in terms of geographic proximity. This result is analogous to its economic and political isolation from the other Asian countries. This may be due to the similar level of economic development and relationships to the Western Industrialized countries. Furthermore, a separate Indochinese region is delineated, which was also a distinct dimension in terms of United Nations voting behavior and trade patterns.

In using factor analysis to measure geographic proximity, the technique enables my research to empirically test one of the conditions suggested as critical for the concept of regionalism. Although, the results have been criticized as no more than a complicated way of looking at a map, factor analysis is a construct validation technique that seeks to clear up the ambiguity in the term "South East Asia". Factor analysis shows that the region is not just a politically determined unit of analysis. Furthermore, using factor analysis means that a similar methodology is employed throughout the

30 See Cantori and Spiegel(1970) The International Relations of Systems for a similar definition of the units comprising the South East Asian system.
research allowing for comparisons of the results. In finding a geographic distinct South East Asian region, the results indicate a distinct subsystem.

The other indicators further explore this identification by looking at the interactions and perceptions of belonging to a distinctive community. By examining the conditions and processes in South East Asia and relating them to theoretical formulations, to see if they are applicable to the South East Asian experience, geographic proximity indicates a distinct subsystem identity. From this initial classification, an examination of other measures shows whether intraregional economic and political relations have increased through cooperation, and whether functional interdependence is increasing (Kegley 1975).
5.0 Political Interdependence

In analyzing political interdependence, two separate factor analysis procedures are performed. The first procedure is to identify the distinctive issues in the United Nations around which disagreement occurs. The results reduced the data into its basic dimensions. These basic dimensions can then be classified.

The results of factor analysis in the issues before the United Nations produces seven factors with eigenvalues greater than 1. Figure 3 shows the graph of eigenvalues for the seven factors. This criterion is employed throughout the analysis of the data in order to solve the number of factors problem. This refers to the number of factors to be retained for rotation. It is based on the necessity of excluding factors not accounting for at least the total variance of one variable (Rummel 1967).

The seven factors are classified to show their interrelated variation. The rotated factor matrix in Table 4 shows the factor loadings. Those factor loadings above 0.40 are retained. The total variance accounted for by the seven factors is 88 % with factor 1 alone accounting for 63 % of this variance. From Table 4, the factor variance indicates the strength of the relationship between variables and factors. Thus, factors with high loadings such as Resolution 4 and Resolution 7 are closely related to factor 1.
On rotation, the clusters of intercorrelation among the variables can be identified more easily. However, factor 6 accounting for only 2% of the variance has no loading above 0.40 and thus does not meet the criterion for further analysis (Refer Kim and Mueller). From Figure 3, the graph indicates that the factor variances level off after factor 6, resulting in their exclusion based on Cattell’s scree test. Factor 7 does not qualify for analysis based on the fact that it has only one significant loading upon it (0.80). This type of factor is termed a specific factor.

Factor 1 is predominant in terms of the concerns of the United Nations. The factor is labeled "Dispute Settlement". Factor 1 accounts for 63% of the common variance in the Factor model. Concern with the Middle East and South Africa are frequent topics that have concerned the United Nations. Nuclear issues relating to South Africa and Israel link closely with the territorial issues. Another set of roll call votes that load highly were initiated by the Resolution 183 based on recommendations and decisions adopted by the General Assembly in a special report.* All these issues are concerned with settlement of nuclear issues through negotiations, treaties and disarmament. This factor is classified as a group factor since it has high loadings on most of the variables. The "Dispute Settlement" factor in the present study is relatively distinct to the extent that very few of the resolutions have appreciable loadings on the other factors. Resolution 2 and Resolution 44 are the two exceptions.

Factor 2 is predominantly concerned with Human Rights issues. These issues have not previously been associated as a specific dimension by Alker (1964) and Russett (1966 1967). Low negative loadings are found on issues relating to arms control and nuclear disarmament suggesting that this issue represents something which is not shared by the Human Rights issues on dimension 2. The moderate loading of the Grenadian issue on this factor is difficult to interpret. However, its higher loading on Factor 1 is easier to classify (0.60) since it involves a dispute settlement similar to the Israeli and South African resolutions on this dimension.

The issues of Kampuchea and Afghanistan are the major resolutions on Factor 3, both with loadings of -82 and -82. This factor is labelled "Intervention" to distinguish these Resolutions from
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### Table 4. U.N. Resolutions in the Thirty Sixth General Assembly: Rotated Factor Matrix.

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Figure 3. U.N Resolutions: Scree Plot.
those of Dispute Settlement. The polarization of view regarding Intervention between the countries in the United Nations can be recognized in Factor 3. This is due to the positive loadings on Resolution 3 concerning the Falklands which was also subject to outside intervention. In contrast, Resolutions 1 and 5 have negative projections on this factor. This suggests a pro-Western and pro-Soviet voting bloc emerging on this particular issue dimension.

Factor 4 contains issues that load on more than one factor. A significant number of low negative loadings (not illustrated) on this factor meant that the factor could be labelled bipolar. The Resolutions are grouped together as “Arms Control” issues since the concern is in the prevention of war. The influence of the nuclear weapons issues in the United Nations can be gauged by the fact that a further dimension Factor 5, emerges with issues that are labelled descriptively “Deterrence”. These factors are named in accordance with the variables that load heavily on them. Thus, the issues in Factor 5 are concerned with negotiation rather than actions to limit nuclear weapons that characterizes Factor 4. Factors 4 and 5 account for 2.9 % and 2.4 % of the variance respectively.

From the tables, it can be shown that Factors 4 and 5 have considerably lower loadings (0.4 and 0.5) indicating that the correlation between these Resolutions and Factors 4 and 5 is considerably weaker. This is verified by determining the importance of the factor by the amount of total variation in the data for which it accounts. The squared loadings of the variables (Resolutions) on Factors 4 and 5 produce a total variance of only 1.54 and 1.29 on the eigenvalue scale.

### 5.1 Analysis of dimensions of countries in the U.N.

The second factor analysis technique uses all 53 Resolutions to determine the interrelationship amongst the countries. The interest is primarily with the patterns of political behavior that the ASEAN countries exhibit in the United Nations General Assembly. The relationship of each
ASEAN country to the separate dimensions is important as well as the scores of each ASEAN country on the factors extracted.

Eight factors emerged with eigenvalues greater than 1. Using the scree test adopted by Cattell, the scree line indicating random errors or trivial factors, meant that only the first six factors are included (See Figure 4). Factors 7 and 8 with eigenvalues of 1.36 and 1.16 are excluded due to the small amount of variance that these two factors explain. The matrix that emerges from the principle component analysis illustrates the initial loadings of all the variables before rotation.

Factor 1 is labelled the "Industrialized Community". Factor 1 accounts for 22% of the variance. The nations are predominantly European or Commonwealth countries. However, the classification Western is not used due to the inclusion of Japan within this grouping with a high loading of 0.70. It is interesting to note that the United States has the lowest loading on this group (0.49). This suggests that the United State political viewpoint is only moderately related to the rest of the industrialized community. These countries loaded heavily only on one factor, indicating that they are statistically interdependent amongst themselves and are little dependent on the voting behavior of the other countries.

The second factor is predominantly Asian countries. It accounts for 22% of the variance. Four of the ASEAN countries load on this factor (above 0.40) with the exception of Malaysia, which has a low loading on Factor 5. Thus, Singapore, Philippines, Indonesia and Thailand exhibit a degree of political interdependence in terms of their voting in the United Nations. The scores of the ASEAN countries reveal a high loading, which indicates that these countries are highly involved in this factor. All of the loadings on Factor 2 are indicated in Figure 4. This shows the spatial representation of the results. The distance relations among the vectors may be interpreted as modelling political interdependence in an organizational setting (Schubert). The smaller acute angle represents a higher degree of correlation among the countries.
The second factor can be seen to produce an intercorrelated pattern of variation between the ASEAN countries with the exception of Malaysia. Thus, Factor 2 is identified as the "Asian" factor.

The cluster of countries on Factor 3 could be identified as pro-Soviet Union rather than pro-Western in terms of their position on United Nations resolutions. These high loadings represent a common political attitude by the countries involved in this factor. This is the opposite of the voting behavior shared by United States and Israel which display significant negative loadings. Factor 3 accounts for 8% of the total variance.

Factor 4 is identified as the "Muslim-Oil" factor. All of the countries that load above the threshold level of 0.40 are Muslim. The concentration of the oil producing countries on one dimension with high positive loadings, (above 0.80) merits its inclusion in the classification. Factor 4 accounts for 7% of the variance.

Factor 5 is identified with the least confidence of any of the factors. It is believed to represent "Insurgents". High scores among the countries on this factor are those that are threatened by internal insurgency or hostile neighbors. The countries involved in this factor, Afghanistan, Malaysia, Iran and Libya are all Muslim countries. They may be linked together in their voting attitudes due to the rise of Islamic fundamentalism in recent years. The inclusion of Malaysia in this category may be due to the redirection of policy towards bumiputraism (Malaysia for Malays). This has involved a comprehensive plan to increase Malay learning and culture in schools. This is designed to enhance the Muslim community vis a vis other minority groups.

On the basis of similar ideology, Factor 6 is identified as a Communist dimension. Only China and Kampuchea load heavily (0.7) on this factor, with no significant high negative loadings present. Thus, the first six factors fulfill the criterion for analysis outlined by Mueller and Kim. Each factor has eigenvalues greater than 1.0. The loadings are greater than 0.40 on at least two variables and the factors exhibit simple structure.
Figure 4. Spatial Representation of Factor 2.
Table 6. Political Interdependence: Rotated Factor Matrix Final Statistics.

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Table 8. Political Interdependence: Rotated Factor Matrix.

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Figure 5. U.N Country Groupings: Scree Plot.
In comparing these results with Russett’s study, the best method would be to compare the factor scores. However, since no factor scores are available from Russett’s study, the results are compared in terms of the complexity, configuration and total variance of the variables. One interesting contrast between the studies is that the issue of racial discrimination and apartheid load heavily on Factor 1 (Dispute Settlement) in this study, whereas Russett’s results found these issues spread across the factors. Thus, the voting behavior on these issues suggest a greater intercorrelation between these variables than Russett’s 1963 study. One final difference is that the specific factor of Palestine in Russett’s study has shifted to a common factor in my analysis, suggesting that there is a common principle which the resolutions on Factor 1 embody.

In terms of configuration and complexity of the grouping of nations, the grouping of “western” nations are similar in pattern and magnitude of loadings. However, Russett found three ASEAN countries clustered together with Indonesia being the deviant case. The shift in voting behavior by Indonesia can be recognized in the 38th Session of the General Assembly. Indonesia’s shift from global foreign policy aspirations, to a stronger concern for regional security and issues is reflected in her orientation towards the Asian voting group. Russett included Indonesia within the group that voted with the Soviet Union on particular issues. The 38th General Assembly study of the United Nations General Assembly finds Indonesia closely tied with its ASEAN neighbors (Factor 2). Malaysia is the country that has shifted from its pro-western grouping to link more closely with other Muslim countries.

Thus, it is concluded that the concept of regionalism as measured by political interdependence is not applicable solely to the ASEAN countries. Other regional groupings emerge. However, the ASEAN countries do cluster together in terms of political interdependence with the exception of Malaysia. The reasons for the factor analysis results will be outlined in the following discussion.
5.1.1 Discussion

In reporting the results of the factor analysis, the study is concerned with the main distinctive issues in the United Nations and the alignments of nations on these issues. Furthermore, the proposed influences on the votes of the states is suggested, with particular emphasis on the ASEAN countries. The importance of ASEAN as a regional voting bloc, in terms of loyalty and pressure in determining the voting behavior of its members is considered.

In terms of factor loadings the dispute settlement issue dominates the Thirty Sixth General Assembly. The fact that other voting alignments emerge from the factor analysis suggests that a variety of conflicts and disagreements underlay voting positions.

Haas has interpreted the voting conflicts in terms of a "balancing" process between East and West demands and the political, economic and anticolonial demands of the underdeveloped countries.31 Similarly, Schoessinger suggests that the main conflict dimension is the communist/anticommunist struggle, with the sudden prominence of nationalism in Asia and Africa. Although, these two articles were written in the 1950's the theoretical conceptions of a multidimensional voting process in the United Nations General Assembly is relevant to the results of this study.

The first dimension labelled Dispute Settlement consists of certain anticolonial demands (for example regarding South Africa Resolution 6). This issue of obtaining independence for Namibia, has been an intractable decolonization problem for the United Nations.32 The initiatives for Namibia have led to differing opinions amongst the African and other non aligned states towards U.S. policy proposals. The U.S. links the solution to Namibia with the withdrawal of Cuban troops from neighboring Angola.


The issue of Namibia in the United Nations with the involvement of South Africa is one of several issues that divides opinions. The South African policy of Apartheid is also a major concern. The Reagan Administration has improved its relations with South Africa and continues to see South Africa as strategically important. Resolutions involving economic sanctions and embargoes together with a condemnation of apartheid, have received full support from the Afro Asian nations, and the Soviet bloc. The U.S. voting to support the South African position. However, the Europeans either abstain on these issues or as in the case of the U.K. vote in the negative. Israel whose ties to South Africa have been brought up in the United Nations as a separate issue, has adopted a pro-western position in terms of its voting behavior.

The same grouping of countries emerge over the question of Palestine. The United States and the E.E.C. (except France), oppose the threat of sanctions against Israel.33 The United States explains its opposition to this series of resolutions, on the grounds that the Resolutions fail to affirm the right of every state in the area to have recognized boundaries, although simultaneously expressing its support of the legitimate rights of the Palestinian people.

Although, Europe and United States diverge from the Middle Eastern and Asian countries on the majority of Dispute Settlement issues (Factor 1), several issues produce a more pro-western alignment. In terms of the role of the United Nations in Lebanon, the supranational role of this body is vigorously supported by the Afro Asian groups, along with the Europeans against the position of the Soviet bloc.

The nuclear issue on this dimension (Factor 1) proves the most decisive in terms of East/West and underdeveloped country alignments. Disarmament is shaped by a complex interaction of East/West and North/South dynamics.34 The United States and the Soviet Union have often in the past been forced into a common position of defending their measures towards arms negotiations. However, 

33 E.E.C is the European Economic Community.

in the Thirty Sixth Assembly the two powers do not cooperate as closely. The European countries and the United States do not support the resolutions but several other countries abstain. India, China and the Philippines do not vote with the other Asian nations suggesting that cross cutting pressures determines their voting behavior. In the case of the Philippines, the presence of U.S military forces (Subic Bay) and its military alliance with the United States may be the reason for its policy position. India's refusal to condemn the development of nuclear weapons may be based on the long term deal with the United States, whereby it imports nuclear technologies and materials. However, the political and economic demands of the resolutions in general, gives credence to the interpretation that the issues reflect an East/West voting division.

In examining the sources of several of the proposals on this dimension, the growth of initiatives by Asian, Middle Eastern and African countries indicates a greater diffusion of power in the General Assembly. This would suggest a pluralist voting dimension, rather than the bipolar notions of East/West alignments in the General Assembly.

Resolutions concerning the position of Israel, produce draft resolutions from a variety of countries, including Bangladesh, Cuba and Malaysia. The sponsors of the proposals and resolutions are from geographically distinct groups. Egypt, Laos and Malaysia are frequent sponsors indicating that the majority of dispute settlement resolutions are developed by Asian or Middle Eastern countries. Soviet leaning countries such as Vietnam and Laos increasingly appear among a number of co-sponsors of dispute settlement issues.

The distribution of legislative initiatives in terms of apartheid found a greater number of countries involved in drafts and compromises in the United Nations. The sponsors are either African or Asian. Malaysia and Indonesia are particularly active on this issue. Cross regional sharing of initiatives is also evident on the question of self determination of peoples. The inclusion of Singapore, Philippines and Thailand on a draft resolution for universal self determination shows a degree of ASEAN regional loyalty in terms of policy positions. The number of initiatives sponsored
by either Asian or Middle Eastern countries suggests that a "balancing" process between East/West demands and those of the underdeveloped nations is present.

The second dimension labelled Human Rights (Factor 2), indicates that a different coalition of nation states oppose the suppression of Human Rights. These resolutions cut across the voting alignments in factor 1 (dispute settlement), showing that a second distinct conflict underlay the voting positions on these issues. Substantive classifications of issues before the United Nations have produced dimensions labelled Human rights. Alker and Russett in their study over time found Human Rights an emergent but divisive issue in the United Nations. The shift in resolutions by which colonial and Human Rights have become the dominant motif reflects the emergence of a North/South dimension, with the subordination of Western bloc demands. The General Assembly resolutions cover a wide variety of issues in the Human Rights field. However, the task of building an international consensus on rights questions is often frustrated. The negotiation towards agreements on principle, practices and proscriptions is reflected in the lack of consensus or stable majority in the United Nations voting patterns.

The United States and Israel differ significantly from the majority by voting against the resolutions in the United Nations. This is contrary to the U.S. State Department's promise of an "even handed approach", opposing Human Rights violations whether by ally or adversary. Although the United States does not ratify many of the resolutions such as fundamental rights in Chile and Guatemala, it is still looked upon as a leading promoter of Human Rights. The issue of Human Rights produces no strong regional voting bloc whether along an East/West or North/South dimension in the Thirty Sixth Assembly. The European countries show sharp disagreement suggesting skepticism about the degree to which consensus on basic human rights exists.


37 ibid p. 117
The ASEAN countries maintain independent voting positions on this issue. The refusal to support proposals condemning human rights led to abstentions from Singapore and Thailand and a firm negative vote from Indonesia. This may be due to the fact that individual human freedoms are not a primary concern of these governments and that the governments of Indonesia, Singapore and Malaysia have intermittently denied the rights of its citizens. The imposition of martial law after the race riots in Malaysia in 1969 is one example. Secondly, the ECOSOC commission of the United Nations made several references to the torture of political prisoners in Singapore. Thus, the ASEAN countries seem reluctant to accept abstract principles of human rights that would involve the establishment of international hearings. Even the Philippines exhibits a degree of independence in terms of voting behavior on Human Rights, despite its former colonial links and influence from the U.S. Indonesia and India, two prime examples of countries that traditionally were closer to the Soviet bloc on most issues do not fully endorse this viewpoint. This represented a shift away from the Middle Eastern/Asian /Soviet majority.

Factor 3 (Pro-Soviet) suggests an East/West controversy in the United Nations. The fact that the Afghanistan and Kampuchean issue load negatively, whilst the Falklands issue is positive suggests that the balancing power dimension of Haas may be appropriate. The fact that these issues could be classified as Dispute Settlement issues, but load on a different factor may be the result of a shift in voting behavior. In the Dispute Settlement issue a distinct polarization occurs between Western voting behavior and the Soviet bloc, with the Asian and Middle Eastern countries inclined to vote with the latter. On the Falklands issue, the U.K. finds herself almost in complete isolation from her usual voting partners. A distinctive feature is that the Asians voted against the issue whilst the Europeans abstain. However, the issue of Kampuchea and Afghanistan, on which the Soviet Union faces the opposition of the Third World and the Islamic nations who sponsored the resolutions, produced a similar isolated position that the U.K. has experienced. The reason for the opposition strongly supported by the ASEAN countries, is based on the belief that it violates the sovereign rights of the Afghan people and the norms of non interference and non intervention.38

38 The Washington Post 2/14/81.
The issue of Kampuchea (Factor 2) is probably the most significant in illustrating the degree of political interdependence or cohesion of the ASEAN countries. It is frankly admitted within ASEAN that the emergence in 1975 of total Communist control of Indo-China - its neighbor in South East Asia - was the catalyst in cementing ASEAN political cooperation. The collapse of the non-Communist, U.S. backed regimes in Laos, Kampuchea and South Vietnam in 1975 hastened the necessity of a common regional policy. Initially, the public stance of the ASEAN governments was conciliatory but in private there was differing perceptions of Vietnamese intentions and the approach to be adopted towards Indochina and China. In 1975, Malaysia was the most conciliatory with expressions of peaceful co-existence with Vietnam whilst Singapore was more circumspect. For Indonesia the ultimate threat to stability was the Chinese. The Indonesian response was to stress the importance of "regional resilience" to meet all external threats. The differing positions of the ASEAN countries vis a vis Communist Indochina needed clarification to establish a strong united front.

Despite the different perceptions of Vietnamese intentions and policy towards China, the Indonesians accepted that ASEAN should aim for peaceful coexistence. The ASEAN Declaration in 1976 of a Zone of Peace, Freedom and Neutrality is evidence of their desire for peaceful co-existence. The ASEAN states were forced to reformulate their policies due to subsequent events in Indochina. Conflicting national interests and mutual antagonism between Kampuchea and Vietnam on one hand and China and Vietnam on the other reasserted themselves. In Kampuchea the Khmer Rouge were engaged in a vicious war against Vietnam with backing from the Chinese. Increasing the problem was the Sino-Soviet rivalry with Moscow supporting Vietnam and Peking aiding Kampuchea.

The ASEAN countries affected by the hostility on their doorstep, moved to propose a Resolution in the United Nations calling for the withdrawal of Vietnamese armed forces in Kampuchea. Vietnam and her ally the Soviet Union opposed the Resolution. The Soviet Union is involved in extensive aid to Vietnam and blocked a Security Council Resolution in 1979 to withdraw Vietnamese troops from Kampuchea, which antagonized the ASEAN countries. The ASEAN
countries gained support from the Western bloc, Middle East and China for the withdrawal of Vietnamese armed forces against Kampuchese civilians. Despite the united opposition to the Vietnamese invasion, the foreign policy initiatives of the ASEAN countries do not receive full support from China. China blocked a conference under the auspices of the United Nations, that was proposed by the ASEAN countries to negotiate with Vietnam.

The focus of ASEAN's diplomacy is to prevent international recognition of the Heng Samrin government installed by the Vietnamese in Kampuchea. The withdrawal of Vietnam is uppermost to ASEAN but the policy finally adopted by ASEAN is to deny recognition to the new government in support of the ousted government, despite the emerging evidence of the barbarity of the Pol Pot regime. The U.S. and China express agreement over the condemnation of the Vietnamese invasion and back the Pol Pot regime. The continued U.S. support of the ASEAN position to restrain Vietnam is iterated by Haig, "the U.S. has no intention of normalizing relations with a Vietnam that occupies Cambodia and destabilizes the entire South East Asia Region".

The continual joint ASEAN statement transmitted to the United Nations and the support from China against the intrusion into the territory of Thailand, shows the isolation of the Soviet bloc on this issue. Furthermore, in a meeting of foreign ministers of the E.E.C. and ASEAN, the former expressed full support for the ASEAN position. The extent of support for ASEAN's proposals is shown by the broad group of cosponsors to the resolutions. These include geographic groups from Europe, Africa and Asia. The initiatives on this issue along with those of Dispute Settlement, has shifted to developing countries with a high degree of polarization. However, the position of the Afro Asian states on the issue of Kampuchea suggests that although the Soviet bloc finds it expedient to support Afro Asian self determination or dispute settlement claims, there has not developed a sense of loyalty or obligation to one another.

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Despite the seemingly cohesive policy position of the ASEAN countries, there are strains within ASEAN on relations with Indochina. Thailand's policy has shifted from a belief in an ASEAN solution to the Kampuchean issue, since the pressure from ASEAN in the United Nations did not bring about a withdrawal or reassurance against Vietnamese military retaliation. As a consequence, Thailand has moved closer to China due to her vulnerability. This has provoked serious misgivings amongst the other ASEAN states. Malaysia is concerned with the degree of identification of Thailand and ASEAN with Chinese policy. Both Indonesia and Malaysia fear that ASEAN could be used by China to assert her influence in the region. Malaysia and Indonesia's apprehension over China has a converse echo regarding Singapore's views towards Vietnam. Singapore's Foreign Minister Sinnathamby was outspoken proposing that the ASEAN governments should side with the anti-Vietnamese forces in Kampuchea. The Singapore position is that ASEAN and other non-communist governments should provide arms and material support to the Kampucheans. For the Philippines, the principal of national integrity is involved which led it to oppose the Vietnamese invasion in Kampuchea. The Philippines advocates the withdrawal of troops from Kampuchea in accordance with the other ASEAN members' positions. Despite these differing perceptions of the Indochina problem, the ASEAN countries are united over two related issues. These are the withdrawal of Vietnamese forces and the condemnation of the flow of Indochinese refugees which they collectively attribute to Vietnamese actions. United Nations involvement in this issue is expected to continue, due to the big power interest in the region and the concern on humanitarian grounds for the refugees. The involvement of ASEAN is expected to continue with a broad base of support from Europe and Asia.

An interesting result that emerges from the factor analysis is the degree of overlap between nuclear issues on factor 1 and the Deterrence and Arms Control factors (4 and 5). Resolution 23 would seem to be more closely related to the Deterrence issue rather than Dispute Settlement. A possible reason for this occurrence may be due to the similarities between some of the Deterrence, Arms

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Control and Dispute Settlement issues. By examining the policy positions of the states on the different dimensions, the different voting groups that emerge show some consistency with regard to nuclear issues on all three factors. A solid Afro Asian caucus emerges that supports nuclear disarmament, which is opposed by a somewhat cohesive European bloc along with pro American countries such as Israel and Japan. However, the implications of the issues concerning disarmament and arms control lead the United States and Soviet Union to take similar positions on one proposal. The ASEAN states are cohesive in their support for disarmament. This links strongly with the Soviet position and confirmed the dominance of East/West voting alignments in the Thirty Sixth General Assembly.

A discussion of the groupings of countries in terms of issues before the United Nations suggests that cross cutting pressures influence the voting behavior. The policy positions of the nation states are shaped by domestic, regional, political and ethnic considerations. The results on the individual issue dimensions suggests a considerable degree of overlap between geographic regions and active groups. In the United Nations in the Thirty Sixth Assembly there is a pro Western bloc and active Middle Eastern, Asian and Soviet caucuses.

The reason for these groupings may be reflected in terms of environmental variables. Thus, the Industrialized countries (factor 1) represent countries that are similar in terms of development, (trade, GNP) and contain a high percentage of the nations population that is of European descent, which may account for similar voting behavior. The inclusion of Japan in this grouping is possibly due to her link as a military ally of the U.S and the similarity of her economy (free enterprise) with the West. The fact that Japan is economically developed and more deeply imbied with Western industrial values, may account also for its pro Western behavior.

The Asian grouping of countries (factor 2) with the exception of Malaysia, may be partially explained by their common support for self determination and racial equality, of which they are the major advocates in the United Nations. The ties of religion and trade are not factors which may help explain the determinant of similar voting behavior in the United Nations. The influence of

Political Interdependence
trade should have led Indonesia, Singapore, Malaysia, and the Philippines towards the pro-Western group on many issues since the Western countries and Japan are the principal trading partners. However, membership in the Group of 77 concerned with economic issues for the developing nations, indicates the cross-cutting pressures that confront ASEAN in determining their policy positions in the United Nations. In terms of religion as a cohesive factor, the numerous religions (Christian, Hindu, Islam, and Buddhism) in the Asian grouping would not provide what Lindberg and Easton call an emotional attachment. Additionally, the ideological hostility to Communism by all of the ASEAN countries did not orientate them towards the Western world. This may be due to the fact that the ASEAN members like to regard themselves as non-aligned in foreign policy, despite the fact that five of them (Indonesia excluded) retain some form of security agreement with either the U.S. or U.K.

The need for unity over questions of self-determination (such as Namibia and Palestine) may provide some explanation in determining their voting behavior. A number of the countries had a colonial history, which produces a markedly anti-Western position over current “colonial issues” such as South Africa.

Furthermore, the vulnerability of these Third World countries in terms of nuclear arms has led to close cooperation in the General Assembly. This reflects attempts by less powerful countries of Asia and the Middle East, to persuade the major powers (U.S. and U.S.S.R.) to sacrifice some of their nuclear capabilities. These two variables may explain some of the determinants of voting behavior in the United Nations of the Asian factor.

The possible reason for Malaysia’s isolation (on factor 4), from the other ASEAN countries may be due to religious linkages. Issues involving Moslems (e.g. Palestine), produces a cluster of Middle Eastern countries with Malaysia. The stress on bumipatrisa has placed the Moslem issue as a high priority on the domestic agenda. The foreign policy objectives of Malaysia may mirror the issues

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at the national level. The government has to consider the influence of the growth of Islamic Fundamentalism among Malay youth embodied in the Dakwah movement. These groups emphasize religious values and illustrate the religious and ethnic tensions at the national level. However, one would expect Indonesia and Brunei by their religious ties to have greater affinity with the Middle East. The influence of Islam is also evident in Indonesia among the Muslim elite but is constrained by the Suharto government who regard partisan Muslims as a threat to the secular regime. The domestic policy may constrain Indonesia's policy position since it relies on large investments in the economy by Japan and the Western world. The Replita III, the national plan for 1979-1984 emphasizes diversification by soliciting investment to balance the Western influence and strengthen Indonesia's non-aligned position.

In analysing issues and country groupings in the United Nations several conclusions emerge. The grouping of countries depends on the issue but broad geographical groupings have emerged (See Table 5). The ASEAN group has shown that on particular issues (Kampuchea), they exhibit a high degree of political interdependence. However, cross cutting pressures produce different policy positions, the perception of which is simplified by factor analysis.

In using United Nations voting to determine if the ASEAN countries constitute a region in terms of political interdependence, several problems are noted. The United Nations votes are assumed to represent elite attitudes at both the national and international level. The positions of the countries on certain issues could not be determined since the policy aims may not reach a roll call vote. The possibility may emerge that the cross cutting influences may prevent a particular country from raising an issue. The authors Bacharach and Baratz and Lukes, suggest the possibility that the "dynamics of non-decision making" are not accounted for in counting successful issues. This argument may have some validity, when it is noted that there is substantive consensus on almost every issue with a two thirds majority, suggesting that the strength of voting cohesion are only

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partially represented by roll call votes. To solve this problem, the use of other indices such as economic interdependence is necessary to measure the degree of cohesion amongst the ASEAN countries.
6.0 Economic Interdependence.

An attempt is made to analyze the factor content of economic interdependence using export trade criteria. The results may be useful for understanding the nature and importance of the trading groups and for comparing the degree of economic interdependence/dependence between groups on each factor. The hypothesis is that the common variance of the ASEAN countries could be accounted for by a single factor. Thus, if the ASEAN countries load heavily on one factor, their degree of economic interdependence between other groups could be compared.

Eight factors are extracted from the factor analysis of the correlation matrix. All eight factors have eigenvalues greater than 1.0. The total variance accounted for by the eight rotated factors is 76%. The percentage of variance among all the variables accounted for by each particular factor is illustrated in Table 6. The rotated factor matrix with the appropriate loadings is shown in Tables 7, 8, 9 and 10.

From Table 6, Factor 1 has the greatest percentage of variance in the data (47%). The factors are named in accordance with the variables that load heavily (> 0.4) on each factor. From the unrotated factor matrix it is noted that most variables load heavily on Factor 1. The subsequent factors have a mix of negative and positive loadings in equal proportions. It is difficult to interpret the individual factors from the unrotated matrix. Many of the variables load highly on more than
one factor. For example, variable X1 (USA) loads moderately on Factors 1 and 2. After rotating the factors the results are simplified and easier to interpret.

Although eight factors are rotated only the first five factors are analyzed. These five factors explain the greatest percentage of the total variance (68%). Factors 6, 7, and 8 are dropped from the analysis. Firstly, factor 8 loads at a level of 0.40 on only one factor. The small loadings (> 0.40) represent a small percentage of the variance on that factor (< 5%). For variables 6 and 7, a scree test dictated that they should be excluded. The small proportion of variance that these two factors explain (see Table 6), meant that they are difficult to interpret. The factors may be the result of anomalies or random error.

A correlation between Factor 1 and twenty five countries occurs. Factor 1 accounts for 47% of the common variance (see table 11) with factor loadings above the threshold level. The countries with the highest loadings (> 0.7) are predominantly Middle East Oil producing countries. Several Asian countries load on this factor, but it is significant that the factor produces a relationship between three ASEAN countries, (Philippines, Malaysia and Brunei) in terms of trade patterns. The similar trade patterns may be due to the fact that the principal export of Brunei is oil. This would link Brunei with the Middle Eastern bloc but would not explain the significant loading of the Philippines on this factor. The similar trade patterns of the three ASEAN countries gives some indication of the degree of economic interdependence within the region.

The variance of Malaysia, Brunei and the Philippines on this factor computed by the squared factor loading is 0.6%. These countries are not as closely related to Factor 1 as the Middle Eastern countries. Factor 1 is thus labelled Middle Eastern.

Sixteen countries load significantly on Factor 2. Six of these exceed 0.70 whilst the others have a moderate loading. Factor 2 explains 8% of the total variance. Factor 2 is identified as the Industrialized Factor since the countries involved are those primarily involved in manufacturing/service industries. The inclusion of three countries, Malaysia, Singapore and India
Figure 6. Economic Interdependence: Scree Plot.
<table>
<thead>
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<th>Factor</th>
<th>Eigenvalue</th>
<th>% of variance</th>
<th>Cumulative %</th>
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</thead>
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<td>47.7</td>
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<td>Factor 4</td>
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</tr>
<tr>
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<td>1.39</td>
<td>3.2</td>
<td>68.2</td>
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<td>Factor 7</td>
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<tr>
<td>Factor 8</td>
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<td>2.4</td>
<td>76.2</td>
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</table>

Source: International Monetary Fund (IMF); Direction of Trade: Years 1950-1981: ICPSR, Ann Arbor, Michigan.
on this dimension may be the result of their former trading links to the United Kingdom. Secondly, Singapore is predominantly a service oriented economy, which would explain her links to the other nations. Factor 2 like Factor 1 appears to be a multidimensional construct, since some countries (for example Algeria and Malaysia) load on more than one factor.

Factor 3 is the most clearly identifiable regional trading bloc in the analysis. The countries are all identifiable Asian. The core of the region appears to be the Indochinese countries and the factor is labelled to depict this dimension.

From the results four countries have loadings above 0.50 on Factor 5. This factor is clearly dominated by the geographic group of India, Pakistan and Afghanistan. North Korea has a low loading on this factor, which is an overlapping factor since North Korea loads above the threshold level on Factor 1 (Industrialized). The variance accounted for by North Korea is lower on Factor 4 (0.196%) than on Factor 1 (0.30 %) illustrating that North Korea’s involvement is greater on the latter. Factor 4 is classified as an Indian trading bloc.

Factor 5 accounts for 3 % of the common variance within the data. From the results Factor 5 represented a problem in interpretation. The moderate loadings of Indonesia and Philippines on this factor gave some semblance to the notion of interregional trade. However, the inclusion of Egypt within this grouping is difficult to justify. Only Indonesia and Philippines would be assumed to have a similar trading pattern on this dimension, if the concept of regionalism measured by economic interdependence is applicable to the ASEAN countries.

In comparing the results with Russett’s study, the degree of comparability is lower than the other variables measuring regionalism. This is due to the fact that Russett’s method resulted in clusters of countries that “choose” similar trading partners. In contrast, the factor analysis in this study delineated interdependent groupings of nations in terms of patterns of trade. The similarity of the two studies is based on the configuration of the variables in terms of their pattern and complexity. Russett in his analysis produced nine clusters of trade groups with a distinct Asian cluster. The
Table 10. Economic Interdependence: Rotated Factor Matrix.

<table>
<thead>
<tr>
<th>Country</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
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<td>Brunei</td>
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</table>

Source: International Monetary Fund, years 1950-81
Ann Arbor Michigan
Table 11. Economic Interdependence: Rotated Factor Matrix.

<table>
<thead>
<tr>
<th>Country</th>
<th>Factor 1</th>
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<th>Factor 3</th>
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Source: International Monetary Fund, years 1950-81 Ann Arbor Michigan
<table>
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<th>Country</th>
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Source: International Monetary Fund, years 1950-81 Ann Arbor Michigan
Table 13. Economic Interdependence: Rotated Factor Matrix.

<table>
<thead>
<tr>
<th>Country</th>
<th>Factor 1</th>
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</tr>
<tr>
<td>Algeria</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Libya</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Korea</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S.S.R.</td>
<td></td>
<td></td>
<td></td>
<td>0.446</td>
</tr>
<tr>
<td>Indonesia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: International Monetary Fund, years 1950-81 Ann Arbor Michigan
Asian cluster included the five ASEAN countries. However, the Asian cluster was not geographically proximate, since Europe, Middle East and Latin America had sharply defined trading links with them. Distinct regional clusters that do not load heavily with external/geographically distant countries emerge in this study.

An Indochina and Indian cluster is identified. The six ASEAN countries did not constitute a region in terms of trade patterns. A degree of economic interdependence is noted between Malaysia, Singapore and Brunei, whilst Indonesia and the Philippines produce a degree of trade affinity. Economic interdependence as a measure of regionalism is found to be inapplicable in relation to the ASEAN countries.

6.1.1 Discussion

The relevance of trade transactions in the study of regionalism is a controversial topic. The perspective developed in this study is that trade pattern flows in terms of volume and direction, can measure the relative interdependence of a hypothesized region (ASEAN). A discussion of the results of the factor analysis is presented below. The focus is on what degree do the ASEAN states exhibit economic interdependence and what are the reasons for their limited trade flows. A study of systemic factors and subsystem interactions present a variety of reasons for the factor analysis results. Of interest to the measurement of regionalism, is the potential for greater economic interdependence, in terms of the policies of the ASEAN states. Finally, some conclusions are drawn as to the benefits or drawbacks of economic interdependence for the ASEAN countries.

The transformation performed on the raw data is to define patterns of trade links between nations. However, it should be noted that this does not define groups of nations in terms of magnitude of

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\(^{44}\) Brunei was not included in Russett's analysis.

\(^{45}\) See Earlier Discussion in Chapter 3.
trade flows. The study is concerned with the partnership or interdependence in transaction behavior that emerges from the factor analysis. Thus, factor analysis may link together countries that are dissimilar in terms of magnitude of trade flows but have a similar pattern or trend.

The ASEAN countries do not cluster together on one factor, which would indicate that the structure of trade relations does not support the notion of ASEAN economic interdependence. However, four ASEAN countries are highly correlated on Factor 1 (Middle Eastern), along with the oil producing nations. Brunei, with its high dependency on oil, relies on the same markets as the Middle Eastern countries. The major importers are the Industrialized countries of Western Europe, U.S. and Japan. These countries are also the major exporters to the oil producing nations. For Malaysia, Singapore and the Philippines the long established trade relationships with the U.K. and the U.S. respectively, provide historic ties which may account for their position on this factor.

The group of industrialized European countries make up the majority of countries on factor 2. However, it is not composed exclusively of countries from Europe, but includes those that are highly involved in manufacturing/service industries (e.g. U.S. and Japan). The inclusion of Malaysia, Singapore and India on this factor may be the result of former Commonwealth ties which has produced a special economic relationship to the U.K. and to a lesser but growing extent with Europe. The grouping of European countries in terms of trade flows is fostered by the development of a common market established by the regional organization, the European Economic Community (1958). The geographic contiguity of many of the countries on this factor (2), suggests that former colonies are linked not only to the Imperial power, but also to each other as well. However important the colonial relationship was, there is the semblance of an economic community (factor 2).

Factor 3 groups the Indochinese countries into a distinct cluster. This is not only based on geographic contiguity, but is also due to the political orientation of its members. The annexation of Laos and Kampuchea by Vietnamese forces initially led to economic isolation. Neighboring Thailand closed its borders for trading after the Vietnamese invasion in 1978. The conflict within
Indochina hampers economic trade, which resulted in extensive relief efforts and foreign aid pouring into Kampuchea. Secondly, massive waves of refugees from Vietnam, Kampuchea and Laos continue to enter the ASEAN countries (particularly Thailand), Hong Kong and China. This has hindered the economic and social recovery especially in Kampuchea. Thus, although the Indochinese countries have become a closed political and economic bloc, the limited foreign trade has led to a relatively autarchic group.

A distinct geographic region emerges on factor 4 (Asian Factor) These Asian states all trade fairly heavily with the communist countries. The fact that Afghanistan is landlocked may explain why its trade patterns are not geographically dispersed since it has limited access to shipping/port facilities.

Two ASEAN countries emerge on factor 5 (Dependent). The Philippines has a long and continuous history of economic relations with the United States but has sought to establish economic relations with alternative countries, such as Japan, to balance the U.S. Similarly, Indonesia has strong links with Japan, although her trade links to the U.S. remain subordinate to those of Japan and E.E.C. Both the Philippines and Indonesia are highly dependent on assistance from Japan and U.S., which would account for their similar trade patterns and continual reliance on a single trading partner. The direction of trade indicates that the Philippines, is after only Indonesia, the most dependent in its pattern of trade amongst the ASEAN countries.46 The inclusion of Egypt on this factor is interesting. Previously, Egypt's economic relations with the Communist countries was significant.47 However, her economic shift like that of Indonesia, has produced a greater affinity towards the Industrialized countries.

An interesting absence in terms of similar trade patterns is a pro Soviet bloc. No distinct "Eastern European" cluster emerges that is exclusively Communist. Although, not all Eastern European countries are included in the factor analysis, the fact that U.S.S.R. links with the Middle Eastern


and pro Western Asians on factor 1, shows that the Soviet Union is quite commercially cosmopolitan.

From these results the ASEAN members exhibit limited economic interdependence. Several reasons both systemic and involving subsystem level interactions (within ASEAN), may explain the trade relationships.

The growth of a global economy contributes to the demise of a regional trading bloc amongst the ASEAN states. The ASEAN countries are linked to the global economic system, through their desire to expand foreign trade and invite foreign investment to increase economic growth. The historic ties and special relationships established during colonial times, have already been suggested as one factor in the pattern of trading relationships. It is argued that the colonial legacy has led to economic and political isolation amongst the ASEAN states, which has impeded regional cooperation and diminished the growth of regional consciousness, which Thompson suggests is a necessary for classification as a region.

This external domination of the economy, due to the imposition of capitalist modes of production by colonial powers has continued. The first assumption of this argument is that the lack of economic interdependence is related to the unequal economic relationship, that has polarized countries into Industrialized and Developing nations. Past colonial influences resulted in the exploitation of colonies' resources, such as Indonesia and Malaysia, for export to the Industrialized World. The pattern of economic development was guided by foreign ownership and investment, which shifted control of the economy from domestic governments. The ASEAN countries were assigned to, "a subordinate position vis a vis core capitalist states". The fact that the Industrialized

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49 This argument is advance by Rosa Luxemburg. For a fuller explication in terms of South East Asia See Savranamutti Journal of Contemporary Asia Vol 16, No. 2, 1986 p.205.
51 Savranamutti ibid p.208.
countries account for sixty per cent of the total ASEAN exports of primary commodities illustrates the unequal relationship that has hindered economic interdependence. Thus, the lack of economic interdependence among the ASEAN countries is based on,

a situation in which the economy of certain countries is conditioned by the development and expansion of another economy to which it is subjected. The relations of interdependence between two or more economies, and between those and world trade, assumes the form of dependence when some countries (the dominant ones) can expand and be self sustaining, whilst other countries (the dependent ones) can do this only as a reflection of that expansion, which can either have a positive or negative effect on their immediate development(52).

The external domination of the economy of the ASEAN members has persisted due to the influx of foreign capital creating external debt. This has led to a vicious circle of dependency for the ASEAN countries that has had serious negative consequences for ASEAN regionalism. For example, the Indonesian debt increased from 9.2 U.S. billion to 19.5 billion between 1974 and 1979, whilst the Philippine debt rose to 26 U.S. billion as a result of U.S. and I.M.F. loans.

Similarly, foreign ownership of the means of production has decreased the opportunity for regional economic cooperation. Forty five percent of investment in the manufacturing sector is by foreign owned companies. However, to argue that foreign investment in the region is a cause of ASEAN’s lack of economic interdependence is questionable. Singapore has the largest percent of foreign investment (69.4%) and encourages foreign investment for large scale industrialization. Singapore has encouraged various economic “giants” like the U.S., E.E.C. and Japan, to invest in her economy, in order to avoid the potential of foreign dominance of any one country.

Foreign capital could therefore be regarded as necessary for the development of the ASEAN countries. In the long term, this could provide greater regional economic trade due to the availability of larger markets. This suggestion does not describe why the ASEAN countries prefer

54 Crone D ibid p.75.
to trade with the Industrialized economies. One reason for this, may be that the size of the market is greater in developed countries. Despite the fact that Indonesia is the fifth largest country (population), the purchasing power of the majority of the populace is low.

These systemic factors have sought to explain the lack of economic interdependence amongst the ASEAN countries. Yet, many features within the ASEAN countries themselves may explain the low level of intraregional trade.

Economic nationalism which is felt necessary to the development of the national economy may hinder regional economic cooperation. The importance of indigenous economic interests is used particularly by Indonesia to seek domestic support. Unlike the countries of Western Europe, the ASEAN countries (except Thailand) had first to forge a sense of nationhood. This conflicts with the movement to regionalism which carries with it the implication of economic and political unification.

The strength of this economic nationalism, or possibly ethno-nationalism is illustrated by the development of four Indonesian ports including Jakarta, in order to bypass Singaporean shipping facilities/trade, despite the geographic proximity of the Singaporean free port and the facilities offered.

To suggest that regional cooperation may be necessary for ASEAN development and a rational policy, fails to understand the socio-cultural tensions or hostility that impedes regional growth. Racial criticisms of the Chinese community in Singapore has provided a restraint on regional cooperation. The economic advancement of Chinese in Singapore has invited criticisms from its neighbors and produced regional suspicion. The position of the Chinese has produced division in the Islamic countries, Malaysia and Indonesia where the Chinese communities are quite distinct. In Indonesia they constitute barely 3% of the populace, but they are distinctly outside the political mainstream. The Indonesian Chinese population will have to choose their citizenship in order to eliminate their stateless condition. A similar situation prevails in Brunei.
More serious incidents that indicate the mistrust amongst the ASEAN countries involve Malaysia and the Philippines. The Filipino claim to Sabah, which led to the collapse of previous regional organizations such as MAPHILINDO has provoked considerable strains. The Malaysian support both militarily and morally, to the Muslim minority in Mindanao, has led to sharp exchanges between the two countries. These conflicts have been contained partly because the ASEAN members realize the potentially disruptive effect on ASEAN of intra-regional quarrels. Despite the attempts to mediate (by Indonesia) and Marcos' pledge in 1977 to shelve the Sabah claim, some difficulties remain between the two countries, Malaysia and the Philippines.

Frictional situations are present involving all the member states, for widely divergent reasons that impede regional economic cooperation among the ASEAN members. A major cause for communally based bilateral tensions within ASEAN is the political tensions between Malaysia and Indonesia. The Konfrontasi issue was dominant in the 1960's with Indonesian policy to crush Malaysia due to the fear of Malaysian economic growth and the vision of a Malaysian Federation. The emergence of a new foreign Minister, Malik and the replacement of Sukarno with Suharto started a process of reorientation of Indonesian foreign policy.

Although Konfrontasi between Malaysia and Indonesia was officially settled before ASEAN was formed, there remained lingering suspicions of Indonesia's motives and ambitions concerning a dominant role in South East Asia. The comment by Panggabean (Indonesian Military official) that South East Asia should provide for their own defence and security maintained a "mood of crisis and agitation" between the two countries. Malaysia had considerable reservations about ASEAN prior to its formation because of its distrust of Indonesia. Despite the decline of Konfrontasi, there remains several frictional situations present involving the member states of ASEAN for widely divergent reasons.

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The simmering disagreement over territorial boundaries remained for 19 years between Indonesia and Malaysia before being concluded by a treaty in 1982. The traditional reference to tanah-ayer (fatherland) by Indonesia is a major reason for disagreement that could resurface to cause intractible problems. The Malaysian map in 1976 incorporating the islands of Ligitan and Sidaphan cut across Indonesia’s continental shelf prompting Indonesia to report in 1981 that “foreign troops were occupying Sidapan”. Although the Konfrantasi issue has lost some of its poignancy, the conflict potential and mutual distrust of motives continues to permeate bilateral tensions between Malaysia and Indonesia. Therefore, hostile relations have previously impeded regional economic growth or political cooperation amongst the ASEAN nations. However, the current volume of intraregional trade (16%), may increase with the ceasing of hostilities.56

In addition to bilateral friction, the prospects of regional economic cooperation and interdependence have been hindered by the political structures of the ASEAN countries themselves.57 A reason for the limited economic interdependence is due to the fact that the capacity of each of the governments to implement economic change varies. The means of each government to implement economic arrangements to increase regional cooperation, depends on the ability to isolate themselves from the pressures of particular sectional interests. In comparing the ASEAN members, the degree of political pressure from above (elites) or below (pressure groups, trade unions) is central to the extent that these interests affect government policies. Based on Crouch’s observations, the political structure of Malaysia and Singapore do not experience severe obstacles in their pursuit of regional economic interdependence. For example, the authoritarian nature of P.A.P (governing elite) stifles rival leadership and provides economic assistance such as welfare programs, that benefit large sections of the middle and working class. Thus, dissatisfaction is minimized making government freer from overt political pressure from below. The Singapore government’s sucess in economic development has enabled it to build up a substantial base of

57 Crouch H Domestic Political Structures and Regional Economic Cooperation. (ASEAN Economic Research Institute, Singapore 1984).
support for its policies. The government is also insulated from pressure from above from private business interests. The PAP leaders are not businessmen but technocrats. The government is distinct from the business community and able to resist vested interests since a high proportion of business is from foreign interests. The Singapore government is able to enjoy a wide latitude especially in the economic sphere which places little limitations for the pursuit of economic interdependence or cooperation.

In contrast, Thailand and the Philippines are open to pressure from technocratic and business interests over government economic policies. Regional interdependence and cooperation is circumscribed, since it would involve readjustments and possible negative effects on big business interests. In Indonesia the political and administrative capacity of the government to pursue programs of regional cooperation is hampered by the close ties between the military governing elite and particular business interests. The government is almost incapable of pursuing policies which harm elite level vested interests. The technocrats unlike Malaysia and Singapore, cannot implement policies to increase regional economic cooperation due to the patronage structure of business, which must account for Indonesia's attitude towards cooperation and integration within ASEAN.

The political structures of the ASEAN countries initiate economic policies that reflect differing economic philosophies. Economic links between the countries may be slow to develop due to the different economic policies adopted. The emphasis by Indonesia on import substitution has led to protective tariff barriers for these industries. This impedes intra-ASEAN trade and is contrary to the export oriented approach of Singapore.

The different economic policies is highly correlated with the economic advancement of the ASEAN countries. The advocacy of a free trade area is rejected on the basis of national interest. Indonesia is reluctant to cooperate as it would help the industrially more advance states (Singapore and

58 See Crouch for a fuller discussion on domestic political structures, and the relationship of various sectional interests to government economic policies.
Malaysia), whilst threatening the government's Industrialization Program which was protected on the basis of high tariffs.

Limited intra-regional trade may be due not only to protectionism amongst the ASEAN states, but arguably due to the basic structure of their markets. Most of the countries (with the exception of Singapore) are producers of primary products. They have similar basic export patterns that would impede intra-regional trade. Instead of cooperation, the markets are competitive in the global economy. This argument has continually been used to account for the low volume of intraregional trade.

Although agriculture is the most important sector, the structure of the economies may be complementary rather than competitive. Differences in resource endowments and export commodities illustrate the diversity. For example, Thailand is a major exporter of rice, whilst the Philippines and Thailand are among the world's largest exporters of sugar cane. Despite the limited degree of ASEAN intra-regional trade, the policies adopted by the member states indicate that the degree of economic interdependence may increase in the future.

Cooperation for basic goods such as rice and oil in "critical circumstances" increases the potential for intra-regional trade. During times of surplus, the ASEAN members are required to buy from other members, who will provide for them during times of scarcity. The preferential trading being established has led to item by item tariff reductions, designed to placate the least industrially advanced member Indonesia, which would be most severely effected by greater trade liberalization such as a free trade area or customs union.

The potential for economic cooperation can be gauged by the fact that there has been a tremendous growth in intergovernmental agencies and organizations. One experiment is the South East Asian Fisheries Development Center (SEAFDC) established in 1970. The growth in regional organisations is not limited to the government sector. Several non-governmental groups have emerged such as the Confederation of ASEAN Chambers of Commerce. The proliferation of
technical groups as the first movement towards regionalism is central to the functionalist school. The possibility that cooperation is occurring in less controversial areas such as family and population planning may lead to a spillover effect in other areas.

Greater intra-regional trading relationships may assume greater importance due to the growth of external protectionism of industrially developed countries like the U.S. The focus on economic interdependence would reduce the vulnerability of the ASEAN countries and encourage greater self-reliance.

However, by proceeding at the pace of the economically least advanced nation (Indonesia), the other members could reduce their competitiveness and adopt policies that are detrimental to their own long term economic interests. Finally, regionalism may increase ASEAN self-reliance in terms of primary commodities but increased export to the global economy is needed for industrialization to proceed.
7.0 Socio Economic Homogeneity.

The results of the R factor analysis are evaluated in terms of the central assumption of the study, that socio economic homogeneity can be used as an indicator in factor analysis to measure the degree of regionalism amongst the ASEAN countries. The descriptive statistics that are initially used to describe the relationship of the data is the correlation matrix. This would give some indication how the variables would load on dimensions representing socio economic homogeneity. Some variables associate higher with others producing high correlation coefficients. For example, V69 and V67 yields a correlation of 0.74 and V30 and V139 have a value of 0.85. From these highly intercorrelated measures, it would be expected that they would load together on the same dimension using factor analysis. The correlation matrix also produces some negative values, such as variables V316 and V67 (-0.56). This suggests that socio economic homogeneity will produce several dimensions or relationships among the variables chosen for the analysis. The concept of socio economic homogeneity would thereby be multidimensional which is theoretically correct.

The factor dimensions obtained are interpreted by evaluating the content of the items defining the factors and considering the interpretation given to them by Russett. The major factor dimensions of socio economic homogeneity are labelled. The proportion of variance accounted for by the rotated factor matrix is presented in Table 11. The rotated factor matrix is shown.
From the unrotated matrix, it can be seen that the majority of variables load heavily on the first few factors above the threshold level of 0.40. The variance accounted for by each dimension decreases and many of the factors load significantly on more than one factor. Due to the difficulty in interpreting the interrelationships of the variables the matrix is rotated.

On rotation, ten factors are extracted explaining 86% of the variance in the data. The amount of variance of each dimension as a proportion of the total variance is shown on Table 15. The ten factors are subject to a scree test, since factors accounting for smaller proportions of item variance are less interpretable. These minimal factors may be the result of transient factors, anomalies or error variance. Factor 9 is not retained as it has no loading above 0.40. From the scree test that plots eigenvalues against % of variance, the curve suggests that variables 8, 9 and 10 should be excluded from the analysis. The remaining factors are "interpreted" by indicating those variables with high factor loadings. From Tables 11-14, the first factor has highly and positive loadings on fourteen indicators. Six measures such as exports/GNP, GNP/Per Capita and Trade/GNP load above 0.8 with the remaining factors > 0.40. Due to categorically similar cluster of the heaviest loadings on this factor, it is identified as an Economic Growth dimension. It could be classified as a group factor since not all of the variables had high loadings.

Factor 2 has overlapping variables across several dimensions. This factor accounts for 11% of the common variance. The results indicate that the factor is multidimensional in that the variables did not underlie a single construct. High loadings occur on three variables above 0.8 (See Tables). Factor 2 is believed to represent a Workforce dimension.

In contrast to Factors 1 and 2, Factor 3 has only two significantly high loadings above 0.8. The remaining five variables have moderate loadings. Factor 3 is labelled Income giving predominant weight to those factors with the highest loadings. The factor displays a certain emphasis on economic discrimination, suggesting that actual wealth and potential income are correlated.
Figure 7. Socio Economic Homogeneity : Scree Plot.
Table 14. Socio Economic Homogeneity: Final Statistics.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Eigenvalue</th>
<th>% of variance</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>17.67</td>
<td>36.8</td>
<td>36.8</td>
</tr>
<tr>
<td>Factor 2</td>
<td>5.43</td>
<td>11.3</td>
<td>48.1</td>
</tr>
<tr>
<td>Factor 3</td>
<td>4.46</td>
<td>9.3</td>
<td>57.4</td>
</tr>
<tr>
<td>Factor 4</td>
<td>3.59</td>
<td>7.5</td>
<td>64.9</td>
</tr>
<tr>
<td>Factor 5</td>
<td>2.89</td>
<td>6.0</td>
<td>70.9</td>
</tr>
<tr>
<td>Factor 6</td>
<td>2.06</td>
<td>4.3</td>
<td>75.2</td>
</tr>
<tr>
<td>Factor 7</td>
<td>1.66</td>
<td>3.5</td>
<td>78.7</td>
</tr>
<tr>
<td>Factor 8</td>
<td>1.35</td>
<td>2.8</td>
<td>81.5</td>
</tr>
<tr>
<td>Factor 9</td>
<td>1.23</td>
<td>2.6</td>
<td>84.1</td>
</tr>
<tr>
<td>Factor 10</td>
<td>1.17</td>
<td>2.4</td>
<td>86.5</td>
</tr>
</tbody>
</table>

Table 15. Socio Economic Homogeneity: Rotated Factor Matrix.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Government Current Revenue/GDP</td>
<td>0.434</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Defense Expenditure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Health Expenditure/GDP</td>
<td>0.421</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defense Expenditure/GNP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Education Expenditure/GNP</td>
<td>0.672</td>
<td>0.550</td>
<td>0.594</td>
</tr>
<tr>
<td>Economic Discrimination: Proportion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Discrimination: Intensity</td>
<td></td>
<td>0.579</td>
<td></td>
</tr>
<tr>
<td>Separatism: Proportion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voters/Adult Population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military Manpower</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered Voters/Adult Population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Votes cast</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working Age Population</td>
<td>0.743</td>
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</tr>
<tr>
<td>Population Density</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural Density</td>
<td>0.735</td>
<td>0.410</td>
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</tr>
<tr>
<td>Ethno-Linguistic Fractionalization</td>
<td></td>
<td>0.498</td>
<td></td>
</tr>
<tr>
<td>% Income to top 5% Population</td>
<td></td>
<td></td>
<td>0.895</td>
</tr>
<tr>
<td>% Income to last 40% Population</td>
<td></td>
<td>0.916</td>
<td></td>
</tr>
<tr>
<td>Newspapers/1000 Population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor Force: Services</td>
<td></td>
<td>0.930</td>
<td></td>
</tr>
<tr>
<td>Private Consumption/GDP</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>GNP/Capita</td>
<td>0.901</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GNP/Current Growth Rates</td>
<td>0.922</td>
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</tr>
<tr>
<td>Energy Consumption/Capita</td>
<td>0.693</td>
<td>0.583</td>
<td></td>
</tr>
</tbody>
</table>

### Table 16. Socio Economic Homogeneity: Rotated Factor Matrix.

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imports/GNP</td>
<td>0.849</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exports/GNP</td>
<td>0.843</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade/GNP</td>
<td>0.835</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calories per Capita/Day</td>
<td></td>
<td>0.842</td>
<td></td>
</tr>
<tr>
<td>Doctors/Million Population</td>
<td>0.478</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Piped Water: Urban</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Expectancy: Females</td>
<td></td>
<td></td>
<td>0.921</td>
</tr>
<tr>
<td>Infant Mortality Rates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crude Birth Rates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Enrollment Ratios</td>
<td>0.499</td>
<td>0.466</td>
<td></td>
</tr>
<tr>
<td>Enrollment: Higher Education/Population</td>
<td>0.424</td>
<td>0.631</td>
<td></td>
</tr>
<tr>
<td>Literacy Rates</td>
<td>0.504</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radios/1000 Population</td>
<td>0.495</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phones/1000 Population</td>
<td>0.511</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic Mail/Populatation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Mail/Total Mail</td>
<td>0.751</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban (100000 +)</td>
<td>0.682</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor Force: Agriculture</td>
<td></td>
<td></td>
<td>0.928</td>
</tr>
<tr>
<td>Labor Force: Industry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture/GDP</td>
<td></td>
<td></td>
<td>0.495</td>
</tr>
<tr>
<td>Industry/GDP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services/GDP</td>
<td>0.917</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GNP</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 17. Socio Economic Homogeneity: Rotated Factor Matrix.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
<th>Factor 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Government Current Revenue/GDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Defense Expenditure</td>
<td>0.928</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Health Expenditure/GDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defense Expenditure/GNP</td>
<td>0.767</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Education Expenditure/Gnp</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Discrimination: Proportion</td>
<td>0.420</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Discrimination: Intensity</td>
<td>0.419</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separatism: Proportion</td>
<td>0.478</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voters/Adult Population</td>
<td>0.841</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military Manpower</td>
<td></td>
<td>0.712</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered Voters/Adult Population</td>
<td>0.787</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Votes cast</td>
<td>0.845</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working Age Population</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Population Density</td>
<td></td>
<td></td>
<td></td>
<td>0.896</td>
</tr>
<tr>
<td>Agricultural Density</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethno-Linguistic Fractionalization</td>
<td></td>
<td></td>
<td></td>
<td>0.596</td>
</tr>
<tr>
<td>% Income to top 5% Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Income to last 40% Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspapers/1000 Population</td>
<td></td>
<td></td>
<td></td>
<td>0.684</td>
</tr>
<tr>
<td>Labor Force: Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Consumption/GDP</td>
<td></td>
<td></td>
<td></td>
<td>0.768</td>
</tr>
<tr>
<td>GNP/Capita</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GNP/Current Growth Rates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy Consumption/Capita</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 18. Socio Economic Homogeneity: Rotated Factor Matrix.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Factor 4</td>
<td>Factor 5</td>
<td>Factor 6</td>
<td>Factor 7</td>
<td>0.407</td>
<td>0.518</td>
<td>0.468</td>
<td>-0.621</td>
<td>0.725</td>
<td>0.416</td>
<td>0.682</td>
<td>0.712</td>
<td>0.917</td>
<td>0.682</td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 19. Socio Economic Homogeneity Country Groupings: Rotated Factor Matrix.

<table>
<thead>
<tr>
<th>Country</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.A</td>
<td>0.769</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>0.805</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>0.925</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>0.887</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>0.934</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>0.939</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.K</td>
<td>0.871</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>0.458</td>
<td>0.582</td>
<td>0.760</td>
</tr>
<tr>
<td>New Zealand</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Algeria</td>
<td>0.452</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td></td>
<td>0.815</td>
<td>0.760</td>
</tr>
<tr>
<td>Iran</td>
<td></td>
<td>0.844</td>
<td>0.667</td>
</tr>
<tr>
<td>Iraq</td>
<td></td>
<td>0.784</td>
<td>0.614</td>
</tr>
<tr>
<td>Kuwait</td>
<td></td>
<td></td>
<td>0.614</td>
</tr>
<tr>
<td>Libya</td>
<td></td>
<td>0.769</td>
<td>0.614</td>
</tr>
<tr>
<td>Oman</td>
<td></td>
<td></td>
<td>0.614</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td></td>
<td>0.418</td>
<td>0.614</td>
</tr>
<tr>
<td>Egypt</td>
<td></td>
<td>0.600</td>
<td>0.614</td>
</tr>
<tr>
<td>Israel</td>
<td></td>
<td></td>
<td>0.614</td>
</tr>
</tbody>
</table>

Table 20. Socio Economic Homogeneity Country Groupings: Rotated Factor Matrix.

<table>
<thead>
<tr>
<th>Country</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afghanistan</td>
<td>0.701</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bangladesh</td>
<td>0.625</td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td></td>
<td>0.541</td>
<td></td>
</tr>
<tr>
<td>Hong Kong</td>
<td>0.851</td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>0.405</td>
<td>0.640</td>
<td></td>
</tr>
<tr>
<td>Kampuchea</td>
<td>0.713</td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Korea</td>
<td></td>
<td></td>
<td>0.793</td>
</tr>
<tr>
<td>South Korea</td>
<td></td>
<td>0.428</td>
<td></td>
</tr>
<tr>
<td>Laos</td>
<td>0.709</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>0.750</td>
<td></td>
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</tr>
<tr>
<td>Nepal</td>
<td></td>
<td></td>
<td>0.812</td>
</tr>
<tr>
<td>Pakistan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sri Lanka</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td></td>
<td></td>
<td>0.701</td>
</tr>
<tr>
<td>U.S.S.R</td>
<td></td>
<td></td>
<td>0.881</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
<th>Factor 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.A</td>
<td></td>
<td></td>
<td></td>
<td>-0.451</td>
</tr>
<tr>
<td>Canada</td>
<td></td>
<td></td>
<td></td>
<td>-0.474</td>
</tr>
<tr>
<td>Japan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Germany</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
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<td></td>
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</tr>
<tr>
<td>Netherlands</td>
<td></td>
<td></td>
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<td>U.K</td>
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<td>New Zealand</td>
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<td>Algeria</td>
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<tr>
<td>Indonesia</td>
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</tr>
<tr>
<td>Iran</td>
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</tr>
<tr>
<td>Iraq</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Kuwait</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Libya</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oman</td>
<td></td>
<td>0.567</td>
<td></td>
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</tr>
<tr>
<td>Saudi Arabia</td>
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<tr>
<td>Egypt</td>
<td></td>
<td></td>
<td></td>
<td>0.626</td>
</tr>
</tbody>
</table>

Source: Taylor C.L and Jodice D.

Table 22. Socio Economic Homogeneity: Country Groupings Rotated Factor Matrix.

<table>
<thead>
<tr>
<th>Country</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
<th>Factor 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td></td>
<td>0.815</td>
<td></td>
<td>0.495</td>
</tr>
<tr>
<td>Afghanistan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bangladesh</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burma</td>
<td></td>
<td>0.452</td>
<td></td>
<td>-0.410</td>
</tr>
<tr>
<td>China</td>
<td></td>
<td></td>
<td>0.445</td>
<td></td>
</tr>
<tr>
<td>Hong Kong</td>
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<td></td>
</tr>
<tr>
<td>India</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Kampuchea</td>
<td>0.425</td>
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<tr>
<td>North Korea</td>
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<td>0.425</td>
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<tr>
<td>South Korea</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Laos</td>
<td>0.472</td>
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<tr>
<td>Malaysia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nepal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>0.667</td>
<td></td>
<td></td>
<td>0.852</td>
</tr>
<tr>
<td>Philippines</td>
<td></td>
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<tr>
<td>Singapore</td>
<td>0.694</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>0.890</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S.S.R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Taylor C.L and Jodice D.  
The fourth dimension has two variables concerned with voting behavior (V67 and V74) that load highly. The remaining two variables are concerned with communications. Although, this factor is clearly dominated by a voting dimension, it is identified as a Communications Factor since voting could be considered as one expression of political communication.

Factor 5 has six variables with moderate loadings (>0.4) and two indicators of socio economic homogeneity that have a negative relationship with this factor. By examining the negative projections on this factor, it can show what the factor does not represent. The negative loadings are for Doctors/ Million and Telephones/ per 1000 population which are generally used in models of socio economic variables as measures of development/underdevelopment. The fifth factor is identified as a Social/Demographic Welfare dimension. It estimates the general level of social homogeneity and the physical quality of life within the sample countries.

Two variables (V24 and V104) load highly on Factor 6, whilst the remaining variables have a weaker relationship with this factor. Table 10 shows the variables that have a significant loading above 0.40 on Factor 6. Although, the factor was clearly dominated by measures of defense expenditure and population density, the high intercorrelation between these variables shows that countries can be classified on the basis of a Rates of Growth dimension. The factor is uncorrelated with any of the other dimensions since the variables load only on one factor. The factor transformation using these socio economic dimensions can be used to classify the countries on the basis of their rate of growth performance.

From Table 10, four variables are found to load moderately on Factor 7 which load only on one factor. The factor is identified as a Quality of Life dimension comparable to that of Abizadeh et al (1985). This factor although it explains a small percentage of the total variance, shows that there are many facets to the concept of socio economic homogeneity. However, the dimensions obtained are a result of the variables employed. The variables chosen in the present study are felt to be theoretically representative of socio economic homogeneity. As a result, the dimensions of this analysis are transposed to produce classifications of countries, in terms of differences in socio economic homogeneity.
economic homogeneity. The results of the analysis will indicate the degree of regionalism amongst the ASEAN countries. Furthermore, the interpretation of the results may be significant in indicating the problems and prospects for regionalism.

7.1 Analysis of dimensions of socio economic homogenous countries.

Principal Components analysis is used in order to determine the number of dimensions, that represent relations between countries and then group countries which are colinear with one another. However, several modifications are made to the selection of the original indicators. Although, socio economic homogeneity is felt to be a multi dimensional construct, the indicators that did not load moderately are subsequently dropped from the analysis. This is based on the belief that factor analysis determines the underlying dimensions or relationships and retaining every available indicator would be simply brute empiricism.59

A reasonable compromise would be to retain all the variables that moderately on at least one factor.

In analyzing the results, Russett’s comments are worth citing. He states that,

close agreement between two nations on several attributes might permit one to group them into a fairly homogenous region, despite differences with respect to another attribute(60).

However, due to the multidimensional nature of the construct countries should not group together on the basis of a single attribute.


60 Russett ibid p. 14.
A correlation matrix of the countries is obtained providing some initial information on the relationships within the data. The highest correlations in the matrix are between the Industrialized countries such as Japan and Germany (0.95). This does not indicate that these two countries are completely socio-homogeneous. Their high intercorrelation may be the result of the predominant number of economic indicators chosen. As would be expected, Japan and Germany have similar levels of economic development. Amongst the ASEAN countries the intercorrelations were low (e.g. Singapore and Indonesia 0.4). This suggests that these two countries have a weaker linkage in terms of socio-economic homogeneity. This result is expected since the economic levels of Singapore and Indonesia are markedly different. Singapore is a newly industrialized country with high per capita income compared to the agricultural economy of Indonesia. The remaining ASEAN countries have weak correlations amongst themselves suggesting that factor analysis will not produce a distinctive ASEAN dimension.

The correlation matrix is then subject to principal components analysis. Seven eigenvalues greater than unity are extracted. The seven factors are plotted in accordance with Cattell’s scree test. All seven factors are retained. The factor loadings and initial statistics are presented in Tables 15, 17 and 18. The loadings are then interpreted based on which variables loaded most highly on it. The correlation between each country and the factor is given by the appropriate factor loading.

The seven factors account for 84 per cent of the variance explained. Factor 1 accounts for 43 per cent of the common variance. The high eigenvalue of this factor indicates that the factor is the most important in determining the amount of total variance in the data. Table 14 shows that fourteen countries load on factor 1. Seven factor loadings exceed 0.8. The remaining factors are above 0.4. This factor is clearly dominated by the Industrialized Western countries and is labelled accordingly. The low negative loadings on this factor (not illustrated), are characterized by Muslim countries (e.g. Saudi Arabia) suggesting a marked difference in terms of social composition. Factor 1 is principally economically advanced countries reflecting a high standard of living.
Factor 2 accounts for 12 per cent of the variance. This factor includes Malaysia with a moderately high loading of 0.74. The countries that contribute most to this factor are predominantly agricultural suggesting similar economic structure. The countries are involved in primary production and factor 2 is labelled Primary Producers.

Eight factors load above 0.4 on Factor 3. This factor accounts for 9 per cent of the common variance. It includes one ASEAN country Indonesia with a high loading of 0.84. The fact that the countries with the highest loadings are predominantly oil producing, indicates that the grouping may be influenced by their economic structure. The major export and source of revenue for these countries is their oil reserves which would account for Indonesia's inclusion in this grouping.

Factor 4 explains 5 per cent of the variance with ten countries grouping together on this factor. Several countries (for example U.K. and Algeria) load moderately on more than one factor. The factor is difficult to interpret due to the low to moderate loadings. Secondly, the countries are disparate in terms of economic development and social composition.

Four per cent of the common variance is accounted for by Factor 5. Four countries have positive loadings. Israel and the Philippines are above 0.8. Factor 5 is characterized by countries that have predominantly homogeneous religious populations with some religious fractionalization. These countries are also major recipients of foreign aid, whose provider is also the principal trading partner. The factor represents an Economically Dependent country grouping. The negative loading on this factor is Hong Kong, whose economic development reflects opposing characteristics. This includes multiple trading partners and less economic dependency.

The sixth dimension explains 3 per cent of the variance. It does not have a clear pattern of country groupings in terms of socio-economic homogeneity. Its importance to the construction of socio-homogenous grouping is small due to the minimal variance explained. Factor 7 includes only two negative loadings of 0.45 and 0.47, for Canada and U.S.A. The factor represents a Canadian-U.S dimension in terms of socio-economic similarity.

Socio Economic Homogeneity.
Table 23. Socio Economic Homogeneity: Rotated Factor Matrix Final Statistics.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Eigenvalue</th>
<th>% of variance</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>16.60</td>
<td>43.7</td>
<td>43.7</td>
</tr>
<tr>
<td>Factor 2</td>
<td>4.89</td>
<td>12.9</td>
<td>56.6</td>
</tr>
<tr>
<td>Factor 3</td>
<td>3.76</td>
<td>9.9</td>
<td>66.5</td>
</tr>
<tr>
<td>Factor 4</td>
<td>2.20</td>
<td>5.8</td>
<td>72.3</td>
</tr>
<tr>
<td>Factor 5</td>
<td>1.86</td>
<td>4.9</td>
<td>77.2</td>
</tr>
<tr>
<td>Factor 6</td>
<td>1.48</td>
<td>3.9</td>
<td>81.0</td>
</tr>
<tr>
<td>Factor 7</td>
<td>1.23</td>
<td>3.2</td>
<td>84.3</td>
</tr>
</tbody>
</table>

Source: Taylor C.L and Jodice D.  
Figure 8. Socio Economic Groupings: Scree Plot

Socio Economic Homogeneity.
The results of the factor analysis show that socio economic homogeneity is not a multidimensional construct. The dimensions of the construct are related to the choice of indicators used. In using these indicators to group countries in terms of their socio economic similarity, Factor 1 has the most expected grouping of countries. The results indicate that the ASEAN countries do not exhibit a degree of socio economic homogeneity. However, this result is in accord with the literature on the social diversity of the ASEAN countries (Jorgensen Dahl; Broinowiski). The ASEAN countries can be described as an "ethnographic mosaic".

In contrast, to Russett's results, no distinct Afro-Asian country grouping emerges. However, the inclusion of Japan with the Western community is similar to the results of this study. The expected grouping of Japan and the Philippines on a distinctive Asian cluster did not emerge in Russett's analysis. The emergence of the Philippines on Factor 5 (Economically Dependent) suggests its distinctiveness in terms of social composition and reaffirms the lack of a specific ASEAN cluster. The following analysis of the economic and social background of the ASEAN countries will explain in greater detail the possible reasons for the factor analysis results.

7.1.1 Discussion

The results of the factor analysis classifies the thirty eight countries, on the basis of socio economic variables. Using socio economic homogeneity as a major criterion in classifying a region, the ASEAN countries were found to lack homogeneity or at least similarity on a variety of indices. A few reasons are suggested as to why particular countries grouped together on the basis of the seven socio economic dimensions identified. The social and economic structure of the ASEAN countries are discussed in order to explain why the ASEAN countries did not group together on a single dimension.
Although this suggests that the ASEAN countries are not socially or economically similar, there is some evidence that the region does, "possess adequate similarity and cross national resemblance."\textsuperscript{61} This viewpoint is analyzed and several comments are made as to the necessity of socio economic homogeneity in fostering a regional consciousness.

The grouping of mainly Industrialized countries on Factor 1 are primarily Western or European settled nations. These states are characterized by a high level of economic development. They have high per capita incomes and quality of life. These countries are mostly industrially advanced states, but with low rates of economic growth compared to the newly industrialized countries such as Singapore and Korea. The former experienced a rapid growth rate of 12% between 1968-74, with an annual growth rate sustained at 7.8% between 1974-1980.\textsuperscript{62}

The European countries on Factor 1 (Industrialized) differ from the less developed countries since their rate of growth is lower. This is because the more developed the country, the more difficult it is to maintain high growth rates. The inclusion of Japan on this factor is the exception, since it is one of the few developed countries to maintain a high rate of economic growth.

The inclusion of several Asian countries such as India and Malaysia is not due to similar levels of economic development with the Western Industrialized countries. Their similarity across the socio economic attributes is probably due to Western administrative and legal systems.

Factor 2 (Primary Producers) produces a cluster of geographically dispersed countries. The countries represent an agricultural-industrial split. Two of the countries Hong Kong and South Korea, could be classified as newly industrialized countries with high degrees of urbanization and a predominant manufacturing sector. In contrast, the economies of the remaining countries share several attributes. They are overly dependent upon the primary sector of agriculture.

\textsuperscript{61} Kegley C.W Jnr and Howell L.D. "The Dimensionality of Regional Integration : Construct Validation in the South East Asian context", International Organization, 25, p.1006.

\textsuperscript{62} Source : Europa Yearbook 1986.
Four of the countries have large reserves of petroleum and natural gas which accounts for a large percentage of their GDP and exports. In terms of social structure, the majority of their populations are Muslim. But within each of these countries there are widespread differences in the Islamic faith. In Indonesia, the orthodox coastal Malays of North Sumatra differ from the Javenese whose faith is mingled with remnants of Hinduism.

The grouping of countries on Factor 3 are identified as the Middle Eastern countries with similar ethnic-religious backgrounds. The major revenue for the countries is from their natural resources, with wealth concentrated amongst a small percentage of the population.

Factor 4 groups together countries that vary widely in terms of social composition and economic development. Several of the countries have predominantly labor intensive agricultural economies, whilst Singapore has a small industrialized service economy.

Structurally, the countries vary widely. Singapore has an urbanized, highly literate and increasingly well educated population. China in contrast is characterized by a rural agricultural economy. The overriding similarity between the two countries is based on ethnic origin since Singapore is largely a Chinese, commercial city state. Although, the countries appear economically heterogeneous, close agreement between two nations on several attributes (such as ethnic origin), groups them together despite differences on another socio economic attribute (Russett).

The countries on Factor 5 (Economic Dependent) have different religious, cultural and ethnic bases. However, in terms of economic structure there are some similarities. These countries have relied on one major trading partner who is also significant in providing aid to these countries. For Israel and the Philippines, the United States is important both economically and strategically. Both countries experienced an economic downturn in 1983, which resulted in huge deficits and large scale borrowing from the U.S. High cost of living increases resulted, whilst their respective currencies devalued on the World market.
Using indicators identified as measuring socio economic dimensions several country groupings emerged from the factor analysis. The geographic region of South East Asia does not emerge as a recognizable grouping. In suggesting several explanations for the factor analysis results there are considerable reasons for the absence of an ASEAN region.

The diversity and complexity of the human geography of South East Asia is rarely surpassed in other parts of the world.⁶³ The population of the various states display not only differences in national identity, but there are profound racial, cultural, demographic and economic contrasts between West and East, mainland and maritime Asia, and between rural and urban areas. The ASEAN countries are in sum a plural society, that can be described as an ethnographic mosaic.

Demographically, the ASEAN countries display marked differences. The populations vary considerably from the city state of Singapore with a total of 1,499,400 to its populous neighbor Indonesia. Indonesia has an estimated population of 161.6 million (Dec 1984) that is spread out over a vast and fragmented territory. Singapore with its small land area and acute housing problem, has the highest density of 4,124 people per square km, which gives rise to problems different from its neighbors.

The spatial structure of the population differs between the ASEAN countries. Singapore is highly urbanized, whilst the urban populations in the other ASEAN states constitute not more than 30% of their respective total populations.⁶⁴ Yet the urban populations in the largest cities are expanding, as a result of natural increase and net migration from the rural areas. However, with the exception of Bangkok, Thailand’s distribution of population is still predominantly rural. Only 23 % of the population is classified as urban compared to 79 % in Singapore.⁶⁵

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If geographic pattern produces differences amongst the ASEAN countries, ethnic cleavages may be also significant in explaining the lack of cultural assimilation amongst the ASEAN nations. None of the ASEAN countries are homogenous horizontally or vertically in terms of ethnic type. The countries are multiracial societies with both indigenous and immigrant groups. However, the nations are often described in terms of the dominant racial group.

The dominant ethnic type in Singapore is Chinese with a significant Malay and Indian community. The government's policy of neutralizing any conflict is reflected by its decision to make all three ethnic languages and English, the official language despite the minority status of the Malays. The composition of the population in the other ASEAN countries mean that the Chinese and Indian are minorities. They have experienced economic nationalism and discrimination. The Chinese comprise approximately 33% of the Malay population whilst the indigenous groups are Malay. The indigenous groups are referred to as bumipatras (sons of the soil), who have been favored by government measures and continue to receive preferential treatment.

Problems have arisen in all the ASEAN countries due to the noticeable disparities between ethnic groups. The ethnic differences are reinforced by differences in economic well being. The rich immigrant Chinese are involved in the more lucrative business and commercial sector, whereas the indigenous population have generally stayed in traditional agriculture. The different linguistic, ethnic, cultural and economic communities have created divisions that hinder the emergence of homogenous national groups. If the countries are heterogeneously divided and stratified, this will further compound efforts to establish a region and indicates the lack of socio economic homogeneity in ASEAN.

The main religious divisions run parallel to the ethnic cleavages. The mainland state of Thailand and the islands of the Philippines are closest to the notion of one religion. Buddhism and Roman Catholicism are the predominant religions in their respective countries. Other minority religions are present (such as Islam in Mindaneo). Yet the Philippines is relatively religiously and ethnically homogeneous unlike the other ASEAN countries. The Muslim population is largely concentrated...
in the South and comprises only 5% of the Filipino populace. The Chinese population is also small (1%). Thus, the Philippines and Thailand may find it easier than others in South East Asia, to use religion to bind their nation together and achieve a degree of solidarity. In the other ASEAN countries, religious uniformity is not as strong compared to Thailand and the Philippines. Although there is a large Muslim presence in Indonesia, Malaysia and Brunei, there are considerable variations in the degree of attachment to that religion. Among the younger urban Malays there has been a rise in Islamic Fundamentalism which differs from the Islamic faith practiced by the Javenese in Indonesia. The ethnic diversity and religious divisions among the ASEAN countries have caused problems internally, which hampers the movement towards a socially and culturally assimilated region. Apart from these factors of differentiation there is also the language barrier between the ASEAN states. In terms of language there is no one predominant within ASEAN. In fact within each country, there are widespread variations in dialects and language.

Thailand is the closest to approximating one national language among its populace. The divisions in language among the other ASEAN countries tend to follow basic ethnic divisions. In Indonesia for example, there is a diversity of indigenous languages ranging from the predominant Javenese language in Java, to the Batak dialect in the uplands of Sumatra. Altogether, there are some twenty five different languages and two hundred and fifty dialects being recognized in Indonesia.

The linguistic diversity has a similar counterpart in the Philippines. There are eight major languages (Bikol, Ilocano) and about seventy dialects spoken in the islands. The use of English as the medium of instruction and business has helped to overcome some linguistic boundaries. But language reinforces the barrier against regionalism among the ASEAN countries.

However, both Singapore and the Philippines have adopted English as the lingua franca, whilst Indonesia and Malaysia have introduced English as the second language in schools. The neutral English language may provide a centripetal link to bind the various ethnic and religious groups together in South East Asia.
The dissimilarity in terms of language, religion and ethnicity, may account for a lack of regional consciousness in this area. The widespread differences in social structure further compound the lack of regional assimilation. In Thailand, Indonesia and the Philippines, economic development has resulted in social structures in which the beneficiaries of growth constitute a small proportion of the population. The social structures of Malaysia and Singapore are different. In both countries, economic development has led to a growth of a large and prosperous middle class, while the lower class have also experienced material improvement.66

The differences in social structures coexist with disparities in economic structure amongst the ASEAN countries. In terms of wealth, Brunei enjoys one of the world’s highest levels of national income per head ($17,500 in 1984). The country enjoys good public services and a high standard of living. Among the services provided are free medical care and education, which is not exist in other ASEAN countries. Education in the Philippines for example beyond primary is determined by socio economic status. The quality of education is based on the ability to pay.

In terms of relative income and services, Indonesia lags behind the other ASEAN states. According to the World Bank, Indonesia has a GNP of $540 per head. It is officially estimated that 58 % of the population live in absolute poverty, barely subsisting in a poor and overpopulated agricultural economy. Even the urban population lack the basic social amenities such as electricity and easy access to medical facilities and schools in the Kampung areas.

Whilst Indonesia and the other ASEAN nations (with the exception of Singapore and Brunei), strive to feed and employ large and growing populations, the latter two countries continue to depend on foreign workers. This has led to a heavy dependence on Chinese and other foreign participation and labor skills in Brunei. They account for approximately 25 % of the total labor force due to the small indigenous population.

In contrast, the relentless pressure for employment opportunities is a major area of concern especially for Indonesia and the Philippines. The growth of the urban workforce has resulted in large numbers of urban poor who are either unemployed or struggling for a meager existence in the informal sector. For example, 46% of Jakarta's workforce is employed in the informal sector. According to the Asian Development Bank, the Philippines likewise has high levels of unemployment and underemployment. It is estimated that 15% are unemployed and 33% underemployed, with no reduction expected since the population increase of 2.4% in the mid 1980s is one of the highest in Asia.

Another major difference in ASEAN's economic structure is the composition of the labor force. With the exception of Singapore, the other ASEAN countries have predominantly agricultural economies. Singapore has moved to a post industrial phase, turning increasingly to high technology, while the other five members are in more or less early stages of industrialization. The other members are moving away from an economy that is based largely on agriculture, forestry or fishing.

For example, the Philippines employs more people in agriculture than any other sector. But manufacturing increasingly provides 25% of GDP, whilst trade transport and other services contributed a further 40%. Yet the proportion of workers remaining in agricultural occupations differs between the members showing a marked industrial-agricultural split.

Singapore has the largest number of workers employed in white collar occupations. The biggest growth has been in the financial and business sector, which accounts for 8% of the workforce (Crouch 1984). The economic restructuring since the 1970s has led to an increase in professional and managerial workers and a subsequent decline in blue collar workers due to greater automation and industrialization. Yet the workforce in Singapore has wages per capita that are nearly equivalent to various white collar occupations. The increase in wealth has benefited a large segment

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of society, with the result the middle class standard of living has risen, and many members of the working class are able to obtain a similar lifestyle.\textsuperscript{68} The emergence of a large middle class in Singapore has meant a greater distribution of societal rewards and benefits. Yet in other ASEAN countries there has been a greater inequality of income distribution. In the Philippines income inequality measured by the Gini ratio showed a sharp increase in the 1970's and 1980's.

Despite some movement towards a non-agricultural economy within ASEAN, the occupational structure of the countries differs markedly. Thailand has the highest percentage of the population employed in agricultural production (76 \%). Yet it differs from the other primary producers since it has experienced no serious land shortage. This is because rice has been the basic commodity and has been able to meet basic food needs.

The situation has not prevailed in the Philippines where 52 \% of the population is involved in agriculture. In the rural areas, an important cause of poverty is lack of access to land. Over four million are landless and a quarter of a million are tenants (Crouch). The Philippines has continued to advocate wealth distribution schemes, but the concentration of landownership corresponds to the governing elite who continue to thwart land reform. The widespread disparities in economic growth and occupational structure of the ASEAN region pose additional problems in perceiving the region as a social and economically homogeneous unit.

The variations are also enhanced by the different colonial influences. Dutch, English, Spanish and American influences were dominant in the area, establishing different traditions of law, education and administration within ASEAN.

The legacy of colonial intervention meant that different types of government and institutions were implemented within the region. The post-dependence situation is one of dissimilarity in ranges of political activity and type of government. Although the authoritarianism and semi-authoritarianism

\textsuperscript{68} Source: Ministry of Trade and Industry Economic Survey of Singapore World Bank 1981 p. 82
political characteristics are prevalent in each of the ASEAN countries, the extent of which varies
tremendously.

Brunei is maintained as an Islamic state ruled in a manner similar to the Middle Eastern sheikdoms.
The Sultan continues a ban on political activity and elections which resembles the martial law
period under Marcos. Although Malaysia has an electoral system with multi party representation,
the dominance of the UMNO\textsuperscript{69} stifles opposition. The system has become more authoritarian since 1970, as the opportunities for organized political opposition has been restricted.\textsuperscript{70}

This summary examining the different cultural, linguistic, ethnic and economic communities that
comprise ASEAN suggest why these countries do not cluster together in terms of various socio
economic indices. Yet in seeing the ASEAN states as separate and distinct, there are some strands
that have been interwoven, which may encourage a greater regional identity. Kegley's quotation
suggests some elements of fusion in ASEAN.

The ethnic types converge somewhat in South East Asia. The Malay character of three of the
countries, Malaysia, Brunei and Indonesia is an important bond. This is especially evident in the
case of Brunei and Malaysia, who are strongly linked in terms of cultural, linguistic and religious
values.\textsuperscript{71} In analyzing the ethnic composition of the states, there are several similarities. All of the
countries have minorities that are striving for greater recognition and benefits, whether it is the
Muslims in Mindaneo or the Shans in North East Thailand. Many of the minorities occupy a
distinct geographical area within which their culture, religion and language are predominant.
Similarly, their opposition stems from their perception of relative deprivation. Relative deprivation
involves discrepancy between a group's perception of what it expects and what it receives. The

\textsuperscript{69} UMNO is the United Malay National Organization.


\textsuperscript{71} Wetherbee D. "Brunei : The ASEAN connection", \textit{Asian Survey, XXVI} 1983.

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minorities have all received unfavorable treatment from their respective governments and economically have been subjected to widespread economic discrimination.

Problems with minorities have also occurred (except Singapore), in all the countries regarding the Chinese. Anti-Chinese economic nationalism was and still is, present in all countries (Lee Yong). Certain occupations and trades are closed to the Chinese such as a limitation on retail establishments imposed by the Philippines.

The similarity of social problems, corresponds to a similar effort in the ASEAN countries to sustain development. The struggles in coping with urbanization and industrialization have caused problems within ASEAN, in terms of services and infrastructure. All of the developing countries have similar structural problems in the movement to industrialization. They are reliant on fluctuating prices for a few primary exports and rising prices for largely manufacturing imports. The agricultural economies are dependent on one or two principal commodities. This common set of internal problems is stated by Thanat Koman (foreign Minister of Thailand),

individual weakness and impotence will gradually be replaced by a greater strength....it becomes increasingly necessary for the small and weak nations to close their ranks and pool their limited means and potential (72).

The perception of common internal problems suggests a sociological solidarity amongst the ASEAN countries. This is also evident in terms of external goals. The common fear of communism and the strive for collective security suggests a degree of cross national resemblance and the development of a regional consciousness necessary for the identification of a distinct subsystem (Thompson 1973).

The perceived changes in regional outlook has led to a greater socio cultural cooperation. The example of seven day visa free stays is designed to increase social interaction. This will lead to greater integration according to the Communications model. This social assimilation is fostered by

past and present labor movements that may help build a regional consciousness. The examples of socio economic interaction closely resemble the neofunctionalist model. Although ASEAN is not socio economically homogeneous, cooperation in such "low" intensity areas may have a spillover effect into more political or "high" areas to foster a greater sense of regionalism.

There are some elements of social life that suggest similar social structure and relationships amongst the ASEAN countries. The prevalence of patron/client relations is strong within ASEAN, suggesting a degree of social similarity in the region. The Filipino concept of utang na loob has similar connotations in Thailand, Malaysia and Indonesia in the stratification of social relationships.73

Although the respective countries differ on a number of socio economic indices, the centrifugal tendencies of these indicators may be lessened due to the perception of similar societal problems and trends. Despite the lack of a homogeneous region, the continuing dialogue in the region has helped provide regional stability and international recognition for the ASEAN countries. Suharto’s comment questions the necessity of socio economic homogeneity for the development of regional consciousness. He argues that,

I feel it is a pity that so many foreign analysts place too much emphasis upon noting the difference between the member countries, and then proceed to conclude that ASEAN is an impossibility (74).

As with so many social science terms, there is no clear definition of regionalism. Suharto’s comment and the previous discussion cast doubt on the necessity of socio economic homogeneity as a measure of the degree of regionalism. The structure of relations among the ASEAN countries, characterized by a degree of increased interaction may be sufficient to classify the area as a region.

73 utang na loob is a Tagalog phrase that translates as debt of gratitude.

74 Opening Address Regionalism in South East Asia Center for Strategic and International Studies, Jakarta 1975 p.7.
8.0 Theories and Conclusions

The research design was to test quantitatively the research question described in the first chapter of this study. After a brief explication of the theoretical concept regionalism, the relevant variables were operationalized. The results of the study were then related to relevant elements of theory.

Factor analysis was used to test regionalism in the South East Asian context. Factor analysis has several advantages. It is flexible to a wide range of research designs and a wide variety of data (votes, trade figures). It has the computational advantage of being able to analyze large amounts of data, and extract complex interrelationships in the data, into independent patterns of behavior (Rummel). Finally, the technique's main contribution to this study is that it enabled a comparison with Russett to provide construct validation for South East Asia.

This study used factor analysis to analyze the following research questions:

- What degree of regionalism do the ASEAN countries show, with regard to each variable defined as measuring regionalism?
What is the relationship between regionalism in South East Asia and current theories in the fields of Politics and International Relations?

Geographic proximity estimated in this study, for the ASEAN countries was found to be consistent with the results of other studies (Russett, Cantori and Spiegel). ASEAN was found to be geographically proximate, with the members comprising the core of the South East Asian region. Although my results did not include the same number of countries as Russett, the results strongly supported the reliability and validity of his classification for South East Asia.

The second indicator, political interdependence, which was tested found a difference with Russett's findings. Comparisons found that over time, Indonesia has moved closer to an Asian viewpoint, whilst Malaysia had shifted from a strong pro-Western voting position. Indonesia's movement corresponds to the disassociation with Sukarno's foreign policy and an attempt to repair Indonesia's poor relations with several of her neighbors. For Malaysia, the rise of Islamic fundamentalism was attributed to the shift in its voting alignment.

The third indicator, economic interdependence, found that trade patterns within ASEAN were negligible compared to its relations with other trading blocs. The results clearly showed that my findings were not consistent with the results of Russett's study.

Finally, socioeconomic homogeneity was not inferred from the factor analysis results. Diversity in language, religion, ethnicity and economic conditions were some of the major reasons attributed to the widespread variations among the ASEAN nations.

The preceding chapters that examined the degree of regionalism in ASEAN found on the basis of the data that the ASEAN members did not constitute a region. Factor analysis was used to determine the pattern of interrelationships among the variables such as trade transactions. This
study by using factor analysis was able to delineate similarities and differences between the various political systems of South East Asia, in order to see if there is observable cooperation in both domestic and international policy between them. As a model to measure regionalism, factor analysis tested the theoretical framework of Subsystems, Communications and Functionalist theories by operationalizing aspects of each theory. The theoretical basis for this study focus attention on patterns of trade relations, voting behavior, socio economic homogeneity and geographic proximity as the variables to be examined. The empirical predictions of the three theories were tested in the South East Asian context to establish their usefulness and validity.

The relationship of regionalism to the current theoretical models was found to vary in the context of South East Asia. Throughout this study it has been assumed that regionalism varies in degree and kind, from limited cooperation to integration, in both domestic and international policy. In terms of Subsystems theory, the region comprised geographically proximate, distinct actors that had enhanced their international standings in such forums as GATT and United Nations. This verified the notion of external recognition and suggested the emergence of a distinct regional consciousness. Whether the ASEAN countries have reached the stage of a security community (Deutsch) is questionable. Although widespread compliance has emerged in several areas, the continuing capabilities to produce peaceful resolutions will depend on elite behavior. Such incidents as the external sympathy from Malaysia towards Muslim separatism in the Philippines could impede further cooperation and mutual responsiveness.

Several elements of the functionalist approach were found to be applicable to ASEAN. The importance of musawarah (consensus) to the respective governments, provided consensual decision-making which reduces the level of politicization. The Functionalists seek to structure the co-operative setting to minimize the potential for obstructive politicization (Schubert 1978). The five minus one formula proposed by Singapore's Lee Kuan Yew is one example. He stated that
“when four agree and one does not object, this can be considered a consensus and the four should proceed with a new regional scheme.”

Functionalist constraints on regionalism lead to a stress on incremental growth through intergovernmentalism and consensus. This incremental growth that seeks to find the lowest common denominator among the countries is typical of the ASEAN approach. Preferential Trading Agreements to accommodate Indonesia, the least advanced member is one example. The compromise leads to an incremental movement towards economic interdependence.

The behavior of the ASEAN countries confirms the externalization hypothesis of the neofunctional model. The hypothesis is a specific type of spillover that concerns policies related to non-members. Schmitter summarizes the idea,

that once agreement is reached and made operative on a set of policies, pertaining to inter-member or inter-regional relations, participant will find themselves compelled- regardless of their original intentions- to adopt common policies vis a vis non participant third parties.

The ASEAN countries have adopted a common external policy in terms of their economic relations toward E.E.C., U.S. and Australia. As Lee Kuan Yew (Singapore’s Prime Minister) stated, ASEAN has found it easier to take economic decisions relating to negotiating as a group with dialogue countries, than to tackle the internal complexities of economic cooperation.

Yet the neofunctionalist model may be inapplicable to South East Asia since the end result is to achieve economic and political integration. The concept of regionalism implicitly incorporates the idea of direction towards integration and cooperation as derived from Western experience. The model consists of measures or indicators of the extent and pace of change which may be in need of elaboration or modification. It is unlikely that the members of ASEAN would be willing to divest themselves of their sovereignty. The concept of integration is not widely received in South


East Asia, since the theory was developed in Western Europe, which did not experience the recent struggle to develop a sense of nationhood like South East Asia. Furthermore, the policy externalization within ASEAN differs from elsewhere. The relatively early stage that this process has been achieved contrasts with the experience in other parts of the world. The movement towards regionalism may follow more than one model, as the example of ASEAN illustrates. But to argue that the neofunctionalist theory is not particularly applicable in South East Asia does not render it inapplicable in other studies of regionalism (Kegley 1975).

8.1.1 Recommendations

In measuring the degree of regionalism in South East Asia the present study uses theories drawn from the experience of Western Europe. These systems approaches are useful since they are not necessarily restricted to an analysis of the nation state but can be applied to other kinds of political systems (for example regional organizations like ASEAN). The three theories derived from systems analysis are discussed along with their strengths and weaknesses. The continued use of the three models is advocated since they can be revised to suit conditions in other regions. The theories are suggestive not definitive so that the phenomenon of regionalism should not be taken as discrete (i.e. that ASEAN is a region or not). This does not correspond to reality as the discussions in the preceding chapters show that the factor analysis results do not produce a distinct picture of actual processes and developments among the ASEAN members. Regionalism can be built up over time by a variety of indices some of which were operationalized by this study. This study achieved a multivariate description of the concept of regionalism but the measurement in the context of South East Asia is based on a diachronic study.

To see how far the regional process of integration and cooperation has occurred within ASEAN it is suggested that a study does not look at existing levels of regionalism (in terms of transactions etc.)
Instead measurement over time of such indicators as transactions is more appropriate so that patterns and rates of change can calculate the progress towards regionalism.

Transaction measures need to be supplemented by other indices of regionalism since economic and political interdependence fail to specify the nature of mass attitudes and elite behavior (for example in the U.N.). In order to measure the development of identititive ties or emotional attachment within ASEAN other indicators are needed. Other measures such as parliamentary debates, press and interest groups may be applicable in other regions. In ASEAN the primordial stage of organization has not led to the proliferation of cross national groups that has occured in Western Europe. Similarly, the authoritarian nature and press restrictions in the ASEAN countries do not give a useful indication of the commitment to regionalism.

However, the potential for regionalism and integration needs to be measured to assess the prospects within the context of South East Asia. This study recommends that the systems resources indicate the potential for regionalism. The systems resources of ASEAN include such indicators as budget and staff allocated to collective policy and decision making. By measuring the resources available to the ASEAN states, the actual and potential degree of regionalism can be measured.

The analysis of collective decision making in this study is operationalized by measuring the homogeneity of voting behavior in the U.N. The analysis of foreign policy positions in the U.N. is used to measure the degree of political interdependence among the ASEAN countries. The voting behavior may be more indicative of political cohesion than interdependence. The appropriateness of this indicator may be increased if a broader range of collective decisions is measured not just in the U.N. As issue areas differ in their importance the collection of data on specific issue areas such as external relations, socio cultural and economic functions will determine how applicable the Functionalist model and the notion of spillover are in the context of South East Asia.

The recommendations suggest alternative indicators to measure the degree of regionalism in South East Asia. In measuring regionalism in terms of systems resources, collective decisions etc. the
linkage of nations must also take into account mutual amity and identification. The measurement of these factors is more difficult to operationalize but Lindberg suggests the use of interaction or conflict/cooperation data to measure this dimension of regionalism. The continued measurement of regionalism in terms of empirical analysis should be continued as long as multiple indicators of regionalism are operationalized and the variables are specified and justified.

8.1.2 Limitations

This study found several inadequacies using factor analysis. Data limitations in South East Asia were particularly apparent. The absence of data for many Third World countries excluded them from inclusion in the present study. The I.M.F. trade data for example, provides the main source of statistical data for export/import figures. It shows virtually complete information for all the developed nations but incomplete or missing data for many Third World countries. This lack of information, is similarly true for socio economic indicators.

Depending on what data is available, one may use other techniques of evaluating and measuring regionalism. Other alternatives include multidimensional scaling and hierarchical clustering technique. The hierarchical clustering technique derives a "distance index" to measure similarity. The index measures, for example, the "cultural distance" between two countries. The methodology is thus able to indicate different levels of regionalism among the different country groupings. Time constraints meant that this study could not verify its results, using another method.

Furthermore, the indicators used to measure regionalism in this study are not exhaustive. Other possible indicators of regionalism include inter-governmental organizations to measure the degree of political interdependence (Haas, Schubert 1978). It is reasonable to assume that increasing amounts of political interdependence is one indication of a region. Political interdependence in
terms of common membership in international organizations can measure whether the countries share similar political attitudes.

### 8.1.3 Future Research

For future research, there is the possibility that the study could be applied to a sub-national level population such as a province or state in ASEAN. This would measure the degree of regionalism within the population. However, there may be problems in the collection and reliability of regional data in looking at a sub-population. This may magnify the problems already encountered in this study, but it is an area of interest that I wish to pursue.

Operationally, to measure the degree of regionalism, I would not use factor analysis. In terms of economic interdependence, I would prefer to measure the intensity of transaction behavior, in terms of preference, dependence and interdependence. In order to measure this, the Michaely index seems the most appropriate for future research. This uses absolute transaction volumes to index the relationships which can be applied to a hypothesized region such as ASEAN. Since theoretical and empirical linkages have been suggested between trade transactions (Communications Theory), the results will be relevant to my study of regionalism.
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Appendix A. U.N. Resolutions.

- Resolution 1. The situation in Kampuchea.

- Resolution 2. The situation in Grenada.

- Resolution 3. Question of the Falkland Islands (Malvinas).


- Resolution 5. The situation in Afghanistan and its implications for international peace and security.

- Resolution 6. Question of Namibia. Situation in Namibia resulting from the illegal occupation of the Territory by South Africa.


• Resolution 9. Dissemination of information and mobilization of international public opinion in support of Namibia.


• Resolution 11. Program of action against Apartheid Effects of apartheid on the countries of southern Africa.

• Resolution 12. Sanctions against South Africa.

• Resolution 13. Relations between Israel and South Africa

• Resolution 14. Military and Nuclear collaboration with South Africa.

• Resolution 14. Oil embargo against South Africa.

• Resolution 15. Activities of foreign economic and other interests which are impeding the implementation of the Declaration on the Granting of Independence to Colonial Countries and peoples in Namibia and in all other territories under colonial domination and efforts to eliminate apartheid and racial discrimination in South Africa.

• Resolution 16. Implementation of the Declaration on the Granting of independence to Colonial Countries and Peoples by the specialized agencies and the international institutions associated with the United Nations.

• Resolution 17. Question of Palestine.

• Resolution 18. Tasks of the Division for Palestinian Rights of the Secretariat.

• Resolution 19. International Conference on the Question of Palestine
• Resolution 20. Cessation of all test explosions of nuclear weapons.

• Resolution 21. Urgent need for a comprehensive nuclear test ban.

• Resolution 22. Establishment of a nuclear weapon free zone in South Asia.

• Resolution 23. Conclusion of effective international arrangements to assure non-nuclear-weapon states the use or threat of use of nuclear weapons.

• Resolution 24. Israeli nuclear disarmament.

• Resolution 25. Immediate cessation and prohibition of nuclear-weapon tests.

• Resolution 26. World Disarmament campaign: actions and activities.

• Resolution 27. Condemnation of nuclear war.

• Resolution 28. Nuclear weapon freeze.

• Resolution 29. Release of Ziyud Abu Ein from Israeli prison.

• Resolution 30. Investigation of Israeli practices and policies in the occupied territories.

• Resolution 31. Freedom of all educational institutions in the occupied Palestinian territories.

• Resolution 32. Situation of Human Rights and fundamental freedoms in Guatemala.

• Resolution 33. Situation of Human Rights and fundamental freedoms in Chile.

• Resolution 34. Prevention of Prostitution.

• Resolution 35. Human Rights and scientific and technological developments.
• Resolution 36. Progressive development of the principles and norms of international law relating to the new international economic order.

• Resolution 37. The situation in the Middle East.

• Resolution 38. International Peace conference on the Middle East.

• Resolution 39. Supply of Modern Arms to Israel.

• Resolution 40. Prohibition of the development and manufacture of new types of weapons of mass destruction and new systems of such weapons.

• Resolution 41. Bilateral nuclear arms negotiations.

• Resolution 42. Non use of nuclear weapons and prevention of nuclear war.

• Resolution 43. Prohibition of the nuclear neutron bomb.

• Resolution 44. Nuclear weapons in all aspects.

• Resolution 45. International cooperation for disarmament.

• Resolution 46. Bilateral nuclear arms negotiations.

• Resolution 47. Prohibition of chemical and biological weapons.

• Resolution 48. Chemical and bacteriological weapons.

• Resolution 49. Curbing the Naval arms race: limitations and reductions of naval armaments extension of confidence building measures to seas and oceans.

• Resolution 50. Study on naval arms race.

• Resolution 52. Economic measures as a means of political coercion against developing nations.

• Resolution 53. Questions relating to the proposed program budget for 1984-1985.
Appendix B. Fortran Programs.

B.1 Program 1

*------------------------------------------------------------------------*
C
C THIS PROGRAM READS THE TRADE FIGURES, MAKES THE MATRIX SYMMETRICAL
C PERFORMS A LOG TRANSFORMATION AND FINALLY BOUNDS IT BETWEEN 0 AND
C 1.0
C CURRENTLY CONFIGURED FOR A 42 BY 42 MATRIX.
C
DIMENSION A(60,60), B(60,60), C(60,60)
DO 10 I = 1, 42
   READ (5,*) (A(I,J), J = 1, 42)
10 CONTINUE

C WRITES OUT ORIGINAL MATRIX
WRITE (6,11)
11 FORMAT (1X,'ORIGINAL MATRIX FOLLOWS')
DO 12 I = 1, 42
   WRITE (6,*) (A(I,J), J = 1, 42)
12 CONTINUE
DO 20 I = 1, 42
   DO 20 J = 1, 42
      IF(I.EQ.J) GO TO 20
      B(I,J) = A(I,J) + A(J,I)
20 CONTINUE

C WRITES OUT SYMMETRICAL MATRIX
WRITE (6,22)
22 FORMAT (1X,'SYMMETRIC MATRIX FOLLOWS')
DO 25 I = 1, 42
   WRITE (6,*) (B(I,J), J = 1, 42)
25 CONTINUE
DO 15 J = 1,42
IF (B(I,J).EQ.0) B(I,J) = 1
B(I,J) = LOG10(B(I,J))
15 CONTINUE
EMAX = 0
DO 30 I = 1,42
DO 30 J = 1,42
C                         
C PERFORMS THE LOG TRANSFORMATION.
C                         
C                         
IF (B(I,J).GE.EMAX) EMAX = B(I,J)
30 CONTINUE
DO 40 I = 1,42
DO 40 J = 1,42
C(I,J) = 1 - B(I,J)/EMAX
40 CONTINUE
C                         
C WRITES OUT LOG TRANSFORMED MATRIX
C                         
C                         
WRITE (6,42)
42 FORMAT (1X, 'LOG MATRIX FOLLOWS')
DO 50 I = 1,42
WRITE (6, '*') (B(I,J), J = 1,42)
50 CONTINUE
C                         
C WRITES OUT THE BOUNDED MATRIX
C                         
C                         
WRITE (6,45)
45 FORMAT (1X, 'BOUNDED MATRIX FOLLOWS')
DO 60 I = 1,42
WRITE (6, '*') (C(I,J), J = 1,42)
60 CONTINUE
WRITE (6,70) EMAX
70 FORMAT (1X, 'MAXIMUM VALUE = ', F15.4)
STOP
END
**B.2 Program 2**

---

**C**

THIS PROGRAM READS THE DATA DIRECTLY FROM SPSSX OUTPUT FILES

REFORMATS THE ENTIRE DATA, TO ENABLE DIRECT INPUT INTO A FACTOR ANALYSIS FILE AND PERFORM FACTOR ANALYSIS.

**C**

CONFIGURED FOR READING 5 FILES. ALL OF DIMENSION 38 BY 10 EXCEPT THE LAST ONE WHICH HAS DIMENSION 38 BY 8

---

DIMENSION A(38,10),B(38,10),C(38,10),D(38,10),E(38,8),F(38,8)

DO 10, I = 1,38
READ (5, *) (A(I,J), J = 1,10)

10 CONTINUE

DO 20, I = 1,38
READ (5, *) (B(I,J), J = 1,10)

20 CONTINUE

DO 30, I = 1,38
READ (5, *) (C(I,J), J = 1,10)

30 CONTINUE

DO 40, I = 1,38
READ (5, *) (D(I,J), J = 1,10)

40 CONTINUE

DO 50, I = 1,38
READ (5, *) (E(I,J), J = 1,8)

50 CONTINUE

DATA FROM EACH FILE IS RESTRUCTURED INTO AN ARRAY F

---

IF (J.LE.10) F(I,J) = A(I,J)
IF (J.GT.10.AND.J.LE.20) F(I,J) = B(I,J-10)
IF (J.GT.20.AND.J.LE.30) F(I,J) = C(I,J-20)
IF (J.GT.30.AND.J.LE.40) F(I,J) = D(I,J-30)
IF (J.GT.40.AND.J.LE.48) F(I,J) = E(I,J-40)

---

---

ARRAY F IS WRITTEN OUT WITH 4 VALUES PER LINE, THIS OUTPUT IS ENTERED INTO THE FACTOR ANALYSIS PROGRAM

---

FORMAT (4F15.4)

---

STOP

END
**B.3 Program 3**

```
C
C THIS PROGRAM PERFORMS A FREQUENCY ANALYSIS OF THE TRADE DATA
C REQUIRED TO FIND OUT THE SKEWNESS OF THE DATA.
C
DIMENSION A(44,44),B(44,44),IFREQ(0:1000)
DO 10,I = 1,44
  READ (5,+) (A(I,J),J = 1,44)
10 CONTINUE
DO 15,I = 1,44
  DO 15,J = 1,44
    IF (I.EQ.J) GO TO 15
    B(I,J) = A(I,J) + A(J,I)
15 CONTINUE
DO 20,I = 1,44
  DO 20,J = 1,44
C C HERE THE RANGE IS SET = 1000
  M = INT(B(I,J)/1000.)
  IFREQ(M) = IFREQ(M) + 1
20 CONTINUE
DO 40,M = 0,1000
  WRITE (6,80) M+1500,IFREQ(M) + 1
80 FORMAT (110,110)
40 CONTINUE
STOP
END
```
**B.4 Program 4**

```fortran
C THIS PROGRAM READS THE DATA FROM 5 SPSSX OUTPUT FILES AND DOES
C A FREQUENCY ANALYSIS ON THE TRANSPOSE OF THE DATA
C AS EACH COLUMN HAS DIFFERENT UNITS, THE COLUMNS ARE BOUNDED AND
C THEN TRANPOSED.
C
DIMENSION A(38,10),B(38,10),C(38,10),D(38,10),E(38,8),F(38,48)
DIMENSION IFREQ(0:50,48),VAL(48)
DO 10, I = 1,38
   READ (5,*) (A(I,J),J = 1,10)
10 CONTINUE
DO 20, I = 1,38
   READ (5,*) (B(I,J),J = 1,10)
20 CONTINUE
DO 30, I = 1,38
   READ (5,*) (C(I,J),J = 1,10)
30 CONTINUE
DO 40, I = 1,38
   READ (5,*) (D(I,J),J = 1,10)
40 CONTINUE
DO 100, I = 1,38
   READ (5,*) (E(I,J),J = 1,8)
100 CONTINUE
IF (J.LE.10) F(J,J) = A(I,J)
IF (J.GT.10.AND.J.LE.20) F(J,J) = B(I,J-10)
IF (J.GT.20.AND.J.LE.30) F(J,J) = C(I,J-20)
IF (J.GT.30.AND.J.LE.40) F(I,J) = D(I,J-30)
IF (J.GT.40.AND.J.LE.48) F(I,J) = E(I,J-40)

C FOLLOWING VALUES REPRESENT THE RANGE FOR EACH COLUMN FOR
C FREQUENCY ANALYSIS.
C
VAL(1) = 3.
VAL(2) = 3000.
VAL(3) = 0.5
VAL(4) = 3.
VAL(5) = 10.
VAL(6) = 100.
VAL(7) = 1
VAL(8) = 10
VAL(9) = 10
VAL(10) = 2
VAL(11) = 5
VAL(12) = 4000
VAL(13) = 20000
 VAL(14) = 15000
VAL(15) = 1000
VAL(16) = 15
VAL(17) = 0.05
```

Appendix B. Fortran Programs.
VAL(18) = 3
VAL(19) = 3
VAL(20) = 100
VAL(21) = 5
VAL(22) = 5
VAL(23) = 500
VAL(24) = 3
VAL(25) = 5
VAL(26) = 50
VAL(27) = 5
VAL(28) = 5
VAL(29) = 100
VAL(30) = 1000
VAL(31) = 5
VAL(32) = 5
VAL(33) = 5
VAL(34) = 3
VAL(35) = 1500
VAL(36) = 10
VAL(37) = 5
VAL(38) = 50
VAL(39) = 50
VAL(40) = 5
VAL(41) = 5
VAL(42) = 5
VAL(43) = 5
VAL(44) = 5
VAL(45) = 5
VAL(46) = 5
VAL(47) = 5
VAL(48) = 50000
DO 110, I = 1, 38
DO 110, J = 1, 48
X = F(I, J)
C                            --------------------------------------------------------
C  MISSING VALUES FOR EACH COLUMN ARE DELETED BEFORE ANALYSIS
C                            --------------------------------------------------------
IF (X.EQ.9.0 .OR. X.EQ.99.0 .OR. X.EQ.999.0 .OR. X.EQ.9999.0 .OR. X.EQ.99999.0 .OR. X.EQ.999999.0) F(I, J) = 0
110 CONTINUE
DO 125, I = 1, 48
ICOUNT = 0
DO 120, J = 1, 38
IF (F(I, J).EQ.0) GOTO 120
ICOUNT = INT(ABS(F(I, J)/VAL(J)))
IFREQ(ICOUNT, J) = IFREQ(ICOUNT, J) + 1
120 CONTINUE
125 CONTINUE
DO 130, I = 1, 48
DO 130, K = 0, 50
WRITE (6, 150)(VAL(I)+(K+1)),IFREQ(K, I)
150 FORMAT (F20.10,1I0)
130 CONTINUE
STOP
END

Appendix B. Fortran Programs.
Figure 9. Map of South East Asia.

Appendix B. Fortran Programs.
VITA

Michelle Egan was born in Chester, United Kingdom. Michelle is the daughter of Gill and Ted Egan. Michelle attended West Kirby Grammar School before entering the University of Warwick in 1982. At Warwick, Michelle studied History and Politics (joint) receiving a BA Hons degree in 1985. Michelle gained her Master's degree from the Department of Political Science in February 1988. Michelle intends to continue her studies in a PhD program in the U.S before embarking upon a career in teaching and research.