THE STRUCTURAL CHANGE OF TRADE AND ECONOMIC DEVELOPMENT IN SABAH MALAYSIA

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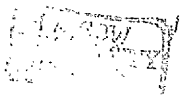

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SUMMARY

There has generally been a lack of agreement as to the specific relation between foreign trade and economic development. The hypothesis presented here is that there is a causal relationship between the two, but it is the change of structure of foreign trade rather than growth of trade without structural change that generates economic development.

Quantitatively, there is rather a structural change within the primary exporting sector than a change from primary to secondary sector, while the structural change in import trade from one functional import group to another is more conspicuous than the change within certain functional import group. Degrees of both commercial and geographic concentration of export trade have been high and increasing over time while those of import trade are low -- quite stable in commercial concentration but a slight increase in geographic concentration.

Owing to the difference in nature and production function, impacts of different exports and imports on economic development diverse. For the sake of analysis of different effects of different exports and imports, ten prime exports are selected and imports are classified according to their functional nature into five groups. The hypothesis is being tested statistically by fitting linear and multiple correlation and regression equations in the logarithm using the data of annual gross national products, total and individual exports and imports, employment and trade balance, all in current market prices, during the period 1955-70.

The overall result suggests that the structure of trade has been changing in favour of trade expansion, financial development, the transformation of mechanisation and educational effects, and growth of tertiary employment. However, employment in agricultural and manufacturing sectors has been greatly lagging behind production. Owing to the highly commercial and geographic concentration which are caused by the large proportion of exports in raw forms in the total trade, and also to the rudimentary stage of industrialisation and other important internal rigidities, external economies so that created in the process of foreign trade were not able to be retained within Sabah and further transmitted to the rest of the economy. Therefore, financial, employment and spread effects of foreign trade upon economic development cannot be exercised to their maximum extent.

The policy implication of the findings is that, in order to foster further economic development, Sabah should adopt the type of policies or strategies that will stimulate the growth of export sector and, at the same time, the growth of domestic activities. Such that to retain as high the forward linkages, and backward linkages as well, at home as possible.

: Timber

: Rubber

: Hemp

: Coconut

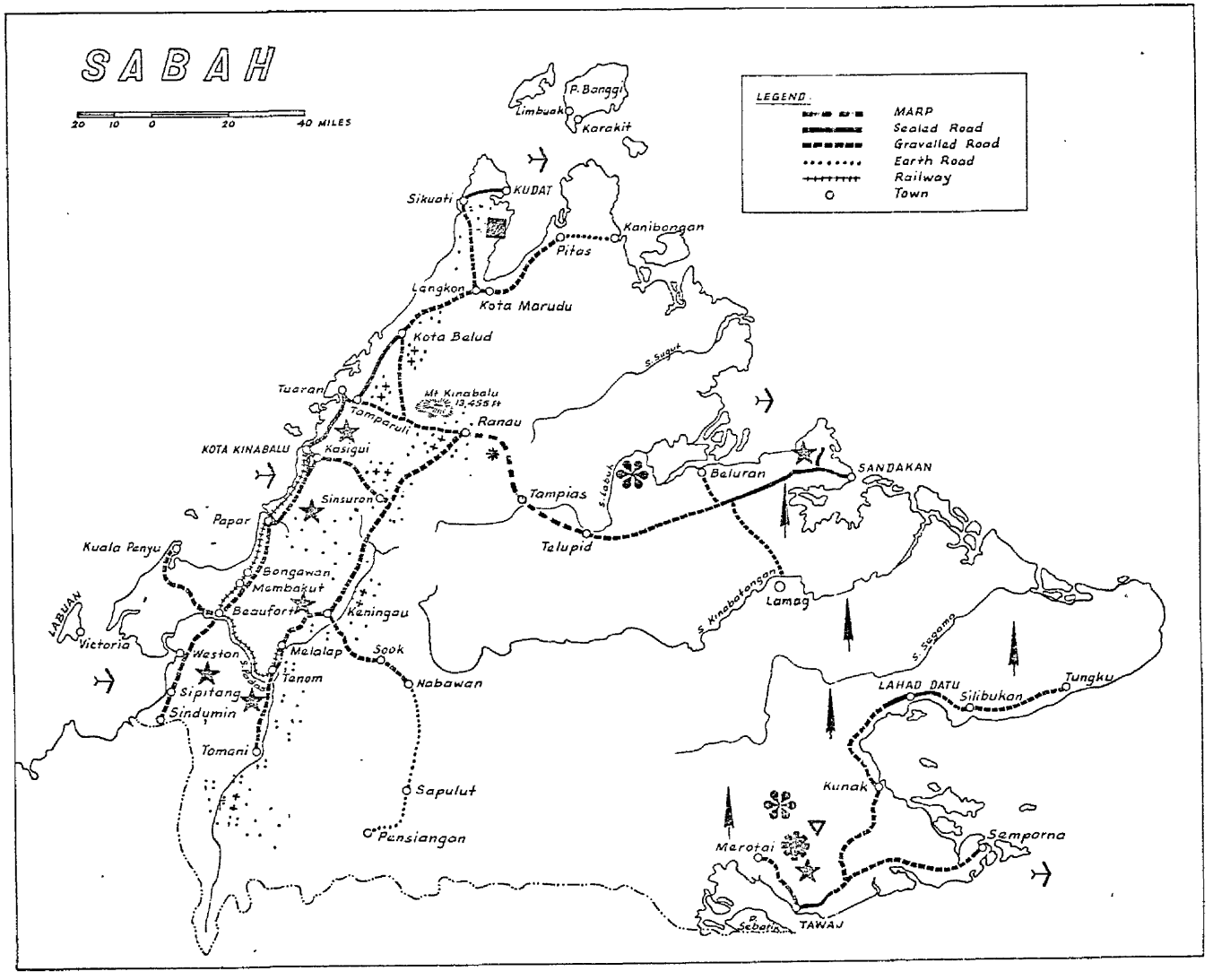
: Fish

: Oil Palm

: Cocoa Bean

: Rice

: Tobacco



CHAPTER I

INTRODUCTION

A. Sabah in General

⁂ Geography [1] -- Sabah, the then North Borneo, occupies the northern part of the Island of Borneo, between 5 degrees and 7 degrees north of the Equator. It covers an area of about 29,388 sq. miles, less than a third of the whole Island or about the size of Scotland, with a heavily-indented coastline of about 800 to 900 miles long.

The area is mountaineous, of dense tropical forests, alluvial and swampy coastal plains intersected by numerous rivers and fertile valleys. It contains the central mountain crocker ranges, of 4 to 6 thousand feet high, rising from the range of coastal low hills and culminating at the northern end in Mt. Kinabalu, 13,455 ft., the highest mountain in South East Asia, runs parallel to the west coast, and there are other mountain complexes at various points to the east of it. The swamp belt is less conspicuous on the west coast because of the proximity of the mountain; but on the east coast it is prominent and is backed by broad, heavily forested plans.

The climate of Sabah is tropical and equable, but humid and pleasant. Near the coast, day temperatures vary

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1. See also North Borneo, Annual Report, various issues.

from 70°F in the early morning to 88°F at mid day, and only on exceptionally hot days to 93°F or 94°F, while at higher altitudes it is cooler, although not even Mt. Kinabalu reaches the snow line. Humidity is generally between 70% to 95%. The annual rainfall varies greatly from place to place, from 60 to 120 inches roughly depending on the locality. Differences in rainfall characteristics and its variations are caused by the prevailing winds. The highest rainfall is in the South-west (Beaufort and Labuan) and the lowest and most evenly distributed rainfall is in the Interior (Tenom, Keningau and Tambunan) and at Tawau in the south-east corner of the country.

⁂ Political Development [2] -- The political history of Sabah up to 1963 can be divided into three clearly demarcated periods. Over the years, Sabah has undergone many changes of government since it formed part of the domains of the Sultans of Brunei and Sulu. Before the days of the North Borneo Chartered Company, an ill-fated attempt was made by an American company, to colonise part of the territory, using land grants from the Sultan of Brunei. The American Trading Company, however, was unsuccessful and the cession was eventually taken over by the British Chartered Company in 1881, which, in turn, under the advice and control of a Governor appointed by Britain, administrated the country until 1942. Then came the World War II, and the Japanese 'co-prosperity' government. After that, an Allied military administration, which soon submitted the sover-

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2. See also North Borneo, Annual Report, various issues.

iegnty to the civil authorities and the new colony was born. From then on, until 1963, North Borneo became the British Colony. Sabah achieved independence on August 31, 1963, and joined Malaysia on September 16, 1963.

⁂ Natural Resources [3] -- Sabah is not only endowed with dense tropical forests but also with vast fertile land and other natural resources. This is the foundation of Sabah's agricultural economy. So far, the dense forests become the country's richest wealth, they are the source of tropical wood supply. With two exceptions, all the common and popular timbers in Sabah are of the family Dipterocarpaceae (non-conifer) and the two non-dipterocap species are particularly suitable for construction purposes requiring a durable hard-wood. The vast fertile lands have given much room for agricultural production for domestic consumption, e.g. rice, and exportation, i.e. rubber. Stone, coral, sand and clay are the only mineral materials being exploited in Sabah but reports of geological surveys indicate that there are promising occurences of rich mineral resources are deposited underground. So far, the major discovery was a large commercially exploitable copper deposit at Mamut on the eastern foothills of Mt. Kinabalu and oil in the offshore areas, and several other mineral deposits, e.g. iron and chromite, have also been found trace in Sabah.

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3. See also North Borneo, Annual Report; Annual Report of Forest Department; Annual Report of Geological Survey Department; and the United Nations, Development Programme: Natural Resources Survey of the Labuk Valley, Malaysia (1968).

⁂ Demography -- Since 1891 eight decennial Population Censuses have been held in Sabah.[4] According to the latest Population Census (1970), Sabah has a population of 653,674 and thus 22 persons per sq. miles, which is almost the lowest density of population in Asia.

Sabah is a plural society which is made up of various races -- Bajaus, Kadazans, Muruts, Malay, Chinese, Indonesian, Philippines and others.

The population of the territory is located almost entirely along the narrow coastal plain of the west, in the Pegalan Valley of the Interior and in the coastal towns of the East. Broadly speaking, a large proportion of population live in the West Coast Residency and the comparatively low density of population on the East Coast, except in those coastal towns, is indicative of the large area there of forest and swamp.

Sabah's population has been growing annually at 3.4% compound from 334,141 of 1951 to 454,421 of 1960 and at 3.72% compound from 1960 to 653,674 of 1970. As a result of much increased natural growth of population and the increase of immigrants in recent decades, Sabah's population very much characterises with young structure. This phenomenon is clearly indicated in Figure 1.

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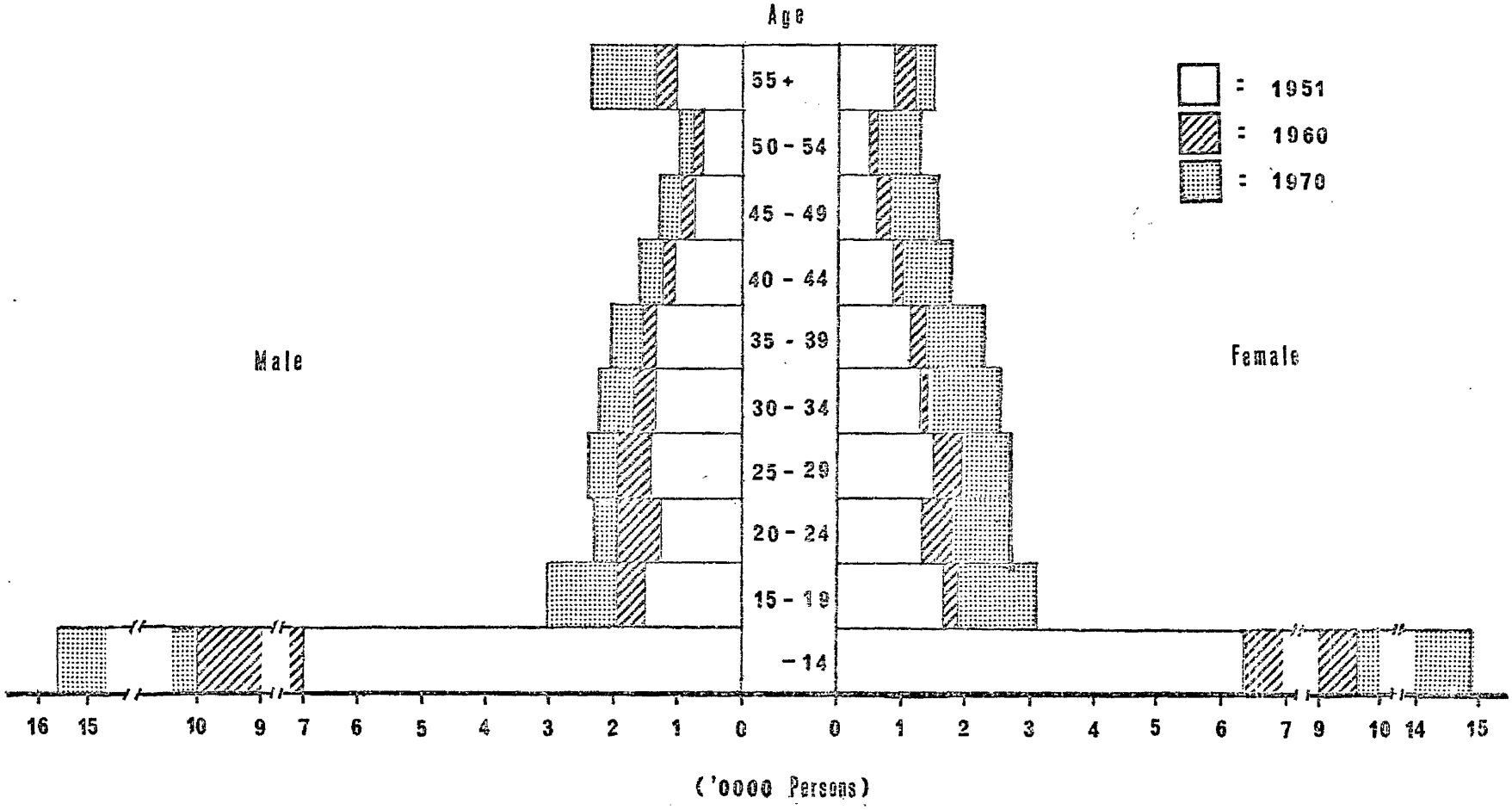
4. These Censuses were undertaken in 1891, 1901, 1911, 1921, 1931, 1951, 1960 and 1970. A census had in fact been proposed for 1941 was abandoned owing to the advent of war.

Figure: 1 SABAH: Structure of Population by Sex and Age

Source: Population Census, Sabah, 1951, 1960 and 1970



According to the Population Census of Malaysia, there were about 16.5% of Sabah's population inhabited in large towns, i.e. Sandakan, Kota Kinabalu and Tawau, in 1970, about 5.7% were in small towns, e.g. Keningau, Kudat and Lahad Datu, and the remaining 77.8% were in the rural area. Population of age below 15 dominated about 40.5% in large towns and about 44.4% in small towns, and 57.2% and 53.6% of population in large and small towns respectively were aged between 15 to 64. As a whole, there were 18.5% of the whole population aged between 15 to 64 inhabited in urban area in 1970 but this figure was 11.1% in 1960.

** Development Planning and Policy -- Immediately after the severe war-time destruction, various schemes and plans have been scheduled for, soly, the reconstruction of the territory. Since 1955 government's policy has begun to shift away from reconstruction and initiated to throw light on the framework of both economic and social development gradually.[5]

During the period 1955-70, there are three development plans which covered 1955-60, 1959-64 and 1965-70 in Sabah.[6] The first two Development Plans were not prepared as a comprehensive document reviewing progress over the previous period and setting out the problems which had to be faced and

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5. In an address to the Legislative Council in January 1955, the late Governor of the then North Borneo, Sir R.E. Turnbull, first publicised the policy for economic development. See Colony of North Borneo, Government Gazette, 1955, pp. 20-25.

6. The 1955-60 Development Plan was revised in 1955 in the /..

and the measures necessary to deal with them, but they contain rather a mere statement of public investment. Therefore, no explicit economic targets were stated in these early Development Plans. A nation-wide economic policy was being designed in the First Malaysia Plan to eradicate poverty by raising productivity and income-earning capacity, to general employment opportunities, to stimulate new kinds of economic activity, both agricultural and industrial, so as to reduce the economy's dependence on single or few primary products, to open sufficient new land for development, and to improve and expand infrastructure, particularly transportation and communication facilities.[7] However, as a matter of fact, various steps have been undertaken during the period covered by the two early Development Plans to ensure and generate future economic development in Sabah, and efforts have also been made to intensify these measures in the Sabah Development Plan, 1965-70 or First Malaysia Development Plan (Sabah), 1966-70. As a primary exporting economy, emphasis has virtually long been placed on maintenance and/or promotion

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6. cont./.. light of a new allocation of funds under the Colonial Development and Welfare Act. Again, as a result of new financial allocation from CD & W Acts passed in 1959, a new Development Plan was scheduled for the period 1959-64. The Sabah Development Plan 1965-70 was finally absorbed into the First Malaysia Development Plan 1966-70. For detials of the allocation of funds, see Central Office of Information, Reference Division, The U.K. Colonial Development and Welfare Acts (R. 3021) and House of Common, CD & W Bill, 1959 (Cmnd. 672).

7. Kuala Lumpur, Malaysia, First Malaysia Plan, 1966-70 (1965).

of production and exportation, for example, new planting and replanting of natural rubber,[8] and with the recognition of the weakness of the main exports efforts have also been conducted to the diversification of production and then of exports, for example, the trial plantation of new crops -- cocoa beans and oil palm -- in 1957.[9] Therefore, agricultrual policy was so designed to diversify crop production in order to reduce dependence on rubber. The process of economic promotion and diversification was further extended in the Sabah Development Plan 1965-70 to the production and exportation of, particularly, wood-based and agro-based manufactures. A 'Development Area' was thus declared under the Investment Incentives Act, 1968, in order to encourage industrial development in Sabah.

⁂ National Products -- No official estimates of Sabah's national products for the years prior to the sixties was published. Also, methods used for estimation are different for different periods of time. Annual estimate for 1963-66 were made based on the classification of imports and those for 1967-70 were based on industrial origin. Annual figures for the first half of the sixties based on industrial origin are also estimated by the International Organization, i.e. the World Bank.

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8. A Rubber Industry Replanting Ordinance came into force on 1st. January, 1955. Colonial Report : North Borneo, 1955.
9. See Colonial Report : North Borneo, 1957, p.51.

Although Sabah Government schedules various multi-year development plans to ensure economic development and implements various economic policies to direct or encourage initiation and expansion of economic activities, most of the economic activities are being left to private sector. But the public sector is rather in the subsidiary but important position in the entire process of national production. This is indeed indicated in the dominant share of the private sector in the Gross Domestic Products shown in Table 1-1.

B. Basic Economic Characteristic and Problems

⁂ Labour Shortage -- One of the most serious impediments to development in Sabah is the perennial question of the shortage of both skilled and unskilled labour, a problem which Sabah has been facing for a very long period. It is possible, that this shortage of population is one of the main factors holding back the gorwth and development of Sabah. Ways and means of increasing the population by immigration are forever being explored. Consequently, mobility of labour from outside to meet the needs of economic development has been and still is a prominent feature in the economy. Various censuses indicated outstanding figures of migration -- during the intercensal periods, the 1960 Census showed a net migration of 20,567. These shortages of both skilled and unskilled labour were and are the function of inelastic labour supply and rapid expansion and diversification of the economy. Perhaps, the shortage of unskilled labour may be less a function of the

Table 1-1

Sabah : Gross National Products and Expenditure

1961-70

(M$ million at current market prices)

	1961	1962	1963	1964	1965
Consumption Expenditures					
Private	243	250	267	324	337
Public	47	56	78	72	90
Capital Formation					
Private	42	53	55	37	40
Public	20	27	37	48	63
Gross National Expenditure	352	376	437	481	530
Exports @	222	238	277	285	335
Less Imports @	218	244	308	313	347
GDP *	356	370	401	453	518
Factor Income Payment (inflow)			9	4	4
Less Income Payment (outflow)			9	9	10
GNP	330	352	401	488	512

Note : @ Including goods and non-factor services.

* Based on industrial origin.

cont./..

(continued)

Table 1-1

Sabah : Gross National Products and Expenditure

1961-70

(M$ million at current market prices)

	1966	1967	1968	1969	1970
Consumption Expenditure					
Private	351	448	453	463	523
Public	104	101	117	146	162
Capital Formation					
Private	68	90	82	103	154
Public	42	39	80	89	93
Gorss National Expenditure	565	678	724	801	932
Exports @	388	426	444	529	552
less Imports @	352	348	366	431	525
GDP *	600	756	802	899	959
Factor Income Payment (inflow)	4	4	5	5	5
less Income Payment (outflow)	11	9	9	13	12
GNP	593	751	798	891	952

Source : Computed and compiled from IBRD, Malaysia -- Review of the Economic Situation, vol 1 (may 1967, Report no. AS-127a); Sabah's 10th Anniversary Within Malaysia (Sabah, 1973), pp. 267-68; Dept. of Statistics, Data for the EPU Mid-Plan Review and The IMF Consultation, 1968 (Kuala Lumpur, Malaysia, 1968); and Dept. of Statistics, Annual Bulletin of Statistics (Sabah), various issues.

absence of potential workers than of their geographical maldistribution in relation to the demand for workers, however. Because, as a matter of fact, there exists an appreciable population of subsistence agriculturists inhabiting mainly in the Interior and West Coast area of Sabah. But the problem is how to move these labour force out of subsistence agriculture into more productive activities. Although almost all of the economic development during the 1960s -- in timber, cocoa, fisheries, oil palm and thier associated processing -- have been centered on the East Coast where more job opportunities are availbale and accessibility is easier. However, owing to various factors this work force has not been coming forth to take this advantage of job opportunities available. It is an expansive and time-consuming process of moving workers from the Interior and the West by taking a ship from Kota Kinabalu right round the north of the country to the East Coast, and of course a return visit is difficult as well. Moreover, those subsistence agriculturists are mostly fishermen and rice-cultivators (the main subsistence activity) who may not be keen to the new environment and to undertake new types of work like timber and oil palm production.

Ironically, in accompany with the shortage of labour, Sabah appears to face a situation of excess supply of educated manpower. Owing to the comparatively small size of the economy, its potential demand for educated manpower is relatively limited, and most of its development, i.e. settlement

schemes, estates, timber production, etc., is in a direction offering mainly unskilled employment, inputs of educated manpower are relatively much smaller. There exists such a question of how far the flood of educated school-leavers may be able to find jobs suitable to its expectations while there are producing many school-leavers each year. Therefore, though Sabah is at present seriously deficient in some types of educated manpower, the number of such people it can support are relatively small and the current directions of development are unlikely to substantially increase the relative capacity to absorb such educated manpower.

* Transportation and Market Fragmentation --- Another constraint to the economic development of Sabah is the deficiency in an effective transport system, which resultantly leads, at least, to the fragmentation of the economy and the existing small market, labour immobility, high cost of domestic production and/or high price, and economically regional independence. Substantial investments by government have been put into the development of transport system, but it is still far from satisfactory. Consequently, the main means of connecting towns to each other is via air and sea, and, to some extent, via rivers. The Interior is more or less isolated and the West Coast is not connected by land transport facility to the East Coast.[10] A reasonably good road system links most of the towns

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10. At present, a gravelled-marp road can be used for connecting the East and West Coast, but it is still under construction.

on the West Coast, which also has both road and railroad access to the Interior Residency. In the East Coast itself, there is no road system linking the main towns of Sandakan, Lahad Datu and Tawau.

Due to the fragmentation of the economy of what is already a small market, the economy of Sabah becomes a collection of 'enclaves' centered by towns and surrounded by various concentration of population. These 'enclaves' have minimal economic contacts with each other and look outward for external economic relationships independently. Each is dependent upon foreign markets as the main source of income with which to buy imported goods for consumption and investment via air/sea. Small and fragmentated markets raise difficulties in developing domestic industries to compete with imports, particularly where high costs are associated with small output. Its geographical location, coupled with poor transport facilities and the enclaved nature of the markets, raise the price of imports, particularly in the more inaccessible area. But, while imports are expansive, imports substitution, to a great extent, is also an uneconomical approach under the present conditions and, consequently, facing a choice between raising the income of the local producers and lowering the costs of living for the consumers.

⁂ Specialisation and Dualism -- Structurally, the foundation of the Sabah economy is predominantly agricultural -- 70% and 52% of GNP at factor costs was derived from

the agricultural and forestry sector in 1961 and 1970 respectively and this sector employed 80.5% and 63.6% of the total national employment in 1960 and 1970 respectively. Large proportion of the employed are engaged in homestead farming on holdings of 15 to 20 acres or less, operated by families with occasional hired help, and producing rice and mixed crops for subsistence and exports crops such as rubber and copra to provide a small cash income. Superimposed on this foundation of homestead farming are the timber and plantation of all sizes up to a maximum of about 2,000 acres. The only other rural occupation of any significance is fishing which, apart from one or two industries, is generally carried on by individual operators. Factory industries are for the most past processing industries connected with the activities of the timber companies, e.g. sawmilling, and estates, e.g. hemp stripping and oil milling. Though a number of small scale factories exist in the towns, producing articles varying from soap to aerated water for local consumption. Finally, there is a multiplicity of services, e.g. building, transport, public utility and commerce, demanded by the growing and prosperous community.

Adding to the fact that the economy is agriculturally oriented it is also export-oriented, exporting a narrow range of primary commodities. It is due to the current stage of development, e.g. market fragmentation, it is for Sabah rather to specialise in the production or exploitation of raw materials for which there exists limited or no market at home.

In addition to the specilisation on agricultural exports, Sabah does quite a substantial amount of re-export trade, for instance, raw copra is being imported via monetary and/or barter trade from the Philippines and then re-exported to the rest of the world, and machinary and transport equipments are imported from abroad and usually re-exported to the neighbouring countries like Indonesia and Brunei.

Primary products are mainly for exports and only a very small proportion is being consumed in the local economy. Complementarily, with little in the way of local manufacturing or processing industries, Sabah is in turn dependent upon imports for wide range of consumption and investment goods ranging from food and beverages to chemicals, machinery and transport equipments. Other than monetary trade, there exists a considerable barter trade at, particularly, the ports on the East Coast.

Specialisation is to such an extent as to convert Sabah into a dualistic economy -- a modern and highly developed sector, i.e. mainly the exports sector and its supporting sector(s), which has high income-earning capacity, and other traditional and backward sector which comprises of subsistence agricultural sector, e.g. padi, coconut, smallholder in rubber industry and small scale fishing industry.

Simultaneously, there exists pecuniary dualism which even crosses the boundary of the above two types of economies. They are the monetary and non-monetary sectors.

The latter is the one in which transactions involve no financial transaction but a mere barter trade. This phenomenon is more common in subsistence rural area in Sabah but also characterises substantial part of Sabah's external trade with Indonesia and the Philippines.

There is also the existence of a dualism in financial market. Despite of the well organised credit market in the modern and monetary sector, credit market in rural area is so disorganised. Credit market in the rural area cannot be controlled by the government nor by other financial institutes but by the local moneylenders rather, who are the chief source of credit to the small borrowers. Consequently, interest rates are relatively higher in rural area than in the modern sector.

Generally, level of wages is higher in the modern sector than in the traditional sector in Sabah. This is in part due to the high income-earning capacity of the modern sector, in part to the shortage of supply of labour and in part to the demand for regular workers. Wage rates in timber industries are generally higher than those in other agricultural industries, for example.

'Technology' dualism also characterises Sabah's economy. Modern technology is being applied in certain sectors while the other remains in the primitive or traditional stage of technology. This divergence holds even true within a sector or industry. Generally, modern technology, e.g. mechanisation, is being adapted and adopted in modern sector and primitive technology in backward area -- gill nets and beach seine remain

to be practised in fishing.

C. Approach of Research

⁂ Initiative of Study and Hypothesis -- Lop-sided production, i.e. primary agriculture oriented, accompanied by heavy dependence upon external economic relationship has made the economy of Sabah vunerable and the internal factor of uneffective transport infrastructure, which leads to market fragmentation, immobility of domestic labour and high production costs, etc., has further exaggerated the existing situation. However, given these economic problems, Sabah's external trade has virtually shown a brisk tempo of expansion accompanied by a drastic change in its structure or pattern during the period 1955-70. What was the position of structural change in the expansion of external trade and in turn in the process of economic development ? Largely because of the difference in production function, different commodities or industries will response to the economic signal differently and their backward and forward linkages so created will be diverse.

For the last two decades, a good deal of attention has been devoted in theoretical and empirical frameworks to various aspects of the relationship between foreign trade, economic structure and economic growth. Studies of this kind attempt to discover uniformities in the pattern of growth, provide insights into the process by which these patterns emerge, and thereby increase our knowledge of the process of growth. It is interesting to investigate the structural change of

external trade and its policies in Sabah economy, which has the above mentioned peculiar characteristic and problems, that may have peculiarly affected the gorwth pattern of the economy and, at the same time, to reinforce or qualify the established generalisations and further improve our understanding of the growth process.

Therefore, in this study, the main facus is on the trade structure -- composition and concentration. And, it is tentatively to examine the hypothesis that, given the current economic constraints, Sabah's economic development is largely attributable to the expansion of external trade which was in turn due to the change in trade structure.

Although Sabah's economy has been changing from time to time, however, special studies of its economic development can barely be seen in the literature. This is my other reason to attempt such a study on foreign trade and economic development in the case of Sabah, which embodies some peculiar characteristics and problems, both economic and non-economic.

** Methodology -- This study covers a period of sixteen years, from 1955, which is the beginning of Sabah's development era, to 1970. Because facus is mainly on the change of trade structure, this period is accordingly further divided into two sub-periods of eleven-year basis, i.e. 1955-65 and 1960-70, and three of six-year basis -- 1955-60, 1960-65 and 1965-70, and the performance of trade in various periods is being examined. So that to reveal and compare the successive

changes of trade structure and their contribution.

In order to quantify the relationship between foreign trade and economic development, quantitative analysis is being proceeded throughout this study. The main quantitative method is the regression and correlation technique. Both logarithmic and orthogonal regression equations are the main stream being used to demonstrate the relationship between one variable and another. Multiple regression equations are also being applied in some cases.

Instead of compound growth rates, fractional or exponential growth rates are being used, except otherwise indicated, throughout this study. It is the regression of annual rate of growth on time; the equation is $\log. X = a + bT$, where T represents calendar years.

Although various devices are available for measuring the degree of concentration, both commercial and geographical, the Gini-Hirschman Index [11] method is adapted in the present study. Because it has a main advantage that it permits the use of statistical tests of significance and of which formula can easily be converted into a simple computer program such that to reduce time consumed.

Other methods adapted in this study are indicated in the text.

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11. For more detials, see Appendix I.

⁂ Scope of Study -- This study covers a period of sixteen years, from 1955 to 1970, of foreign trade and economic development in Sabah. Not only the effects of overall foreign trade on economic development are being considered but the effects of respective individual exports and groups of imports are also being taken into account. Although direct effect is the main theme in this study, indirect contributions are also analysed, as far as information is available. To evaluate the role of overall and individual exports and imports in the process of Sabah's economic development, assessment is being made from various dimensions -- public revenue, foreign exchange, gross national products, employment and transformation of non-economic benefits.

Therefore, in Chapter II, the growth and structural change of exports and imports trade are being investigated. Special attention has been drawn to the development of some prime individual exports and some groups of imports classified accordingly to their nature and function. Level of concentration, in both commercial and geographical, is quantified and indicated by the coefficients or indexes of commercial and geographical concentration respectively. An attempt is also being made to connect trade policies, both internal and external, with the growth and structural change of Sabah's foreign trade.

The findings thus derived in the previous chapter are further applied for analysis of the financial effect, employment effect and 'spread' effect of the development of foreign trade, directly and/or indirectly, on the process of economic

development in Sabah. Some selected economic indicators -- foreign exchange earnings ability, public revenue, gross national products, employment and transfer of knowledge -- are used to measure the impetus of overall export and import trade and of individual exports and groups of imports in the economy. This is Chapter III.

The role of the structural change of foreign trade in the economy for the period under consideration is assessed in Chapter IV from two dimensions -- as a leading sector and source of external and internal finance -- based on the preceding research and analysis. Some suggestions for future economic development are also tentatively put forward in this chapter.

D. Materials and Reservation

Data used in this study are largely compiled and computed from Sabah Government's publications and the United Nations publications. Because of lack of accurate and liable statistics of price index, all data are thus at current market prices as originally appeared in the aforementioned publications, therefore one must beware of the impacts of continuous inflation in Sabah upon the value, in both monetary and real terms, of economic activity. Exports are in f.o.b. value and imports in c.i.f. value. Because of the shortage of firm statistics for non-commodity or invisible trade, value of export or import trade includes merely commodity transactions.

However, the amount of invisible trade constitutes only a very small proportion of Sabah's total export or import trade, it is reasonable to expect that this incompleteness would not affect the reality of the picture of Sabah's foreign trade much. Since exports and imports used in this study include goods at their full value, without any offsets for current consumption, its therefore proper to use gross, not net, products. Exports and imports of commodities and services are moredirectly related to gross domestic products in market prices than to gross national products but it may be more expedient to use the latter,[12] because the latter gives the level of gross products actually gained -- net of the net flow, mostly outflow, is so small a fraction of either domestic or national products. There is no government publication of Sabah's gross national products prior to the sixties, estimates of GNP for the years before 1967 are based on the classification of imports and those for years from 1967 onwards are based on the industrial origin of GDP. But, in this study, figures of GNP for the first half of the sixties are derived from both the series of GNP published by the Sabah Government and those by the IBRD,[13] based on industrial origin of GDP. The analysis of employment development is largely based on the information available in the decennial Population Censuses and supported by

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12. S. Kuznets, "Quantitative Aspects of the Economic Growth of Nations. IX. Level and Structure of Foreign Trade : Comparison for Recent Years" (Econ. Dev. and Cultural Change, XIII, 1, Part II, 1964), p. 7.

13. IBRD, "Malaysia -- Review of the Economic Situation" (vol. I, May 1967. Report No. AS-127a).

the Annual Survey of Labour Force which covers only those engaged in the establishments employing at least twenty persons. For the purpose of quantitative analysis, a series of annual employment for 1955-70 is thus being estimated by assumming a constant growth rate (compound) of employment between two relevant decennial population census years.

In addition to the information and statistics collected, which will no doubt raise substantial number of problems, the analysis in this depends, to a substantial extent, upon the author's indigenous knowledge of the area. The conclusions thus derived are often qualified and tentative. They constitute only an impressionistic account of the role of changing structure of foreign trade on economic development. However, this does not necessarily mean that they are pusillanimous.

CHAPTER II

THE STRUCTURAL CHANGE OF EXPORT AND IMPORT TRADE

A. Total Exports and Imports

Sabah is one of the ECAFE countries which enjoyed a fastest rate of increase in foreign trade, where total volume of exports and of imports was increasing at annual growth rates of 11.1% and 10.6% respectively for the period 1955-70. The growth rates of Sabah's total exports for both periods of 1955-70 and 1960-70, as shown in Table 2-1, are much higher than those of the entire South and East Asian countries, i.e. 6.6% and 7.0% correspondingly, and those of the entire developing countries -- 6.3% and 7.2% -- at the same periods.[1] As absolute volume of trade is concerned, volume of total exports has increased from about M$ 105 million in 1955 to M$ 534 million in 1970 which is more than five times the former; while the increase in total imports has been as well about five and a half times, from M$ 87 million in 1955 to M$ 498 million in 1970. Therefore, quantitatively, the stupendous increase in total exports is largely offset by the correspondingly great expansion in total imports. Another noteworthy feature is that the patterns of growth of both total exports and imports

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1. United Nations, Handbook of International Trade and Development Statistics, 1972. Table 1.5 and Table 1.6.

Table 2-1

Sabah : Statistical Indicators For Total Exports And Imports

(M$ million at current market prices)

	1955-70	1960-70	1955-65	1955-60	1960-65	1965-70
Total Exports	--					
Volume	104.88	222.62	104.88	104.88	222.62	304.96
	534.04	534.04	304.96	222.62	304.96	534.04
Annual Growth Rate %	11.12	9.84	11.31	14.41	6.49	11.38
Index of Fluctuation %	5.97	4.67	7.43	7.79	4.43	3.25
Total Imports	--					
Volume	87.54	195.80	'87.54	87.54	195.80	334.49
	497.97	497.97	334.49	195.80	334.49	497.97
Annual Growth Rate %	10.58	7.90	13.47	14.08	11.27	7.51
Index of Fluctuation %	9.73	6.92	5.37	5.52	3.48	5.55

Note : Average annual percentage deviation from trend :

$$F = \frac{100}{n} \sum_{i}^{n} \frac{|Xi - Xi'|}{Xi'}$$, where

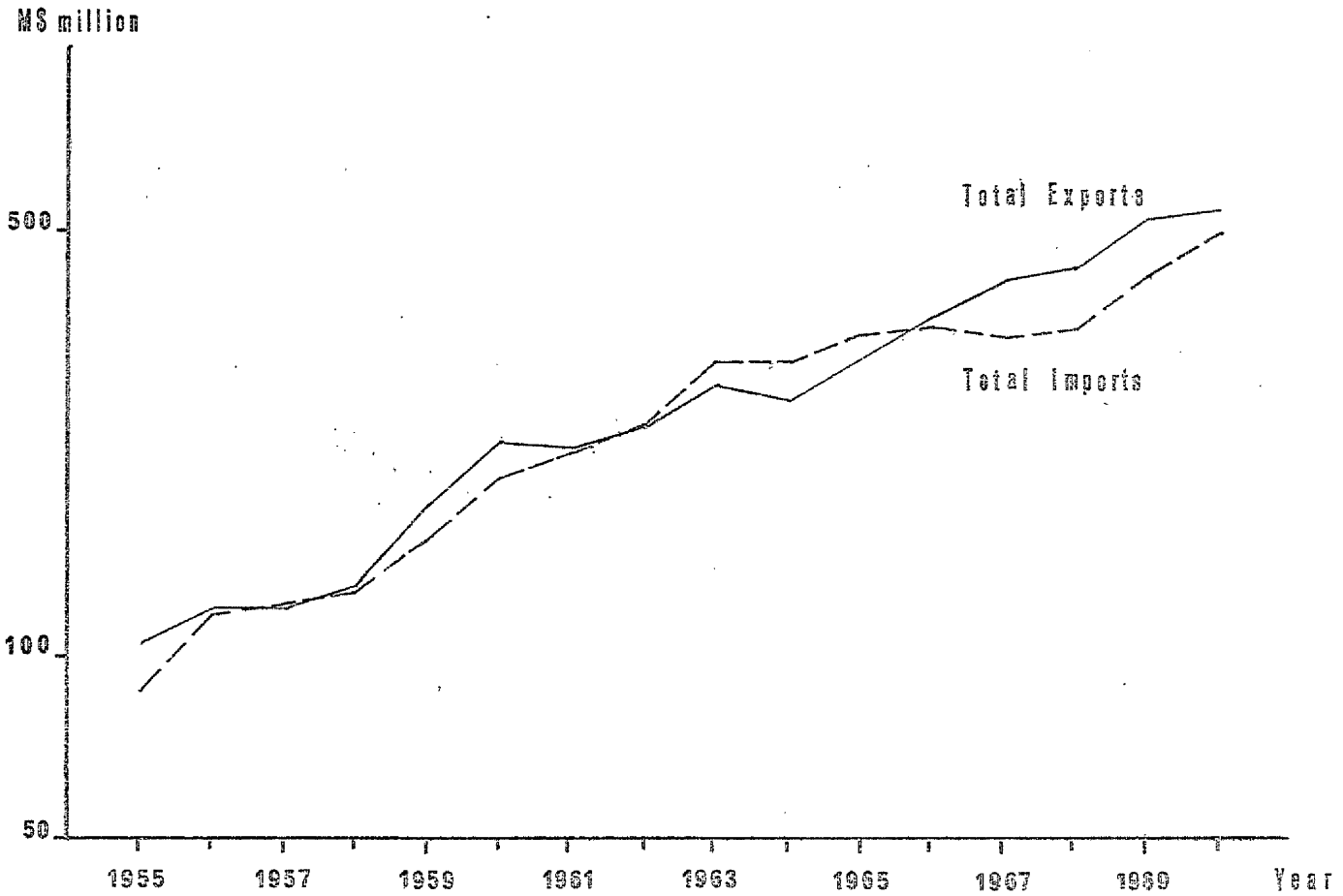
Xi = value of export earnings (imports) at time i ;

Xi' = corresponding trend value (exponential trend) ;

n = number of years covered.

Figure: 2 SABAH: Trend of General Trade, 1955-70 (semi-logarithm)

Source: Appendix Table 1



are similar to each other. From Table 2-1, rates of growth of the total exports in various periods are accompanied by the change of growth of total imports in the corresponding periods. As the entire period under review is being divided into three six-year sub-periods, i.e. 1955-60, 1960-65 and 1965-70, the growth of total imports shows a decelerating trend and so a descending growth rate is indicated in the change of total exports, except a rather drastic fall in the period 1960-65. The relation between total exports and total imports is as well clearly demonstrated in Figure 2 which shows that the curves for total exports and total imports and as well as of which patterns of growth are very close to each other, although the amplitude of total imports is mostly outweighed by that of total exports.

To show the annual percentage deviation of actual volume of total exports and of total imports from respective trend, index of fluctuation compared with the growth rates of the trend are again demonstrated in Table 2-1. The demonstration has been done not only for the entire period but for various sub-periods as well. The index of export fluctuation indicates that the average annual deviation of various total exports for the period from its trend is 5.97 percent point and the average percentages of deviation for various sub-periods range from 3.3 percent point to 8.0 percent point. Whilst in the case of imports, the average percentage of deviation for the entire period 1955-70 is 9.73 percent point and others range from 3.5 percent point to 7.0

percent point for various sub-periods. The percentage of exports fluctuation shows a decline for the sub-period of 1955-60, 1960-65 and 1965-70. This implies that, on the one hand, the degree of deviation is less from the trend in the later period than the earlier ones and the difference between annual growth rates of each of the years in the later sub-period is smaller than that in the earlier ones, on the other. In other words, annual change of total exports in the earlier sub-period is less stable than that in the later sub-period. This is also warranted by the annual changes in various periods tabulated in Appendix Table 1.

B. Composition of Export and Import Trade

* Composition of Exports -- Sabah has been a primary products producing and exporting economy since the early age. It is absolutely clear as we look at Table 2-2, which presents the relative volume of various commodity classes in total exports, and Appendix Table 2, which shows the absolute volume of exports of these commodity classes. Annual growth rates at various periods are listed in Table 2-3. These tables reveal several features. The dominant commodity class is the one which consists of crude materials, oils and fats, most of which are produced domestically, constitutes 76% to 88% of the total exports. Other three classes comprise food, beverages and toabcco, manufactured goods, and capital goods, while a substantial proportion of which are not local output but re-exports instead. In respect of absolute value, each of these four

Table 2-2

Sabah : Percentage Share of Exports by Commodity Class

	Food Beverages and Tobacco (1+0)	Crude Materials and Fats (2+3+4)	Manufac-tured Goods (6+8)	Capital Goods (7)
1955	8.42	84.20	3.58	0.47
56	11.63	79.52	5.54	0.55
57	9.65	83.10	3.89	0.89
58	9.49	85.00	1.68	1.08
59	7.85	87.87	1.18	0.87
1960	8.70	86.87	1.70	0.98
61	12.51	83.37	1.48	0.80
62	16.61	80.04	1.29	0.71
63	18.01	76.62	1.77	1.58
64	13.85	78.93	1.66	1.71
1965	15.41	78.71	1.44	1.42
66	7.03	86.83	1.38	1.71
67	6.60	87.88	0.91	1.38
68	4.29	88.31	1.21	2.40
69	4.91	84.90	1.21	5.69
1970	5.30	87.20	1.70	2.60

Note : Numbers contained in the parentheses are SITC one-digit code.

Source : Computed from Appendix Table 1 and Appendix Table 2.

Table 2-3

Sabah : Annual Growth Rate of Exports By Commodity Class

(percentage)

	1955-70	1960-70	1955-65	1955-60	1960-65	1965-70
Total Exports	11.12	9.84	11.31	14.41	6.49	11.38
(0 + 1)	7.01	-1.92	17.78	11.46	15.75	-8.22
(2 + 3 + 4)	11.34	10.53	10.55	15.78	4.47	12.35
(6 + 8)	3.99	7.56	0.32	-11.89	5.98	13.34
(7)	22.73	24.57	21.13	29.43	20.53	32.10

Note : (0+1) = Food, Beverages and Tobacco;
(2+3+4) = Crude materials and Mineral fuels;
(6+8) = Manufactured goods;
(7) = Machinery and Transport Equipments.

Source : Computed from Appendix Table 2 and, United Nations, Yearbook of International Trade Statistics, various issues.

commodity classes enjoys a favorably growing trend, particularly the exports of crude materials and capital goods. In regard to percentage share in total exports, despite the capital goods class that fulfilled a more significant growing trend and a less significant one for crude materials class over the period under review. Manufactures class suffered from a decelerating trend which is due to the fact that the growth of volume of this class is not fast enough to follow the growth of volume of the two classes mentioned and is thus overtaken by the latter. Food class also faces a diminishing trend which is again mainly due to a relatively slower expansion. The comparison of the growth rates of various classes with those of total exports at corresponding period clearly explains the changes in percentage share. With the exception of exports of food, beverages and tobacco (SITC, 0 & 1), growth rates of other commodity classes are usually accompanied by a level higher than that of total exports.[2] With the exception of two commodity classes -- manufactured goods and capital goods -- growth rates of total exports and other commodity classes are higher at the earlier period than at the later one. Or, in other words, they are facing a decelerating growth trend. Notably, the annual growth of manufactured goods exported shows an improving advancement in the successive periods. This explicitly indicates the fruit of the diversification of both production and exportation in Sabah's economy

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2. If the growth rate of particular commodity class in particular period is higher (lower) than that of total exports in that period, then its share in total exports will be increasing (decreasing) at the same period, under the assumption of equal annual deviation from trend.

during the sixties. In addition, annual growth rates show a general fall, a particularly acute one for the material class, at the period 1960-65, it is very much attributable to the chaos of confrontation which adversely affected the production and exportation of certain primary products.

Broadly speaking, pattern of Sabah's exports has been driven gradually towards diversification, this is warranted by the generally decelerating growth rates of commodity broadly classified and the accelerating growth rates of manufactured goods exported.

⁂ Composition of Imports -- On the contrary, imports comprise largely capital goods and consumption goods while the volume of raw materilas imported is much less dominant than the former two. Here, according to SITC one-digit code, a brief summary of imports which is categorised into six classes is tabulated in 2-4 and Appendix Table 3, and the respective annual growth rates in respective periods are also summarised in Table 2-5. Except for a diminishing trend in the experience of the crude material class imports, the respective import volume of all the remainders presented an increasing trend over the period under review. Among these five commodity classes, capital goods class fulfilled the fastest annual growth rate of 20.3%, then follow the mineral fuels (14.0%), chemicals (13.6%), food, beverages and tobacco (10.3%) and manufactures (10.5%). However, they are different in weight in the total imports. With respect to percentage share, as it is presented

Table 2-4

Sabah : Percentage Share of Imports by Commodity Class

	Food Beverages and Tobacco	Crude Materials	Mineral Fuels	Chemicals	Manufactured Goods	Capital Goods
	(0+1)	(2+4)	(3)	(5)	(6+8)	(7)
1955	33.9	12.3	6.0	4.3	29.1	11.1
56	32.3	15.5	5.2	4.2	27.6	12.1
57	33.1	15.8	4.7	4.4	25.5	13.2
58	33.8	18.5	3.7	4.1	22.7	13.7
59	27.6	15.9	11.0	4.5	21.1	16.8
1960	26.6	15.8	8.2	4.0	21.7	20.3
61	31.9	10.7	6.8	4.4	23.9	19.2
62	35.7	6.7	7.8	3.8	21.1	22.4
63	35.7	4.9	6.9	3.7	22.1	24.3
64	32.7	4.8	8.8	4.5	23.5	23.4
1965	32.3	3.9	8.7	4.1	21.7	25.9
66	26.3	3.5	10.8	4.8	22.4	29.2
67	29.7	2.8	7.3	5.2	22.8	28.8
68	26.5	2.5	8.1	5.7	24.1	30.8
69	26.8	2.5	6.4	5.5	23.2	34.4
1970	23.9	2.7	5.9	5.0	21.8	38.9

Note : Figures contained in the parentheses refer to SITC one-digit code.

Source : Appendix Table 3.

Table 2-5

Sabah : Annual Growth Rates of Imports by Commodity Class

(percentage)

	1955-70	1960-70	1955-65	1955-60	1960-65	1965-70
Total Imports	10.58	7.90	13.47	14.08	11.27	7.51
(0+1)	9.48	5.45	14.49	10.12	14.26	3.06
(2+4)	-4.77	-9.50	-1.35	18.34	-16.36	-0.57
(3)	12.83	6.57	19.02	24.44	13.96	-2.27
(5)	12.32	11.62	12.94	13.18	12.10	11.70
(6+8)	9.59	8.10	11.21	7.29	11.16	8.03
(7)	18.54	14.38	22.37	25.57	16.71	14.96

Note : (0 1) Food, beverages and tobacco;
(2 4) Crude materials;
(3) Mineral fuels;
(5) Chemicals;
(6 8) Manufactured goods;
(7) Machinery and transport equipments.

Source : Appendix Table 3.

in Table 2-4, the performance of those classes can be further grouped into three characters -- diminishing group, which contains only the crude materials class; the growing group which comprises capital goods alone; and the stable group which consists of the others, of which sharesfluctuate within the range of ± 2.0 percent. Annual growth rates of respective commodity classes at successive period generally show a descending trend. The capital goods class is by no means an exceptional case, although its annual growth rates have been much greater than those of the total imports at any particular period in question. Except for a rise in the growth rates of both food and manufacture imports, respective growth rates of all other commodity classes, and so are those of total imports in the period 1960-65 adversely affected by the chaos of confrontation.

C. Principal Exports and Functional Imports

⁂ Principal Exports -- Aforementioned that, in overall terms, Sabah is highly specialised in the production and exportation of agro-based products, or, mor precisely, the economy's exports concentrate on forestry products. The main items of agricultural products comprise timber, rubber, tobacco, copra, fishery products and hemp. At the end of the 1950s and the beginning of the 1960s there came the exports of cocoa beans and oil palm products. As a result of industrialisation towards economic diversification, new semi-manufactured products for exports -- veneer sheets and plywood -- were recorded during the 1960s. All these items constitute 81.4 percent of Sabah's

total export trade in 1955, 90.2 percent in 1960, 92.7 percent in 1965 and 92.0 percent in 1970.

Table 2-6 and Table 2-7 present the proportional shares of these prime exports in the total export trade and the annual growth rates respectively, and respective trends are shown in Figure 3a and Figure 3b. Due to their dominant share in the total exports, changes in quantitative importance of these individual items certainly reflect the changes of structure or pattern of Sabah's export trade. During the period 1955-70, these individual exports have been behaving differently from each other or from some others, and from these tables and diagrams we can derive some distinctive features of their behavior. Firstly, since 1958 volume of rubber exported had been outweighed by that of total timber, i.e. logs and timber, exported and becoming the second important item in Sabah's export trade. Secondly, according to the growth of individual exports during the entire period of study, these main exports can be categorised into three group -- the expanding group which increases more than 2.0%, the stationary group of which annual growth rate lies between $\pm$ 2.0% and the depressing group decreases more than 2.0% annually. Seven out of the eleven major exports experienced a relatively progressive trend, they are logs (as well as timber a whole), tobacco, fishery products, oil palm products, cocoa beans, veneer sheets and plywood, whose annual growth rates range from 5.8% (tobacco, the lowest) to 96.5% (plywood). The depressing group consists of lumber, copra and hemp, whose growth rates range from (-4.9%) to (-10.5%).

Table 2-6

Sabah : Percentage Share of Main Exports, 1955-70

	Timber					
	Logs	Lumber	Rubber	Copra	Tobacco	Hemp
SITC	(242.3)	(243.3)	(231.1)	(221.2)	(121 122.2)	(365.5)
1955	18.9	1.9	40.4	13.7	3.8	2.1
56	19.5	2.4	33.8	19.5	5.4	1.5
57	23.0	3.4	31.1	20.1	7.2	2.4
58	25.5	2.8	25.6	25.0	6.9	1.9
59	32.6	2.1	26.8	20.0	6.0	2.1
1960	38.9	2.1	22.4	18.2	5.9	2.3
61	46.2	0.4	18.7	12.3		2.2
62	51.8	0.6	15.8	7.9	14.4	1.4
63	55.2	0.3	11.8	6.5	15.6	1.4
64	56.9	0.3	12.5	6.1	10.2	1.7
1965	60.5	0.3	11.2	4.4	13.1	0.9
66	72.4	0.1	8.9	3.2	4.1	0.8
67	77.3	0.1	6.4	1.4	3.4	0.6
68	77.3	0.1	6.0	1.5	1.4	0.5
69	71.9	0.2	7.9	1.4	2.4	0.4
1970	74.1	0.2	6.8	1.3	2.6	0.1

cont./..

(continued) Table 2-6

Sabah : Percentage Share of Main Exports, 1955-70

	Fishery Products	Oil Palm Products	Cocoa Beans	Veneer Sheets	Plywood
SITC	03	422.2	72.1	631.1	632.2
1955	0.6				
56	0.8				
57	0.5				
58	0.6				
59	0.5				
1960	0.4			0.2	
61	0.9		0.10	0.2	
62	0.9		0.15	0.3	
63	0.8		0.19	0.5	
64	0.7	0.2	0.21	0.6	
1965	1.2	0.4	0.15	0.5	
66	1.7	0.6	0.31	0.5	
67	1.7	1.3	0.34	0.2	0.2
68	1.9	1.8	0.60	0.3	0.3
69	1.3	2.0	0.69	0.3	0.2
1970	1.5	3.8	0.80	0.5	0.3

Source : See Appendix Table 4.

Table 2-7

Sabah : Annual Growth Rates of Main Exports, 1955-70

(percentage)

	1955-70	1960-70	1955-65	1955-60	1960-65	1965-70
Total Exports	11.12	9.84	11.31	14.41	6.49	11.38
Logs	21.30	16.30	24.44	29.39	14.62	14.22
Lumber	-14.09	-12.61	-16.27	13.81	-41.06	11.44
Rubber	- 1.94	- 2.72	- 2.03	3.42	- 7.74	3.05
Copra	-10.52	-18.19	- 3.70	19.27	-20.29	-13.44
Tobacco	5.81	-21.73	26.07	21.61	0.17	-19.29
Hemp	- 4.88	-17.58	5.96	17.78	- 9.16	-32.61
Fishery Products	19.32	21.32	15.84	5.75	13.56	12.89
Oil Palm Products @	- -	- -	- -	- -	- -	65.95
Cocoa Beans	- -	44.38	- -	- -	58.20	43.36
Veneer Sheets	- -	18.45	- -	- -	41.66	5.47
Plywood @	- -	- -	- -	- -	- -	96.50
Traditional Exports	12.79	10.03	14.41	16.83	7.46	10.06

Note : @ For the period 1964-70.

Source : Computed from Appendix Table 4.

Figure: 3(a) Sabah: Trend of Main Exports, 1955-70

(semi-logarithm)

Source: Appendix Table 4

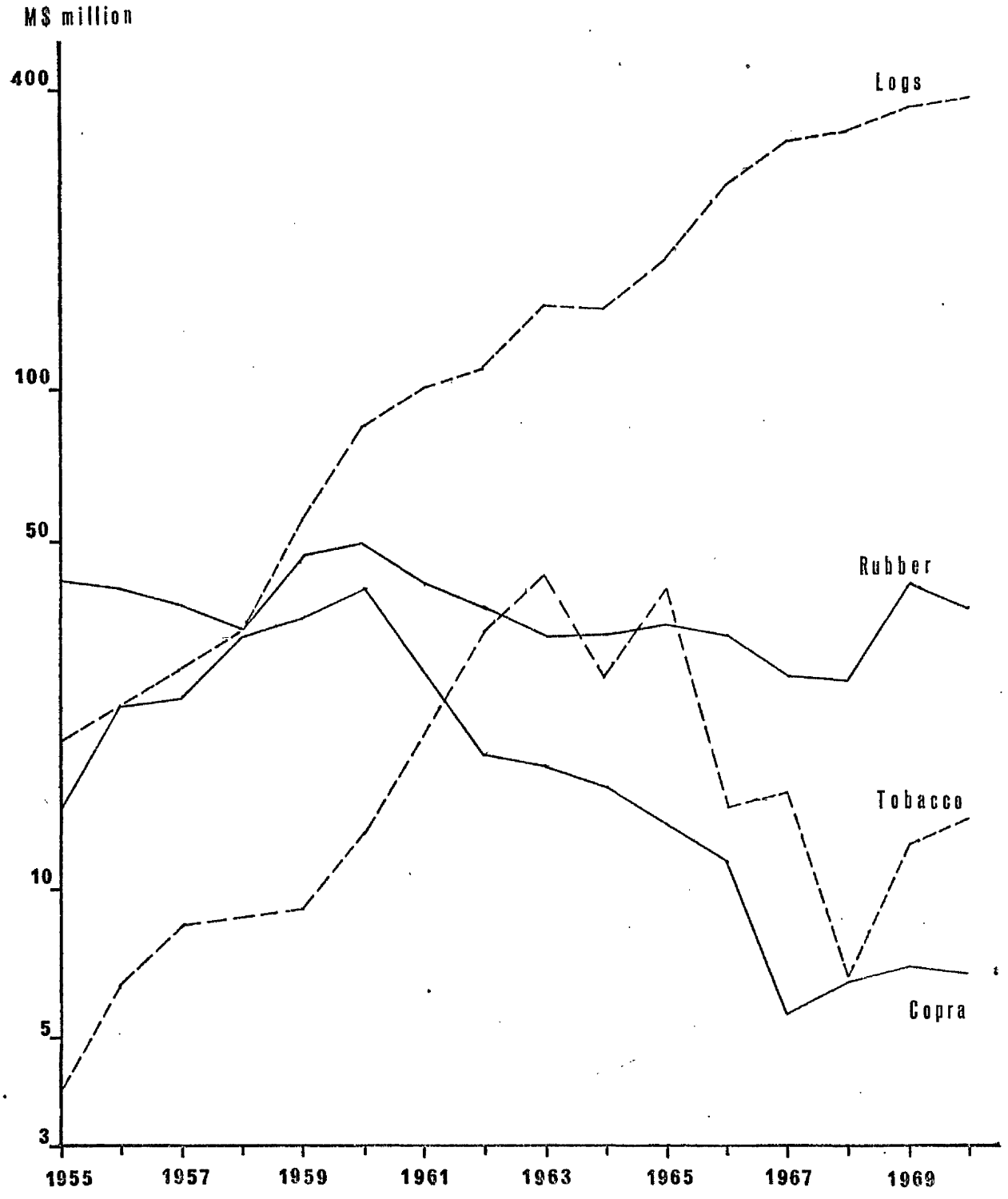
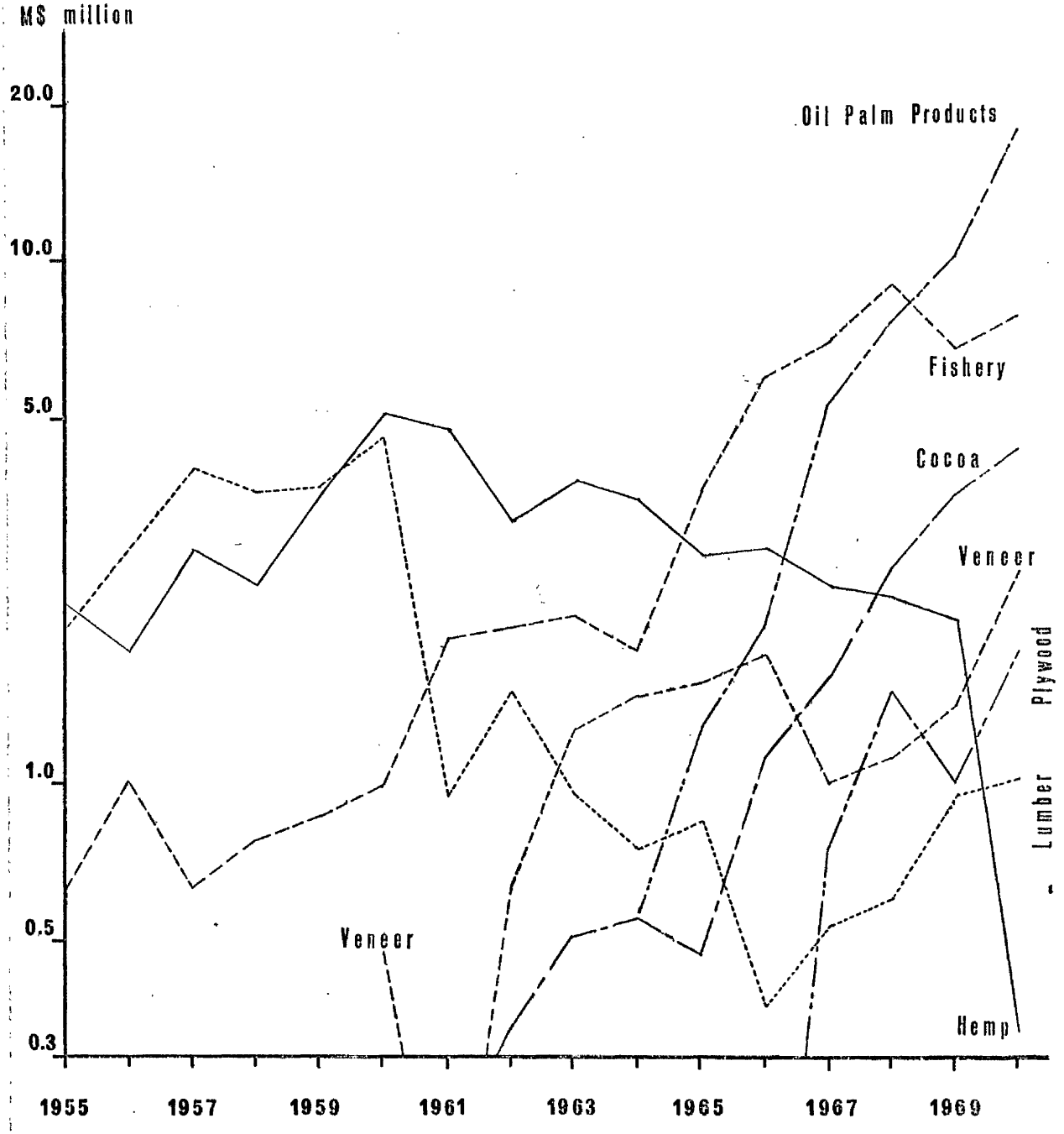


Figure: 3(b) Sabah: Trend of Main Exports, 1955-70

(semi-logarithm)

Source: Appendix Table 4



There is a unique item -- the rubber, which diminishes at about 1.9% annually is classified as the stable one. However, as 1955-70 is broken up into some sub-periods, the growth rate of particular export is different from one period to another and hence deviation from the above classification is inevitable. Thirdly, all of these major exports experienced a lower growth rate in the later period than in the earlier one, or, in other words, a decelerating trend of growth. These are indicated in Table 2-7, Figure 3a and Figure 3b. Fourthly, among these selected items, growth rates of rubber, copra, tobacco and hemp are much lower than those of total exports at different sub-periods in the 1960s. This implies that, regardless of annual fluctuation, shares of each export in the export trade are declining. The difference between the growth rates of each of these four and that of the total exports at particular period indicates the extent of decrease in percentage shares of each export independent of the latter in that period. The fall in percentage shares of particular exports and the rise in those of the others are warranted by the figures in Table 2-6. Fifthly, production and exportation of these exports were adversely affected by the confrontation, a relatively lower growth rate for these prime exports in the period 1960-65 is thus obtained. However, owing to the difference in geographic concentration of individual industries degree of destruction is different from one industry to another.

a. Timber -- Data indicate that timber is by far the most dynamic commodity in Sabah's export trade during the period 1955-70. As it is dissected into exports of

logs and lumber, respective data witness two extremely different performances, with respect to both volume and percentage share. Logs export is the dominant component which constitutes more than 90% of the total timber exports. Export of logs, in terms of volume, consummated a resplendent advancement during this period of sixteen years. It grew at about 21.3% annually, from an amount of less than M$ 20 million of 1955 to more than M$ 86 million in 1960 and finally about M$ 400 million in 1970. The high annual growth rates of logs exports in various periods summarised in Table 2-7 clearly reveal its brisk tempo of expansion. The great difference of its growth over the annual growth rates of total exports at corresponding periods obviously reflects its increasing importance in the exports trade which is presented in Table 2-6.

Contrarywise, lumber exports faced a diminishing trend in volume of exports as shown in Table 2-6, although its quantum of exports expanded at an extremely high rate of 49% per annum. Its volume of exports had once reached the peak of about M$ 4.6 million in 1960 but had been falling drastically since then and, consequently, its percentage shares in total exports are dropping severely. This is main due to the fact that lumber was usually being used as fuels and has been increasingly substituted by, say, petroleum products and electrical apparatus since the beginning of the sixties.

In regard to logs (sawn and veneered), its markets are focus in those countries in the ECAFE region, particularly the Japan which absorbed the lion's share of the total

logs exported during the period retrospected -- 62.7 percent in 1958 and 69.7 percent in 1969, for example. Increasingly large amounts of logs were being exported to the Korean market during the later half of the 1960s, the share is being increasing from 12.8 percent of 1967 to 19.2 percent of 1969. Other major ECAFE importers include China and Macao, Formosa, Hong Kong, Singapore, Australia and New Zealand, aggregately constitute some 9.5 percent in 1968. Among those developed countries of the remainders, the United Kingdom is the outstanding one although its shares, in terms of absolute value and percentage, are diminishing over time. The other are the United States, South Africa, Italy and France, which absorbed the minority of Sabah's logs exports. However, owing to the super capacity of the Japanese, developed countries remained the major importer of Sabah's logs. Other than Japan and Australia, the rest of the rich importers are constituting a decreasing share over time while it is the opposite in those developing countries.

Although Japan is the dominant importer of Sabah's logs, only a small amount of lumber (sawn planed and worked) was being absorbed by her, of which share is roughly 5 percent in average of those years prior to 1966. Instead, about 40 percent to 70 percent of the total exports of lumber were being shipped to Australia. Hong Kong was the second important purchaser which reached the peak of 24.1 percent in 1955 and fell over time thereafter to the lowest of 0.07 percent in 1967. As a historically important buyer of Sabah's lumber, the

importance of the United Kingdom has been vanishing over time, although its share had once been as high as 51.1 percent in 1956, it was only 2.9 percent in 1966. Other attractive buyers are the United States, South Africa and New Zealand, whose shares range roughly from 5 to 12 percent. As a whole, DCs, again, remain the main market in Sabah's export trade of lumber.

Therefore, timber exports, as a whole, are concerned, DCs are the main destination while LDCs are becoming increasingly essential.

b. Rubber -- Since the year of 1958, volume of rubber exported has been outweighed by that of total timber exported and becoming the second important item in Sabah's export trade. In the decade immediately after World War II, rubber dominated largely Sabah's total exports; a progressive jump was stimulated by the boom of Korean War and finally reached the peak of about M$ 50 million in 1960. Intuitively and mainly, owing to the depression of international market prices, volume of Sabah's rubber exported has been falling since 1961, to a level in 1970 which is lower than that of the beginning year of the period 1955-70. Its quantity of exports had been increasing to some extent, but nevertheless not sufficiently great to compensate for the loss caused by the fall of the prices.[3] Obviously, its annual growth rate regarding

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3. Exports of rubber face an acute competition from synthetic substitutes. There is a growing trend in the quantum of rubber exported, at 3% annually, whilst its volume declined by about 1% every year. Figures of quantum show a continuous increase during 1962-65, while its volume is dropping at the same time.

to volume in various periods, particularly during the sixties, are very much below the level of total exports growth and its consequential diminution in proportional shares is warranted by the figures listed in Table 2-6. This simple implies that the crucial position of rubber in Sabah's export trade has been vanishing over time.

In aggregate terms, Sabah's rubber was being substantially shipped to DCs, and evenly distributed among these countries, while the exports to LDCs though large but were rather concentrated in very few countries. Developed markets comprise the United Kingdom, Japan, Germany, United States, Spain, Italy, France, Norway, Demark, the Netherlands and Canada, etc., whose shares range from 33 percent to 85 percent. However, as individual trading partner is concerned, Singapore is the leading one which absorbed 55 percent of the total rubber exports.[4] Another distinct trading partner is Hong Kong, which imported about 3 percent to 12 percent of the total rubber exported. Hence, at least 60 percent of rubber exports were being shipped to LDCs. As scrapped rubber is concerned, Japan and Singapore were historically the leading importers, dominating about 70 to 95 percent of the entire exports of scrapped rubber. Other less essential trading partners are Hong Kong, the United Kingdom and Germany, whose shares range from 5 percent to 25 percent roughly.

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4. Grade I rubber was mostly shipped to DCs while Singapore alone dominated the lion's share of Grade I to V rubber.

c. Copra -- Exports of copra have been well known in Sabah's commercial history. Certainly, it had once been a remarkable contributor to the economy for a considerable period of time. It should be counted historically as the third essential item in the export sector, although its importance has been diminishing over time. No matter from the viewpoint of volume, or from that of percentage share or quantum of exports, its performance can be elucidated from two different periods of time divided by the year 1960. The performance in 1960, with respect to both volume and quantum, was the most remarkable one. The performance of the export of copra indicates a propressice advancement during the period prior to 1960 but since then it has been worsening off continuously. In respect of volume, of exports, the figures rose from about M$ 14 million in 1955 to the peak of more than M$ 40 million in 1960, but dropped drastically thereafter. In 1970 the amount was less than one half of that of 1955. Statistically, its arrant fall since 1961 is indicated by the negative growth rate of the period 1960-65 of 20.3% and 18.2% in the period 1960-70. And its proportional shares in the total export trade are thus falling during the sixties. Intuitively, this negative tempo of expansion was largely due to two possible factors -- price and supply.[5]

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5. Since volume and quantity of copra exported are including the amount of re-exports and of which supplies, other than local minor production, are largely from the Philippines and small proportion from Indonesia through volatible barter trade. Since the change of economic condition in the Philippines, piracies perpetrated on the high seas on the small crafts engaged in the barter trade and Indonesia confrontation, all had their adverse effects on this trade. It

In the past, DCs, no matter in aggregate form or individually, were the major importers of Sabah's copra, but this orientation has been shifting towards LDCs. During the 1950s and the early 1960s, more than 55 percent of the total copra exported were shipped to Demark, France, Germany, Italy, Japan, Spain, Sweden, the Netherlands and the United Kingdom. However, this trend had been declining over time. During the 1960s, this commodity was rarely exported to those aforementioned countries except Japan, Germany and the United Kingdom. On the contrary, Singapore became more and more important in Sabah's copra trade, at least 85 percent of the total copra exported were being absorbed by the entrepot during the sixties.

d. Tobacco -- In the earlier age, unmanufactured tobacco made up the main component of this export but was gradually occupied by the exports of cigarettes which include a large proportion of re-exports, during the sixties.[6] Bothe volume and quantity of tobacco exports increased continuously during the period 1955-65 -- with an export boom during the confrontation period. However, they dropped critically during the later half of the 1960s.

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5. cont./.. is thus undoubtedly that the shortage of copra supply, to certain extent, should be reflected in the fall of copra exports. At the same time, because of lack of demand, prices were dropping.

6. Exports of fine-leaf tobacco have ceased with the final winding up of the business of the only fine-leaf tobacco estate during the year 1960.

Un-manufactured tobacco was a highly geographically orientated export which was almost entirely absorbed by the United Kingdom during the later half of the 1950s and the early 1960s. At the peak year of 1959 this item alone amounted to more than M$ 5.5 million. However, this orientation was no more existing as the last tobacco industry closed up in 1960. Very small amount, less than M$ 0.05 million, were being exported to merely the neighbouring countries -- Sarawak and Brunei. Native cigar and cheroots, which constitute a very small proportion of the exports of tobacco, were as well mainly shipped to Sarawak and Brunei. Cigarettes, the main component of tobacco exports, were entirely exported to the neighbouring countries -- Brunei, Indonesia, the Philippines, Sarawak and Singapore -- and the Philippines took the lion's share.

e. Hemp and Fishery Products[7] -- Relatively, these two behaved in a rather contradictory pattern, that is, the exports of hemp experienced a diminishing trend whilst the other enjoyed a prosperity. That is why both of them, as a whole, contributed only a small and almost constant fraction of foreign exchange earnings to the economy. Surprisingly, again, this export trade seemed to be stimulated by the chaos of confrontation, that it reached the peak in the period

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7. Structurally, hemp exports comprise mainly manila fibre and tow. Crustacea and molluses are the dominant fishery products, particularly frozen prawn, whilst exports of fish, fresh and/or dried. contribute only a little to the total exports of fishery products.

between 1959 and 1964. Though, the performance in percentage share is rather disappointing in the exports of hemp, which has been falling all the way from 2.3 percent of 1960 to merely 0.1 percent of 1970, while an encouragingly growing trend in the exports of fishery products from less than 1.0 percent to almost 2.0 percent is evident. As apparently being indicated in the data, performance of fishery exports can be induced to different features at two different periods. During the period 1955-60, its percentage shares are declining continuously while its volume of exports are increasing slightly. But its performance is rather encouraging in the sixties, both of its volume and percentage share are increasing.

The exports of hemp and fishery products are not solely different from each other in transaction performance but in destination as well. Hemp was mostly shipped to developed countries while the exports of fishery products were being shared by both developed and developing countries. Furthermore, various fishery products have diverse destination. As far as fish (mostly marine type) is concerned, almost all of the exports were absorbed by neighbouring countries like Brunei, the Philippines, Sarawak and Singapore, and very rarely was being shipped to developed markets. Also, crustacea and molluses (salted and dried) were entirely shared by Hong Kong and those countries just mentioned. On the other hand, developed markets like Japan and the United States, imported most of the fresh and/or frozen crustacea and molluses (prawns, mostly); developing countries, as a whole, shared about one-quarter of this

export.

The United Kingdom, the United States and Japan are the major markets of Sabah's hemp exports. The United Kingdom was the leading buyer during the fifties but was overtaken by the United States during the sixties, while Japan retained her third place. Other relevant countries are, ranked in order, France, Spain, Germany and Italy. Following the diminishing exports of hemp, these importers were all facing a negative growth trend. Among them, the United Kingdom encountered the most severe deterioration and the United States the least. In sum, hemp was almost fully absorbed by developed markets and its exports to developing economies were negligible.

f. New Crops and Semi-manufactured Products -- Great efforts have been driven progressively toward economic diversification and industrialisation prior to and during the sixties. Consequently, two new crops and two light manufactures were expectedly being added to the existing exports during the sixties.[8] Although their shares in total exports at the moment are not very significant their performance is excellent.

In 1960 export of cocoa beans was first registered of about 9.3 metric tons and valued 16 thousand Malaysian dollars only, but it expanded persistently and rapidly thereafter. Although there had been a light fluctuation of international market prices, both its volume and quantum of exports

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8. Virtually, these new products had been initiated exporting abroad before the year mentioned above, but the volumes were too small to be recorded in the exports accounts.

managed to expand at an annual growth rate of as high as 44.4% during 1960-70.[9]

Cocoa beans were being entirely exports to DCs -- Australia, Germany, Japan, the Netherlands, the United Kingdom and the Union of South Africa. Share of each customer varies from year to year. However, in roughly term, Japan is among the biggest one, which imported about 10 to 18 percent of the exports during the second half of the sixties.

In 1964 a total of about 900 tons of oil palm products worth more than half of a million Malaysian dollars was exported to the rest of the world. Despite its disappointing trend of unit value, both its volume and quantum of export experienced a tremendously accelerating trend of about 57% and 71% per annum respectively. Its supply and demand are highly elastic enough such that the loss caused by the fall in unit value was transcended by the increase in quantity and its volume of exports nevertheless enjoyed a favourable trend.

Oil palm nuts and kernels are mainly shipped to the following countries : German, Japan, the Netherlands, the United Kingdom and Singapore. During the first half of the sixties, Japan alone absorbed the lion's share of the whole,

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9. As a matter of fact, the production of cocoa beans concentrates in the Tawau Residency, south-eas of Sabah, which shares the boundary in Kalimantan (south Borneo) with Indonesia. The chaos at the boundary during the confrontation would have greatly adversely affected the production in this region.

but its amount, in absolute volume, was small. Great amount of these items were being exported and distributed widely among the above mentioned markets during the second half of the 1960s. Developed markets, as a whole, dominated the large share though Singapore alone imported a substantial amount. Palm oil was being absorbed mainly by the United Kingdom which held about 48%, Japan about 29%, and Portugal about 11%, in 1969. Other major purchasers are South Africa, the Philippines, Singapore and the Netherlands.

As the statistical record indicates, two different trends can be derived from the performance of veneer sheets exports in two different periods. Exports of veneer sheets, in terms of percentage share (Table 2-6), volume (Appendix Table 4) and quantum of export (Appendix Table 5), have been expanding from the year 1960 to 1966. There was an arrant fall in the year immediately after the year and the exports rose again henceforth.

Developed markets, mainly Australia, Japan, South Africa, the United Kingdom and the United States, absorbed almost the entire export of veneer sheets. During the first half of the sixties, almost all of these exports were being absorbed by South Africa, the amount had once over-reached M$ 1.5 million in 1965. However, in 1966 and onwards, most of the veneer sheets exported went to Australia and Japan.

Also, an extra-ordinary advancement has been taken place in the exports of plywood since 1964. Although the trend of its unit value is rather disappointing, its

elasticity of demand and supply is high enough to produce an expanding volume of exports.

The United Kingdom was the biggest purchaser of this item, dominating about 75% during the second half of the sixties. The rest were being exported mainly to Brunei, Hong Kong, the Philippines and Sarawak; among them, Hong Kong absorbed about 68 percent of the total share during the later half of the sixties.

⁂ Commercial Concentration of Exports -- Traditional exports, which comprise timber, rubber, copra and tobacco, make up about 79 percent of the total commodity exported in 1955, 87 percent in 1960 and about 85 percent in 1970. However, the relative weight of the exports of rubber, tobacco and copra has been declining significantly over time, from a percentage of about 73 of the total traditional exports in 1955 to about 42 percent in 1960 and to only 14 percent in 1969. Therefore, while share of traditional exports in total exports remains such large and in which aggregate shares of rubber, tobacco and copra have been decreasing severely, it is that the export sector should thus be characterised by a growing concentration in commodity, during the period concerned. Furthermore, it becomes clear that Sabah's commodity exports become increasingly concentrated if we measure the changes in the commodity pattern of exports by subtracting the annual growth of total export proceeds from that of the traditional exports. Figures in Table 2-7 clearly indicate that annual

growth rates of traditional exports in various periods are higher than those of the total exports in the corresponding period. For example, the difference is 1.67 for the period 1955-70. Analytically, referring to Table 2-8, the coefficients of commercial concentration of Sabah's export trade show an ascending pattern over time. The coefficients of 77.8 and 77.7 in 1967 and 1968 respectively suggest the highest level of commercial concentration of exports in the period 1955-70.

In the period between 1959/60 and 1965/66, a negative association of the rate of economic growth and the degree of export commodity concentration was found among Asian countries,[10] that is, an economy whose exports grew relatively rapidly are found on average to have a significant lower degree of commercial concentration than the economy whose exports grew slowly. This general finding seems to be not applicable to Sabah's export sector, or it is one of the exceptional cases. During the same period, Sabah's exports went up at an annual growth rate of 8.1%, [11] while the coefficient of commercial concentration of exports was increasing from 48.8 of 1960 to 73.2 in 1966.

If it is true that, by and large, the more developed the economy the more diversified are its exports,

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10. See United Nations, Economic Survey of Asia and the Far East, 1967 (Bangkok, 1968), p. 16

11. This level is fairly high as compared with those of other ECAFE economies. See United Nations, Economic Survey of Asia and the Far East, 1967. Table I-1, p. 17.

Table 2-8

Sabah : Coefficients of Commercial Concentration

1955-70

(percentage)

	Coefficients of Concentration		Ratios of
	Exports	Imports	Coefficients
	(1)	(2)	(1) ÷ (2)
1955	48.16	21.22	2.27
56	45.62	22.15	2.06
57	46.29	22.84	2.03
58	46.36	24.80	1.87
59	48.82	23.41	2.09
1960	48.77	21.04	2.32
62	56.40	22.87	2.47
63	58.98	23.06	2.56
64	59.53	19.52	3.05
1965	63.15	20.98	3.01
66	73.19	19.20	3.81
67	77.79	18.85	4.13
68	77.67	18.72	4.15
69	72.58	20.82	3.49
1970	74.23	20.75	3.58
Mean	59.84	21.35	
Standard Deviation	11.998	1.756	

Method : See Appendix I.

Source : Computed from the United Nations, Yearbook of International Trade Statistics, various issues.

Sabah's exports should then be more diversified as the process of economic growth proceeds. However, the process of diversification and industrialisation in Sabah's economy is still in its rudimentary stage and, nevertheless, the export sector did show a tendency towards less specialised and towards more diversified in agro-based and wood-based production.

** Geographical Concentration of Exports --

As being mentioned above, destination of various prime exports has been changing from time to time, e.g. some are from mainly DCs to mainly LDCs and some are changed from direct exports to indirect exports through certain entrepot of LDCs to developed markets, it is therefore rather difficult to draw a precise line on the destinctive destination. However, taking the performance in the 1960s, as a norm, logs, hemp, cocoa beans, plywood and veneer sheets were shipped to developed markets but only copra and tobacco were absorbed mainly by developing markets, and both DCs and LDCs were markets of Sabah's exports of rubber lumber, fishery products and oil palm products. As far as general destination of exports is concerned, Table 2-9 shows that more than one-half of the total exports was being absorbed by industrial economies, and a large portion was being transferred to those developed markets in the ECAFE region, as in Table 2-10 and Appendix Table 6, during the period 1955-70. Although, in Table 2-9, the percentage share of total exports absorbed by developed markets fluctuates from time to time, it

Table 2-9

Sabah : Exports to Developed and Developing Countries

(M$ million at current market prices)

	Developed Countries		Developing Countries	
	Volume	Share %	Volume	Share %
1955	52.06	50.32	51.39	49.68
56	62.10	52.03	57.25	57.97
57	60.77	50.83	58.79	49.17
58	88.15	68.50	40.53	31.50
59	124.84	70.99	51.01	29.01
1960	153.71	69.38	67.84	30.62
62	154.46	66.30	78.50	33.70
63	171.95	63.36	99.42	36.64
64	158.32	60.92	101.57	39.08
1965	180.42	59.12	124.54	40.84
66	235.13	65.63	123.15	34.37
67	278.82	68.07	130.78	31.93
68	279.73	64.58	153.42	35.42
69	305.34	58.58	215.89	41.42
1970	316.89	59.34	216.62	40.56

Source : Computed from the United Nations, Yearbook of International Trade Statistics, and Sabah, External Trade Statistics, various issues.

Table 2-10

Sabah : Destination of Exports in Percentage By Region

	ECAFE						
	Total	DCs	LDCs	Common-wealth	non-Common wealth	Japan	Entire Common wealth Group
1955	47.9	26.2	73.8	71.7	28.3	17.3	57.3
56	49.4	27.7	72.3	58.6	41.4	20.5	52.7
57	62.7	34.8	65.2	54.6	45.4	26.4	53.9
58	76.3	57.2	42.8	38.9	61.1	48.5	44.9
59	72.2	62.3	37.7	37.2	62.8	55.0	39.0
1960	77.3	64.2	35.8	35.0	65.0	55.9	35.7
62	82.5	63.8	36.2	20.8	79.2	60.0	22.4
63	86.3	62.6	37.4	14.7	85.3	62.6	15.8
64	89.8	58.7	41.3	25.9	74.1	55.3	25.9
1965	93.4	56.7	43.3	22.9	77.1	54.0	23.5
66	94.2	64.1	35.9	19.2	80.8	62.6	20.1
67	95.5	66.9	33.1	15.1	84.9	64.7	16.5
68	94.3	63.6	36.4	16.3	83.7	61.1	17.9
69	90.7	60.6	39.4	18.2	81.8	58.8	18.9
1970	91.7	60.1	39.9	18.5	81.5	58.1	19.5

Note : The entire Commonwealth Group is the Commonwealth members in ECAFE region plus Canada and the United Kingdom.

Source : See Appendix Table 6.

cont./..

(continued)

Table 2-10

Sabah : Destination of Exports in Percentage By Region

	EEC		EFTA		N. America	
	Total	West Germany	Total	United Kingdom	Total	United States
1955	13.1	51.5	22.1	100.0	1.9	100.0
56	12.8	36.2	23.1	100.0	1.8	100.0
57	8.0	29.5	19.1	100.0	1.4	100.0
58	6.8	18.1	17.9	97.7	3.4	96.6
59	7.7	30.2	12.3	91.3	4.9	90.2
1960	7.1	31.5	9.3	88.3	2.5	89.3
62	4.9	37.0	5.7	80.8	2.0	74.6
63	3.0	27.0	3.7	75.2	1.2	92.2
64	2.7	39.5	3.2	76.2	1.4	92.0
1965	1.7	21.6	2.2	90.0	1.6	93.7
66	1.0	22.4	2.4	79.9	1.3	98.7
67	0.7	20.0	2.2	92.5	1.1	99.1
68	1.1	31.2	2.7	94.5	0.8	98.3
69	0.7	22.9	2.4	90.4	0.5	98.2
1970	0.1	16.2	2.7	93.6	0.3	96.3

Source : See Appendix Table 6.

remains indicating an upward trend. Volume of exports to developed markets increased rapidly from M$ 52 million of 1955 to M$ 172 million eight years later and then M$ 316 million in 1970. The boom of timber exports, most of which went to Japan, resulted in a suddenly great increase of exports to developed markets in 1958 and onwards, and the fall took place in 1964 was mainly attributable to the contraction of exports to Japan.

If destination of exports is divided according to economic region into Economic Commission of Asia and the Far East (ECAFE), European Economic Community (EEC), European Free Trade Association (EFTA) and North America,[12] ECAFE region has been increasingly dominating larger and larger shares over time, from a percentage of less than 50 percent in 1955 to more than 95 percent in 1967. Beyond the ECAFE region, the EFTA region is among the biggest buyer and North America the least. However, three of them are facing a descending tendency of share in Sabah's export trade over time. These are shown in Table 2-10.

Within the ECAFE region, the absorptive capacity

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12. ECAFE countries enclude Brunei, Burma, Indonesia, Malaysia, the Philippines, Singapore, Thailand, Vietnam, India, Iran, Hong Kong, China, Korea, Japan, Australia and New Zealand, of which the last three countries are categorised as developed ECAFE countries. EEC includes Benelux, i.e. Begium, the Netherlands and Luxembourg, France, west Germany and Italy. EFTA consists of Demark, Spain, Sweden, Switzerland and the United Kingdom. North America comprises the United States and Canada.

of exports from Sabah in developed member countries, which comprise Japan, Australia and New Zealand, has been enlarging while that in developing member countries has been relatively contracting. Figures displayed in Table 2-10 clearly indicate the level and trend of proportional shares of developed and developing ECAFE economies in Sabah's exports to the region.

For Sabah and a considerable number of economies in the ECAFE region had once been colonised, it is interesting to have a look at the traditional relationship between Sabah and those Commonwealth members within the region. As volume of exports is concerned, Sabah's export trade with the Commonwealth countries in the region has been enlarging gradually over time, from the lowest of M$ 34 million of 1958 to the highest of M$ 90 million of 1970. But, on the other hand, percentage shares of Commonwealth group in Sabah's exports to ECAFE region has been falling over time. Unavoidably, as indeed suggested in Table 2-10, Sabah's traditional relationship with the entire Commonwealth world (Commonwealth members of ECAFE region plus the United Kingdom and Canada) is in turn being submerged too -- percentage shares of the entire Commonwealth world in Sabah's total export trade are dropping from as high as more than 57 percent in 1955 to 26 percent in 1964 and finally to 19 percent in 1970.

Analytically, Japan should be responsible for the rise of Sabah's exports to the ECAFE region and to the developed ECAFE countries, and, of course, for the expanded

export trade of Sabah with non-Commonwealth group in the region. As indeed indicated in Table 2-10 and Appendix Table 6, the change of Sabah's exports to Japan was matched by that of exports to developed ECAFE markets, to non-Commonwealth ECAFE countries and to the entire ECAFE region. About M$ 9 million or 17 percent of Sabah's exports to the region went to Japan in 1955, these figures went up to M$ 116 million and 60 percent seven years after and had once reached the peak of about 65 percent in 1967, and finally M$ 284 million or 58 percent in 1970. The expansion of exports to Japan is mainly attributable to the increase in Japan's purchase in Sabah's logs exports, as being mentioned in the preceding section.

Not only the proportion but also the volume of Sabah's exports shared by EEC, EFTA and North American countries were being subsided. As EEC countries are concerned, the West Germany is among the largest market of Sabah, but, nevertheless, both of which volume and percentage shares have been diminishing over time and, consequently, Sabah's exports to EEC region is becoming more evenly distributed among each of the EEC countries.

Owing to the traditional relationship of Sabah with the United Kingdom, the latter remains the leading purchaser of Sabah's exports among other members of EFTA. Although the United Kingdom monitored and maintained more or less 90 percent of Sabah's exports to the EFTA region, its weight in Sabah's total export trade has been diminishing.

Presumably, after mentioning a general direction of Sabah's export trade in the preceding paragraphs, one might probably sketch out a brief picture of the distribution of Sabah's exports to the rest of the world. Accordingly, the computed results presented in Table 2-11 show that the coefficients of geographical concentration of Sabah's exports have been enlarging over time. The low coefficients of geographic concentration in the earlier period suggest the relatively higher degree of even distribution of exports in that period but the gradual increase of coefficients indicates the increasing degree of geographic orientation. This implies that the direction of Sabah's exports has been more and more focused on a single or few markets. Certainly, this increasing level of concentration is mainly attributable to the fact of high dependence upon single product and narrow destination to where the strategic product being shipped.[13] This simply warrants Hirschman's proposition that the geographic concentration of exports is stronger the stronger the commercial concentration of exports.[14] Another additional factor, as has been mentioned in

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13. The relationship between the level of geographic concentration, exports of strategic product, and the degree of commercial concentration in exports, is expressed by the following regression equation :
$X_g = 39.48 + 0.68\ X_t - 0.39\ X_c$, $R^2 = 0.9667$, Standard Deviation 2.173 ; where X_g represents the coefficient of geographic concentration, X_t the share of logs in total exports and X_c the coefficient of commercial concentration.

14. See Albert O. Hirschman, National Power and the Structure of Foreign Trade.

Table 2-11

Sabah : Coefficients of Geographic Concentration

1955-70

(percentage)

	Coefficients of Concentration		Ratios of
	Exports	Imports	Coefficients
	(1)	(2)	(1) ÷ (2)
1955	34.21	33.24	1.03
56	33.97	32.62	1.04
57	34.15	31.77	1.07
58	40.16	31.59	1.27
59	44.23	31.59	1.40
1960	46.86	31.09	1.51
62	52.47	32.28	1.63
63	57.14	32.20	1.77
64	52.94	38.67	1.37
1965	54.64	32.42	1.69
66	61.06	32.24	1.89
67	63.53	32.09	1.98
68	60.28	32.93	1.83
69	56.22	34.59	1.89
1970	63.40	34.85	1.82
Mean	50.35	32.94	
Standard Deviation @	10.368	1.832	

Note : @ 15 degrees of freedom.

Method : See Appendix I.

Source : Computed from the United Nations, Yearbook of International Trade Statistics, various issues.

the preceding section, is the 'psychic distance factor'. Due to the geogrpauhic proximity to only a few developed markets, and also exports are limited to that or those which is/are in demand in these markets, e.g. Japan, Sabah thus maintains or even closers its trade relation with these partners[15] -- at least, it is the case in Sabah in the period under review.

⁂ Exports and Trade Policy -- In principle, Sabah's export trade, as a whole, has been being given incentives and promoted progressively, but in order to control over-logging and prevent exhaustion, timber production has been controlled by issuing, except a few long term concessionaries, short-term or one-year concession or licences and by forest reserve and replanting. Beyond this indirect control over timber exports, quantitative restrictions are hardly to be seen in Sabah's export trade during the period 1955-70. For multi-purposes, as being mentioned precedingly in Chapter I, export duties have been levied upon various primary exports. Due in part to the successive liberalisation of trade policy exercised in the major market for Sabah's leading export -- timber, particularly logs, Sabah's export trade has been

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15. M. Michaely's findings suggest that the trade of countries located in or nearby a major trade area, e.g. Europe, which consists of numerous countries most of which are important traders, is generally geographically less concentrated while that of countries located nearby a major trade area which consists of a single country, e.g. the United States, is generally geographically strongly concentrated, even if these countries are highly developed, such as Canada. See M. Michaely, Concentration in International Trade (1962). Table 3, p. 19 and p. 23.

expanding over time. Trade policy practised in other markets has much influence on Sabah's minor exports, both agricultural and semi-manufactured, of which the lion's share was being absorbed by these markets.

Undoubtedly, psychic distance factor plays an important role in determining Sabah's export trade with the ECAFE countries which indeed absorbed an increasingly lion's share of Sabah's total exports during the period 1955-70, but the change in the trade policy of Sabah's trading partner in this region towards a position in favour of Sabah's promising exports is more determinant. The increasing shares of Japan are largely attributable to the changes of Japan's internal situations and the economic policies thus accommodated. 1955-70 has been a period of unprecedented expansion in Japan's national products as well as foreign trade. The rapid expansion of manufacturing sector was the main impetus, and the growth of imports had kept pace with that of manufacturing production.[16] Since the natural endowment of Japan is poor and limited, the critical expansion mood of her industrial sector has critically intensified has imports of industrial raw materials and food-stuff. Insufficient supply of local timber has caused wood imports to grow rapidly of all three main groups of raw materials.[17]

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16. See GATT, Japan's Economic Expansion and Foreign Trade, 1955 to 1970 (Geneva, 1971).
17. Ibid., Table 4, p. 15.

As a British colony, Sabah had in principle followed Britain's discrimination against Japan's trade during the early post-war period. However, this trading relationship has been improving during the early 1950s. Simultaneously, restrictions were also applied to imports in Japan and until the formulation of the Basic Principle for Trade and Foreign Exchange Liberalisation Program in 1960, Japan initiated relaxing its controls on imports steadily.[18] In fact, some special trading treatments have been granted by the Japanese to the overall Sterling Area since the early 1950.[19] From 1955 to the early 1959, according to this short-term preferential arrangements, a number of products, mainly primary products, which covered almost all of Sabah's major exports, were granted to enter Japan from the Sterling Area under the Automatic Approval System. In addition, at the end of 1957, the spot exchange rate between Yen and Sterling was made freely quotable at rates within 1% on either side of parity.[20] All these factors had no doubt further intensified Japan's imports from Sabah, and this includes not only the lion's share of Sabah's timber exports, but also a substantial volume of Sabah's other prime exports. Japan's concession made under the agreement of Kennedy Round of 1967 had also done much to encourage

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18. See Japan Economic Yearbook (Tokyo : The Oriental Economist) and IMF, Annual Report on Exchange Restrictions, various issues.
19. See Board of Trade Journal (London: HMSO), various issues.
20. IMF, Annual Report on Exchange Restrictions, 1958, p. 218.

Sabah's exports of new crops and semi-manufactured products, i.e. veneer sheets, to Japan. But in regard to proportional shares, due partly to the expansion of Sabah's export trade with other countries or the geographic diversification of Sabah's export trade, Japan's shares in most of Sabah's prime exports have been diminishing at different rates since the early 1964, e.g. Sabah's timber export trade with South Korea has at the same time enlarged.

Because Japan's shares in Sabah's export trade with the ECAFE region are increasing from 17 percent of 1955 to the peak of about 65 percent in 1967 and diminish thereafter, proportional shares of other ECAFE countries are thus declining relatively in the first stage and rise gradually after 1967. However, Sabah's export trade with these remained ECAFE countries, in respect of monetary term, has been in fact expanding remarkably over time. They absorbed 39.6 percent of Sabah's total exports in 1955, 34.1 percent in 1960, 33.7 percent in 1967 and 38.4 percent in 1970. Mainly owing to the Commonwealth trading arrangements and the mechanism of Sterling exchange control system, Commonwealth member countries in ECAFE region took the lion's share of Sabah's export trade with the region during the early period. Following the tendency towards liberalisation since the second half of the 1950s, Commonwealth member countries have been losing their determinant position in Sabah's export trade with the ECAFE region, although the volume of export trade has been increasing substantially over time.

In addition to the determinant factors mentioned above, the expansion of trade between Sabah and Singapore has been also partly attributable to the advantages under the Malayan Currency System and also the advantages derived from the interchangeability of Malaysian and Singaporean currencies.[21]

Although the proportional shares of Sarawak in Sabah's export trade are fairly small, about 1.0 percent to 1.5 percent, the practice of Free Trade Arrangement between Sabah and Sarawak in 1962, which offered free mobility of commodities from one to another, had resulted in an immediately significant increase of Sabah's exports to Sarawak, but didn't last long.

Due partly to the existence of tariff and other trade restrictions, Sabah's export trade with Peninsular Malaysia in the years before 1964 was very limited -- less than M$ 0.2 million, but since the formation of Malaysia Common Market in 1965, which offers freer mobility of commodities within the common market, has contributed to the increase of exports from Sabah to the Peninsular Malaysia from about M$ 0.7 million of 1964 to M$ 1.5 million immediately and M$ 4.7 million of 1970. Peninsular Malaysia is the only one in the Commonwealth which shows a slight increase of proportional share in Sabah's total export trade, i.e. 0.5 percent in 1965, 0.8 percent in 1968 and 0.88 percent in 1970. However, Sabah's export trade with

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21. The inter-changeability of Malaysian and Singaporean currencies was previously limited to notes and coins but extended to banking balances in 1968. See IMF, Annual Report on Exchange Restrictions, 1969.

Singapore and Hong Kong, whose respective trade values are very much more than that of Peninsular Malaysia, had been more or less affected by the new Common Market Agreement. The level of this impact is warranted by a big fall of value of export trade with these two entrepots in 1965-67, and it recovered again thereafter.

In respect of the nature of Australia's tariff policy, preferences are given to the imports of essential industrial materials and other raw materilas which are needed for local industrial production. Therefore, total imports of Australia from Sabah, in terms of value, had been increasing throughout the period 1955-60. On the contrary, although preferential duties on imports of selected manufactured and semi-manufactured products from developing countries are given at a level below the existing most-favoured-nation rates of duty in 1965,[22] its total imports from Sabah has been decreasing during the 1960s. Although value of logs imported by Australia from Sabah shows a growing trend during the 1960s, it value of 1970 is just slightly over that of 1959. Values of sawn and worked lumber imported from Sabah have suffered from a

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22. In July, 1, 1965, Australia accepted Article VIII status under IMF, its exchange system was thus free of restriction on current payments. Also with its adoption of the Brussels Nomenclature, it abolished the general tariff rates so that imports from countries which had been paying the higher rates would henceforth pay the m.f.n. rates. See IMF, Annual Report on Exchange Restrictions, 1966, and Board of Trade Journal, 189, 1965, pp.267-68.

diminishing trend. This is due in part to the growth of Australia's local timber industry and the development of agro-based industry, and partly to the discrimination of Australia's protective tariff policy in favour of local processing industry. However, Australia became one of the biggest markets of Sabah's veneer sheets one year after the termination in 1965 of Sabah's trade with South Africa, which originally absorbed almost the entire export of Sabah's veneer sheets during the period 1961-66.

Besides the political and economic relationship between the United Kingdom and Sabah, exports of the latter enjoyed preferences[23] in the British market and the convience of no exchange control, but encountered unfavourable discriminations in the European markets like the EEC. Therefore, Sabah's export trade with European countries was so concentrated in a single market -- the United Kingdom. However, the tendency towards inter-convertibility of international currencies would have undoubtedly reduced, to a more or lesser extent, the relative benefit derived from the previous Sterling exchange control system. For the margin of preference enjoyed by Sabah

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23. Based on the U.K. customs duties in April, 1962, a quantitative study indicated that 11 percent of Sabah's exports, i.e. mainly tobacco on which Commonwealth preference is minimal, into Britain were subject to duty, the other 32 percent enjoyed preferences, the other were free-duty enter. The average margin of preference enjoyed by Sabah was thus some 3.5 or 2.5 percent if margins on tobacco were calculated on a duty inclusive basis. See R.W. Green, "Commonwealth Preferences" (Board of Trade Journal, 189, 1965), Table 1 and Table 2, pp. 1551 and 1558.

was in fact small, the continuously inflationary pressure, the lowering rates of general duties (of Britain) on primary imports and the high transport costs did even further lower this margin and so reduced the preference. Consequently, Sabah's export trade with Britain, both in term of volume and proportional share, has been diminishing over time, particularly during the 1960s -- the situation is even worse in terms of percentage share.

Sabah's export trade with the EEC has been reducing not only in relative terms but as well as in absolute value. Various import curbs -- quotas, high tariff rates and foreign exchange restrictions, etc.,[24] -- were imposed to discriminate against imports from non-member countries and non-preferential areas. The establishment of the Rome Treaty in 1959 has not improved the situation much,[25] because those discriminatory measures, e.g. Common Agricultural Policy and internal fiscal charges, newly introduced have in fact further discouraged imports although quantitative restrictions are aimed to vanish entirely finally. As a matter of fact, both structure of national tariffs of the SIX and the Common External

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24. For some details of the development of import restrictions applied by the SIX, see Board of Trade Journal, and, IMF, Annual Report on Exchange Restrictions, various issues.

25. For some details of the Rome Treaty, see, in English version, Treaty Setting up the European Economic Community : Rome, 25th March, 1957 (London: HMSO, 1967), and, Treaty Establishing the European Community : Rome, 25th March, 1957 (London : HMSO, 1972), Cmnd., 4864.

Tariff [26] are so characterised by the escalating character and so designed to offer protection to their domestic manufacturing industries. Therefore, EEC's imports Sabah are so discouraged and their volume is being diminished, and imports are so concentrated on unprocessed or raw commodities.

** Functional Imports -- The commodity composition of imports categorised in SITC one-digit code has been mentioned in the preceding section. However, it is commonly recognised that SITC is not the most appropriate commodity classification for an analysis of the relation between imports and economic development. Therefore, a more relevant classification for this purpose should reflect the distinction between capital goods, raw materials and/or intermediate goods, and final consumption goods. This grouping is being applied here. Table 2-12 and Figure 4 show the shares and the trend of imports according to the functional classification for the period 1955-70, and the relevant annual growth rates of each functional group in various periods are summarised in Table 2-13. Like many developing economies, consumption goods are

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26. The structure of national tariffs of the SIX and the Common External Tariff have been analysed in some details in both ECE, Economic Survey of Europe, 1959, Chapter IV, pp. 12-16, and issue 1960, Chapter V, pp. 32-47, particularly "Chart 1 : Average Customs Tariffs on Import of Selected Commodities in EEC and EFTA countries", p. 34. Also, ECAFE, "Obstacles to Export Expansion : Quantitative Restrictions" (Economic Survey of Asia and the Far East, 1962).

Table 2-12

Sabah : Percentage Share of Functional Import Classes

	Consumption Goods			Capital Goods	
	Food	Non-Food	Raw Materials	Capital Goods	Raw Materials
1955	26.0	33.81	15.5	17.84	6.7
56	26.6	30.83	18.4	17.41	6.0
57	24.1	27.82	20.4	18.34	7.1
58	23.8	30.41	21.7	17.81	6.1
59	18.9	31.25	19.2	21.20	9.1
1960	17.9	31.34	18.3	23.98	8.5
61	18.1	37.18	13.5	23.92	7.3
62	17.1	40.71	9.6	25.19	7.3
63	16.8	40.27	7.9	27.50	7.6
64	19.6	35.87	8.0	26.69	8.1
1965	17.1	38.65	6.8	29.02	8.4
66	18.6	32.85	6.8	32.51	9.3
67	20.8	32.91	6.3	31.55	8.4
68	19.6	31.30	6.2	33.41	9.5
69	17.4	30.22	5.3	35.44	7.4
1970	15.4	27.89	4.2	41.79	6.5

Note : The definition of classification is a little bit different from that applied in the Economic Survey of Asia and the Far East. Imports of passenger cars are not included in the Capital Goods class but in the Non-food Consumption Goods class instead.

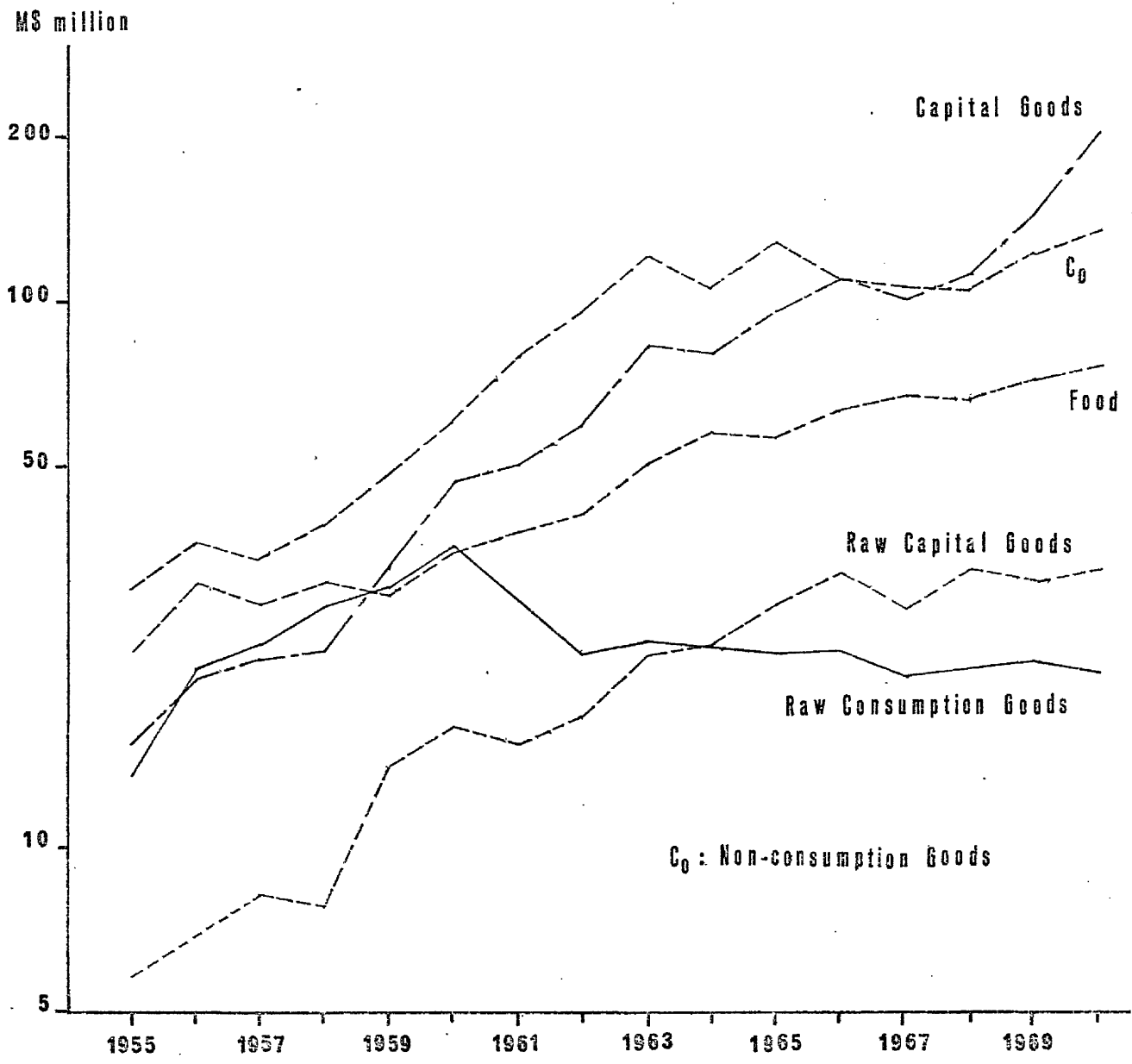
Source : See Appendix Table 7.

Figure: 4

SABAH

Trend of Functional Imports

1955-70



Source: Appendix Table 7

Table 2-13

Sabah : Annual Growth Rates of Functional Imports

1955-70

(percentage)

	1955-70	1960-70	1955-65	1955-60	1960-65	1965-70
Total Imports	10.58	7.90	13.47	14.08	11.27	7.51
Food	8.22	7.84	8.97	6.09	11.07	5.29
Non-Food Consumption Goods	10.60	5.46	16.31	13.35	13.92	1.99
Raw Consumption Goods	-0.21	-3.94	2.42	17.23	-8.10	-1.45
Capital Goods	16.19	13.06	19.07	19.90	15.18	13.63
Raw Capital Goods	12.01	7.80	16.01	21.09	11.76	2.36

Source : Computed from Appendix Table 7.

the major items in Sabah's import trade. However, imports of consumption goods as a whole are concomitant with slightly descending weight in the total import trade while imports of capital goods are increasingly important. During the period 1955-70, due to the development of the economy and the growth of its population, volume of imports of consumption goods and its materials, capital goods and its materials are all expanding remarkably over time, whereas their corresponding proportions in total imports are changing differently. There is a significant increase and a mild one in the percentage shares of capital goods and capital materials respectively, while both consumption goods and for which materials are losing their weight in total imports annually. Annual growth rates of each of these functional groups and those of the total imports are generally experiencing a lower level in the later period. That is, growth rates are decelerating. Growth rates of individual group, except capital goods, are generally below the level of gorwth of total imports particularly during the sixties. Hence, proportional shares of each group, except capital goods, are generally dropping over time.

Trend in commodity shares of Sabah's imports accord to the general tendency in world trade towards a fall in the share of consumption goods and a rise of capital goods,[27]

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27. This has been well documented in the literature, for example, A. Maizels, Industrial Growth and World Trade (Cambridge : 1963), and GATT, International Trade (Annual).

and in view of the tendency for this feature it is to be especially evident in the case of economies in the process of economic development.[28] Non-electrical machinery dominated the increasingly large share of the total capital goods imported, which was mainly attributable to the brisk tempo of expansion of the economy's export sector, typically timber industry,[29] and as well to the process of development of the economy, regardless of the decelerating growth rates of capital goods imported.

* Commercial Concentration of Import --

The composition of imports is not as high degree of commercial as that of exports. The imports account contains much more variety of items and its distribution is more even. As indeed shown in Table 2-8, the computed coefficients suggest a relatively low level, with an insignificant negative trend of from more than 20.0 to less than 20.0, of commercial concentration of import trade.

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28. See S. Kuznets, "Quantitative Aspect of the Economic Growth of Nations. IX. -- Level and Structure of Foreign Trade : Comparison for Recent Years" (Econ. Dev. and Cultural Change, Part II, 1964). N.A. Adams, "Import Structure and Economic Growth : A Comparison of Cross-section and Time-Series Data" (Econ. Dev. and Cultural Change, Jan. 1967). And H.B. Chenery, "Patterns of Industrial Growth" (American Econ. Review, 50, Sept., 1960).

29. The great increase of capital goods imported in 1959 was corresponded by the large expansion of timber exports and by a great increase in fuels imports in the same year and onwards, as shown in Appendix Table 4 and Appendix Table 7.

It is corollary that an economy will import commodities, which are not available or uneconomical to produce at home, from abroad so as to meet the local demand. For an economy as Sabah, whose factors of production (capital, skill labour, technology, etc.) are so limited, local production is less varied and should thus be evident in more varied imports. It is reasonable to expect that in a developing economy, of which local demand is largely dependent upon imports from abroad, where the process of economic development proceeds continuously, the higher the real per capita income but not necessarily more evenly distributed. In turn, the wider the variety of goods demand by ultimate consumers, the consequence would be a wider range of imports. The imports will usually be more varied in capital goods and manufactured goods, since they are usually accompanied by elastic income demand while food is accompanied by inelastic income demand. As the case in Sabah, there is not merely an increase of volume of imports took place but also more varied imports of capital goods, and the share of manufactured goods in total imports has although fallen slightly its components of imports are additionally more varied than before.[30] This is probably one of the reasons why the degree of commercial concentration of imports has decreased slightly.

The observation that commercial concentration is

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30. This is clearly revealed by the content of imports in various issues of External Trade Statistics, Sabah, and, United Nations, Yearbook of International Trade Statistics.

stronger in the export trade than in the import trade accords with the notion that has been conventionally prevalent in the economic thought. The computed coefficients of commercial concentration of imports, shown in Table 2-8, are much less than those of exports, and the variation with regard to the degree of commercial concentration in exports is much larger than with regard to the commercial concentration in imports. The unweighted average ratio between the coefficients for exports and for imports is approximately 2.1 and the measure of relative dispersion[31] is 0.36 for the series of coefficients of commercial concentration in exports and only 0.08 for imports.

Some of the possible causes for higher concentration in exports than in imports in Sabah's foreign trade performance can be summarised in Robinson's well known statement : ' In general, each country is more specialised in respect to the goods which it produces than in respect to the goods which it consumes ....' [32] This simply implies that production of international trade goods is distributed among many countries, each of which specialises in a few industries to which it is fitted and, at the same time, purchases a large

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31. That is the ratio of the standard deviation of the series to its mean. Correspondent figure of standard deviation and mean are shown in Table 2-8.

32. J. Robinson, "Beggar-My-Neighbour Remedies for Unemployment" in Readings in the Theory of International Trade (Philadelphia : The Blakistan Co., 1949), p. 400.

variety of goods from abroad. Since a high level of commercial concentration in exports indicates a high degree of specialisation in production, which means, in turn, that a large variety of goods ought to be imported, therefore it might be expected that the more concentrated the exports the more varied will imports be.[33] As a matter of fact, Sabah has highly specialised in, particularly, the production of forestry products, but a large variety of goods are not available at home and are thus necessary to be met by imports. That is why there exists such a wide gap in commercial concentration between exports and imports. It is particularly a reflection of lack of industrialisation. Statistically, for the period under review, a negative correlation between these two is observed, the computed coefficient of correlation is 0.69 (negative). Secondly, Sabah's production, particularly her comparative advantage in the products which she exports, is based solely on the availability of special natural resources and climatic conditions while other factors of production are fairly limited. Concentration on some specific resources may, ipso facto, mean lack of resources for many other domestically located activities. Domestic production is thus confined to a very narrow range of goods and, in turn, being reflected in high specialisation of exports and in high diversification of imports. Because, as the economy develops over time, the

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33. In M. Michaely's findings that, as a rule, the opposite is true, a positive correlation exists between commercial concentration of exports and imports. See his Concentration in International Trade (1962), p. 17.

variety of goods demanded by ultimate consumers is far wider than that of domestic output of final goods. Thirdly, the improvement in market for the leading exports -- timber -- plays the most important role in determining the level of export concentration while no single import dominates such a large proportion in total imports as timber does in total exports.

** The Provenance of Imports and Geographical Concentration -- Table 2-14 gives a brief picture of volume and percentage share of Sabah's total imports from the entire Economic Class I and those from the developing countries as a whole. Slightly more than one half of Sabah's total imports are supplied by the developing countries, its volume increased all the way from M$ 47 million in 1955 to M$ 151 million in 1963 and finally about M$ 251 million in 1970. Volume of imports from developed countries increased from M$ 40 million to M$ 153 million in 1963 and M$ 246 million in 1970, but its been fluctuating, typically during the sixties, relatively acutely.

Again, provenance of imports is further classified into four groups by region -- ECAFE, EEC, EFTA and North American countries -- as displayed in Table 2-15 and Appendix Table 8. In terms of volume of imports, responsive to the growth of total imports, imports from each of these regions are increasing, though different in level, over time. However, the variation of trade performance between each other region in

Table 2-14

Sabah : Provenance of Imports

(M$ million at current market prices)

	Developed Countries		Developing Countries	
	Volume	%	Volume	%
1955	40.45	46.25	47.00	53.75
56	50.76	43.27	66.55	56.73
57	55.98	46.06	65.56	53.94
58	57.68	44.92	70.73	55.08
59	70.40	45.30	85.02	54.70
1960	92.59	47.29	103.21	52.71
62	118.88	49.90	119.37	50.10
63	153.38	50.36	151.19	49.64
64	175.66	58.17	126.32	41.83
1965	160.66	48.03	173.83	51.97
66	167.07	48.78	175.41	51.22
67	149.62	45.51	179.17	54.49
68	159.89	46.62	183.05	53.38
69	195.37	46.75	222.45	53.25
1970	246.55	49.51	250.97	50.40

Source : United Nations, Yearbook of International Trade Statistics, and, Sabah, External Trade Statistics, various issues.

Table 2-15

Sabah : Provenance of Imports in Percentage By Region

	ECAFE						Entire Commonwealth Group
	Total	DCs	LDCs	Commonwealth	Non-Commonwealth	Japan	
1955	54.6	21.8	78.2	43.6	56.4	15.9	50.0
56	60.6	18.0	82.0	33.4	66.6	13.3	44.3
57	52.5	18.1	81.9	34.7	65.3	13.1	42.1
58	60.0	14.9	85.1	30.3	69.7	10.7	39.7
59	59.8	14.9	85.1	31.0	69.0	10.2	39.2
1960	58.6	17.3	82.7	32.5	67.5	12.6	39.6
62	57.2	18.4	81.6	48.6	51.4	13.5	46.9
63	59.2	19.4	80.6	51.4	48.6	14.7	49.4
64	60.2	19.0	81.0	57.8	42.2	14.0	65.6
1965	54.5	18.5	81.5	68.1	31.9	13.1	57.0
66	61.2	18.7	81.3	61.6	68.4	13.7	57.9
67	67.8	21.2	78.8	61.7	38.3	17.2	56.8
68	68.8	24.1	75.9	62.1	37.9	19.2	56.5
69	69.4	25.4	74.6	62.3	37.7	21.8	54.6
1970	65.7	27.2	73.4	62.0	38.0	23.5	52.2

Note : The entire Commonwealth is the sum of Commonwealth in ECAFE region and the United Kingdom and Canada.

Source : See Appendix Table 8.

cont./..

(continued) Table 2-15

Sabah : Provenance of Imports in Percentage By Region

	EEC		EFTA		N. America	
	Total	West Germany	Total	United Kingdom	Total	United States
1955	2.9	50.5	26.2	100.0	5.2	100.0
56	3.1	52.8	24.0	100.0	5.2	100.0
57	3.3	56.6	23.8	100.0	9.4	100.0
58	4.0	36.7	22.3	95.3	9.3	97.7
59	5.2	34.5	21.2	96.3	9.7	97.3
1960	7.3	28.3	21.0	95.6	10.7	95.5
62	4.9	38.1	20.0	92.8	14.0	97.4
63	4.8	34.2	20.0	93.3	13.7	96.3
64	4.7	38.6	31.8	94.9	9.8	93.7
1965	4.3	32.4	21.0	92.8	12.5	96.8
66	4.9	34.2	21.0	93.5	11.5	95.1
67	4.1	43.7	15.6	92.0	11.3	95.2
68	4.1	49.7	14.7	90.8	11.3	96.4
69	4.0	45.0	12.4	91.0	12.7	99.1
1970	4.6	34.1	12.2	89.4	14.8	96.3

Source : See Appendix Table 8.

Sabah's import trade is more acute when it is interpreted in terms of relative share. Percentage shares presented in Table 2-15 indicate that shares of ECAFE and the North American countries have increased substantially, the EEC has managed to maintain a certain level while the share of the EFTA region has been declining over time.

The ECAFE region has provided more than 50 percent of Sabah's total imports since the beginning of the period under review, and once reached the peak of 69 percent in 1969. Within the ECAFE region, developing economies dominate 73 to 85 percent of Sabah's total imports from ECAFE region while the other 15 to 27 percent are contributed by developed ECAFE countries. Owing to the cultural affinity with and geographic proximity to these developing ECAFE economies involved, most of the consumption goods and intermediate goods chiefly for the production of consumption goods, of which shares accounted to about 65 percent, imported by Sabah are from the developing economies. However, it should be noted that the proportion of imports from the region shared by the developing countries are facing a diminishing trend. Sabah has maintained and even made her traditional relationship in import trade closer with the Commonwealth group of ECAFE region. This is, other than to geographic proximity and cultural affinity, mainly due to the closer economic and political association with the neighbouring Commonwealth members, e.g. Peninsular Malaysia and Singapore, from which export trade with Sabah has been

increasing during the 1960s. In contrast, the biggest customer -- Japan -- of Sabah's exports supplies roughly 15 percent of Sabah's total imports from ECAFE region, while West Germany contributes slightly more to Sabah's imports from than exports to EEC region. Since the United Kingdom is the dominant contributor of exports to Sabah among those members of EFTA region, the fall of share of the United Kingdom in Sabah's import trade should thus be evident in the drops of share of EFTA region as a whole in Sabah's total imports. Nevertheless, Britain has maintained her resplendent position of supplying more than 90 percent of EFTA region's exports to Sabah. Likewise, the United States maintained her leading position of providing more than 95 percent of Sabah's total imports from North American region.

It has just been shown that no any single or few suppliers monitoring the lion's share of Sabah's total imports, and shares of imports are distributed rather more evenly among the economies involved. If it is true to say that the composition of exports of an economy is less diversified than that of its imports, it will further imply that a wide range of goods can only be met by importing from many suppliers or producers abroad. In other words, the level of geographic concentration of imports should be lower. Taking the period as a whole, regardless of the peak of about 38 in 1964, as shown in Table 2-11, the calculated coefficients of geographic concentration of imports fluctuate within a very narrow range of 31

to 34. It is conventionally believed that, particularly in the case of an export-oriented economy with heavy reliance on a single or few commodities, level of geographic concentration will be higher in exports and lower in imports. The computed ratios of coefficients of geographic concentration of exports and imports show an ascending trend and an average of about 1.40. Meanwhile, the exports have geographically a wider range of concentration coefficients, the measure of relative dispersion -- the ratio of the standard deviation of the series to its mean -- is 0.206 for the series of coefficients of geographic concentration in exports and only 0.055 for imports.

** Imports and Trade Policy -- Except for the adjustment of temporarily economic unstability or for other temporary purposes, or for health and security purposes, devices other than tariff policy are rarely seen in Sabah's import trade policy. Foreign exchange policy was accorded to the existing Sterling exchange control system mainly. Import trade policy was primarily guided by the Commonwealth preferential trading arrangements during the years, particularly, prior to 1963. Under the Commonwealth preferential trading arrangement and the Sterling exchange control system, Sabah's imports from the entire Commonwealth are corollarily substantial, constituting slightly more than 50 percent of the total. Owing to the internationally general tendency towards convertibility of

currencies, Sterling exchange control was relaxed in 1959, this has causally induced an expansion of Sabah's import trade with non-Commonwealth countries, e.g. Dollars Area countries. Although the entire Commonwealth managed to maintain its dominant share in Sabah's import trade during the 1960s, there was a geographically structural change in Sabah's import trade with the Commonwealth. Since the formation of Malaysia in 1963, trade barriers which are handicapped to the inter-regional trade within Malaysia have been gradually removed, a further step was taken to establish a Malaysia Common Market in 1965 which offers free movement of commodities within Malaysia, and it was accompanied by a common external tariff and various temporary import restrictions such that to secure domestic market for local infant industries. This has resulted in a great annually increase in Sabah's imports from Peninsular Malaysia, from less than 2.0 percent to 18 percent in 1968 and 21.4 percent in 1970, while there was an annual fall in Sabah's import trade with other Commonwealth members during the 1960s.

Except for the peak of 30 percent in 1964, Britain's share in Sabah's import trade has been declining gradually and continuously from 26 percent in 1955 to 11 percent of 1970. The high Britain's share during the early period is mainly attributable to the Commonwealth preferential trading arrangement [34] and Sterling exchange control system. But the

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34. According to a study of Commonwealth preferences based /..

graudal fall in proportional share thereafter is a part due to the gradual liberalisation of exchange control, a part to the gradual removal of Commonwealth preferences [35] and the protectionism in Malaysia. A significant drop in the share of Hong Kong in Sabah's import trade is also evident in the record and a slight fall in Singapore's share during the second half of the sixties.

On the contrary, import proportion shared by Japan and the United States has been increasing gently, particularly during the sixties. This is largely attributable to the continuous expansion of Sabah's capital goods import trade.

In order to meet the needs for economic development, Sabah's trade policy has structurally long been designed such that to discriminate in favour of 'essential goods' and against 'non-essential goods'. The former includes those of productive capital goods, essential consumtion goods which otherwise scarcity and are not competitive with domestic production, and essential raw materials needed

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34. cont./.. on the materials of 1961, disclosed that about 50.3 percent of imports from the U.K. entered Sabah free of duty. Duties on the remaining half were fairly low, though some 6 percent of imports paid duties of 100% and more, the average rate of duty on all imports was 14.8%. Therefore, more than half of the imports from the U.K. in 1961 enjoyed preference, its average margin was 11% and its average preference rate was 5.4%. See "Commonwealth Preference" (Board of Trade Journal, 188, 3560, 1965).

35. Commonwealth preference on a wide range of goods was removed in August, 1966. See Board of Trade Journal, 191, 1966, p. 605.

for domestic production. This is particularly evident in the tariff structure.[36] Therefore, with respect to the impact of Sabah's import trade policy upon the structure of imports, the data show that there is a conspicious increase in the percentage share of capital goods in total imports while there is a successive fall in those of other groups of imports.

Largely due to the structure of Sabah's import trade with Japan and the United States, imports from these two countries were not threatened by the formation of Malaysia Common Market and those supplementary measures accommodated during the second half of the sixties.

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36. Discrimination in favour of the imports of 'essential goods' had been scheduled in the tariff system in, as early as, the North Borneo Customs Duties Order, 1954. See North Borneo Government Gazette Supplement, 1st. March, 1954.

CHAPTER III

External Trade and Economic Development

It is, by far, well established the main feature of the relationship between structural change as a whole and economic development in an economy.[1] Also, it is generally believed that there exists a causal relationship, positive or negative, between economic development and international trade and this relationship is one of interdependence rather than of an unilateral causation. But it is essential to note that not all types of exports and imports are producing equal efficiency in setting the mechanism by which exports and/or imports may activate economic development. Although the growth of the whole export and import sector might be potentially, directly as well as indirectly, favourable to the accelerated process of economic development, the actual scale and rapidity with which this stimulus is transformed to other sectors will depend not only on the growth rates of total exports and imports but also on the character of the economy's export and import bases. Different characters of various export goods will produce different production function and so will result diversely, in degree and/or nature, direct and indirect effects.[2]

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1. For example, H.B. Chenery, "Pattern of Industrial Growth" (American Econ. Review, Sept., 1960).
2. For example, G.M. Meier, Leading Issues in Economic Development (1970).

Likewise, different characters of import goods may permit divergent functions. All these will further in turn affect not only the exports and imports themselves but also the distribution of national income and the level and composition of employment.

Therefore, in this study, it is tentatively to examine the effects of external trade upon economic development from various dimensions -- the extent to which the impact of exports and imports is upon economic growth, which is indicated by the growth of GNP,[3] upon public finance, upon balance of payments, upon the structure and distribution of employment, and other 'spread effect'.

Per capita income is commonly used as an indicator of economic development, the more developed the economy, the higher is the income per capita of the economy concerned. However, per capita income alone would be an incomplete and biased indication of the process of economic development.[4] Even if GNP rises and even if per capita

3. In order to estimate the extent to which the income earned in the export sector therein accrue to the nationals of the host country, the GNP is more preferable than to GDP. Because the former is the measure of the income earned by the host country nationals within the geographic boundaries of a political unit concerned. As a matter of fact, in Sabah's economy, GDP usually outweighs the GNP but the difference between them is usually small.

4. In estimating the impact of an export sector's development upon the development of the entire economy in which it is located, the findings would be so misleading if we were confined to the analysis of statistical series pertaining to export or estimates of total production which quite frequently exaggerate the share of exports in the GNP. However, if we go further and analyse the whole mechanism of the economy, a more reliable and, perhaps, even a surprisingly reverse result can be derived.

income also rises, the economy should still not be considered to have developed or proceeded if the absolute number of unemployed has at the same time also increased.[5] Foreign exchange constraint is one of the problems in the process of economic development, especially, of trade-oriented economies. This is not exceptional to Sabah. Sabah is not merely an export-oriented economy but it is also import-oriented, most of the domestic needs are met by imports, and, more importantly, capital goods which are most essential to further economic development are entirely obtained through external trade. Export earnings are the mainly and the most promisingly financial source for import expenditure. In Sabah, most of the economic activities are left to private sector, public investment will not direct the economy, but government can promote private investment, particularly in the process towards industrialisation, by providing good investment climate through public investment in infrastructure, etc. Then public savings is an essential source of financing public investment.

A. External Trade and Foreign Exchange Earnings

The balance of payments problem has been regarded since the 1950s as one of the generally severe constraints of economic development of, particularly, LDCs or, more precisely,

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5. G.M. Meier, Leading Issues in Economic Development (1970), p. 431.

export-oriented developing countries. A persistent deficit of balance of payments causes the shortage of foreign exchange, despite those from foreign aids, which is necessary to finance the imports of productive or investment goods which are the crux of economic development. Correspondingly, economic development has been expected to worsen the balance of payments position and has simultaneously been argued to have favourable impact upon the balance of payments position, however. The former is fully formulated in Harrod-Domar's growth model, which demonstrates that the rise of income fostered by economic development is generally spilled over into imports. While in the Adramowitz-Solow model, the increase in income will further enlarge the demand for imports, but technological advances tend to create new exports, thus there is more competition in existing exports and new or more effective import-competing capacity. Similarly, there are those who claim that balance of payments and economic growth are competitive to each other, in the sense that a good balance of payments performance can be achieved only with the pursuit of policies tending to discourage output and hence economic growth. But, another school of thought maintain that growth of output and a good balance of payments performance are perfectly compatible.

After these years of rapid export growth in Sabah, a great amount of foreign exchange earnings has been gained. However, imports are also at the same time stimulated by this rapid expansion, foreign exchange earnings are such that largely offset by the stupendous increase in import

expenditure. Therefore, as shown in Table 3-1, the accumulated foreign exchange earnings indicate a balance in 1966, and only from 1967 and onwards the foreign exchange accumulation shows a substantially positive balance. The amount of the accumulated foreign reserves at the end of the period under review contributed by favourable external trade was M$ 308 million or equivalent to more than 38 percent of the GNP of that year.[6] As the period of 1955-70 is being spread into four four-year sub-periods, as in Table 3-1, foreign exchange reserves accumulated in the first (1955-58) and second (1959-62) sub-periods are exactly balanced by the stupendous foreign exchange expenditure in the third sub-period (1963-66), as the consequence of the unusual increase in imports of non-food consumption goods. And the foreign reserves accumulation was entirely built up during the fourth sub-period where there was merely M$ 80 million in 1967 but the M$ 308 million gain in 1970 increased the economy's reserves in four years by nearly four times. Undoubtedly, that the final balance of payments outcome will depend upon not a single but various factors, essentially they are volume of exports, volume of imports, terms of trade, net inflow of capital from abroad, and foreign exchange policies. But, in the case of an economy like Sabah's which is characterised by such a brisk tempo of export expansion and thus a strong balance of trade performance, a favourable balance of payments

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6. This will certainly, by counting the effect of the first allocation of special drawing rights, add another M$ 308 million to the international reserves of Malaysia.

Table 3-1

Sabah : Balance of Payments Performance, 1955-70

(M$ million at current market prices)

	Balance of Trade	Accumulated Trade Balance	Balance of Payments Performance %
1955	16	16	8.05
56	2	18	8.25
57	- 2	16	6.24
58	0	16	6.16
(1955-58)		(16)	(6.16)
59	20	36	12.79
1960	26	62	20.35
61	27	89	26.97
62	- 4	85	24.15
(1959-62)		(69)	(19.60)
63	- 30	55	14.14
64	- 42	13	3.11
1965	- 29	- 16	- 3.28
66	16	0	0
(1963-66)		(- 85)	(-15.12)
67	80	80	12.10
68	90	170	24.43
69	103	273	34.30
1970	35	308	38.26
(1967-70)		(308)	(38.26)

Notes : Negative signs denote import balance or deficit balance of trade.
The balance of payments performance of each sub-period is the accumulated trade balance of that period deflated by the GNP of the last year of that period.

position is most likely to correspond to economic growth. Although it is here limited to merely current account, due to the fact of low outflow of registered capital, the entire balance of payments position is reasonably expected to be favourable too.

Generally, the relationship between foreign reserve accumulation and output growth is expected to be close in developing countries, typically those which are export-oriented. Economic growth is made possible by accelerating the rate of investment which increases the productive capacity of the economy. Any increase in the exports (over that in imports) of an economy, means that there is an increase of external demand which would influence investment, and thereby, the level of economic activities and the national income of the economy having an export surplus in the same manner as an increase in effective demand at home will have on national income. Since payments have to be made for the imports, the net additional income thus earned through export expansion is the difference between the value of exports and imports. Also, imports constitute a part of current income, i.e. as equivalent to saving.[7] Hence, if exports exceed the imports then there will exist a surplus balance of trade, this excess is treated as foreign investment for national accounting purposes.[8]

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7. Increase in imports will raise the level of activity in the importing country, therefore, imports should be regarded as equivalent to savings in respect of their non-expansionary or even deflationary effect on income, from the view point of the importing country.

8. $S = Id + (X - M)$, $S = Id + I_f$.

Therefore, a positive foreign trade balance accompanied with substantial savings, the rate of growth of productive capacity will be high.

If it is true, then the success of a growth programme of a developing country is dependent upon the imports of those goods which are essential to economic development but are incapable or un-economically to be produced at home. The ability to import these goods is obviously subject to the availability of adequate supply of foreign exchange or import capacity.[9] Strategically, expansion of exports through the exporting country's own efforts is economically a better way of financing imports than other device, e.g. foreign aids and investment in domestic activity.[10]

Tentative attempts are made to correlate yearly gross balance of trade and ratios of accumulated trade balance over GNP respectively with GNP, but, the results are found too frail to warrant any correlation between them. Nevertheless, the correlation between grossly accumulated trade balance (Tb)

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9. The UNCTAD of 1964's agrument had been in favour of a 'close' or 'positive' relationship between import capacity and economic growth. However, this agrument is found to be untenable; no evidence shows that there exists close association between imports of investment goods and economic growth, and also no constant relationship between import capacity and imports. See D. Wall, "Import Capacity, Imports and Economic Growth" (Economica, XXXV, 1968).

10. See B. Cohen, "Relative Effects of Foreign Capital and Larger Exports on Economic Development" (Review of Econs. and Statistics, 50, 1968), p. 284; and V.K.R.V. Rao, "Exports for Development" (The Indian Econ. Journal, 15, 1967/68).

and GNP is found statistically more significant and more reliable. The two linear regression equations are displayed as follows,

$$GNP = 313.22 + \underset{(0.372)}{1.6413}\ Tb$$

$$Tb = -78.98 + \underset{(0.080)}{0.3542}\ GNP$$

These equations suggest that the inter-relationship between GNP and the accumulated trade balance is statistically possible, and also it is more likely that a rise in trade balance that fosters an increase in GNP rather that vice versa. Therefore, the so derived orthogonal regression equation of GNP on accumulated trade balance is introduced as follows,

$$GNP_o = 268.12 + 2.2323\ Tb_o$$

After these yaers of rapid trade expansion, the rapidly increased exports bring just sufficient foreign exchange earnings to meet the huge import expenditure during the period 1955-66. The persistently positive trade balance during the period 1967-70 implies that exports have provided excess of capacity to import to the economy as the mere current account is concerned. Since individual exports differ in their degree of fluctuation and in revenue or foreign exchange earned, and imports differ in their income elasticity to demand and in outlay of expenditure, different exports and imports will have diverse impact on the trade balance and thus the balance of

payments performance. Owing to the nature of the exports and imports, and whose distribution and sources, positive trade balance is always the case in the trade between Sabah and those DCs while the reverse in the trade with the LDCs.[11] Although, as being mentioned in the preceding chapter, the economy's exports and as well as whose distribution have been becoming more concentrated, these have not produced unfavourable effects, at least during the period concerned, upon the economy's source of foreign exchange or on balance of payments position.

B. External Trade and Public Finance

Financially, the foreign or international sector will improve not only an economy's international reserve position but will also provide one of the local sources of public finance and thus of capital formation. Exports and imports provide local government, in various ways, with finance for the creation and improvement of the economic and social infrastructure which, indoubtedly, will further foster the development of foreign and domestic sectors. In addition, financial accumulation has not merely provided capital but also provided a means of mobilising all the other factors of production available. While it is important to note that all the factors of production are complementary in generating development of the economy, it is also important to note that a

11. See Table 2-13 in Chapter II.

sufficient supply of finance is essential for transforming all the other factors of production into conditions suitable for their use in the development process. If a high rate of capital formation is necessary for ensuring a high rate of increase in national income, it follows that the rate of savings should also be correspondingly high.[12] Savings can be obtained from local and foreign sources; both again comprise public and private sources. In a developing country, particularly a small one, where voluntary savings, from private sector (mainly business sector and the households) are very limited,[13] private savings must therefore be supplemented by public savings which is the surplus of current or budget revenue over current expenditure. If capital or savings from abroad are nor forthcoming, major reliance should then be placed on increasing public revenue or decreasing public expenditure or both. Public savings become the first obvious source of finance for national capital formation. The recent experience indeed suggests that the failure of public sector to raise its saving rate may become an important bottleneck to further development.[14] In practice, all developing countries it is now customary to have a development program. In

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12. Saving is the first stage in the process of capital formation, the next two stages being the mobilisation of savings and the conversion of savings into productive equipments or investment.

13. Partly due to the low level of income, high income elasticity of demand, and partly due to the lack of development finance. See D. Seers and J. Joy (eds.), Development in a Divided World (Penguim, 1971), p. 236.

14. See L. Reynolds, "Public Sector, Saving and Capital Formation", in Government and Economic Development, edited by G. Ranis (London : Yale University Press, 1971), p. 544.

most of those multi-year development plans, other than a project of sizable public share in the gross national capital formation, it is usually hopeful of raising revenue as a percentage of national income and so that to higher or rise the marginal rate of saving out of revenue over time. The ultimatum is to approach the target of self-finance in capital formation and even further contribute to the capital needs of private enterprises.

In Sabah, and as well as in other developing economies, public sector is usually increasingly more important. This is partly due to the fact that local government has increasingly taken part in the task of increasing productive capacity and partly due to the reliance of private sector upon public sector to insure further growth. The level of the public sector's reciept and expenditure will thus influence the level of the national income. The public expenditure (both current and development), which are ranged of 16% and 24% of GNP in the period 1955-70, bring out more clearly the fact that the public sector is in an effective position to influence the economy significantly, indirectly through its expenditure and financing decision. Since the government's fiscal operations, by direct and/or indirect taxation, can induce an expansion or contraction of private business activity, and through its investment policy the government can influence the pattern, volume and the direction of aggregate investments. Because of the large efforts by the public sector in promoting

diversification of production of the economy through the introduction of new primary products and industrialisation, and in improving and accruing infrastructure, these proportions are undoubtedly being expected to rise over time. Complementarily, these operations raise the problems of financing. However, the proportions of public revenue (both current and development) in GNP have been simultaneously expanding from 19 percent to 24 percent. This simply implies that the growth of public revenue has been exceeding that of GNP over time.[15] During these sixteen years of economic development, there has been resulting annual budget surpluses, i.e. savings in the current account,[16] All the way through, from as low as M$ 4.0 million to the peak of M$ 83.0 million of 1969. Also, development expenditure of the public sector has been covered by its development revenues which comprise mainly the contribution from budget surpluses, premia from land and grants from federal and/or foreign governments, except for the performance in the first three years and the ending year of the period under consideration. Therefore, during the period of 1955-70, these give the sector almost every year a positive saving out of its entirely current and development revenues; the accumulated savings forms about M$ 139.0 million or 17 percent of the GNP of 1970. This again makes contribution to the capital needs of

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15. During economic development, as income per capita rises, countries usually experience more rapid growth in financial assets than in national wealth or products. See J.G. Gurley and E.S. Shaw, "Financing Development and Economic Development" (Econ. Dev. and Cultural Change, 15, 3, 1967), p.257.

16. Total current revenue minus current expenditure exclusive of the part transferred to development fund.

private enterprises by the public sector potentially possible. For example, at the end of the First Malaysia Plan period 1966-70, the actual amount of the entire expenditue spent in Sabah was M$ 413.48 million, while of which M$ 231.12 million or 55.9 percent was from the State fund and the rest was the Federal contribution.[17]

We have seen that public sector is not only a big saver but as well as prime mover in the process of capital formation. However, in this section, our attention is focus on the sources of finance. A very great portion of the revenues is derived from internal sources -- mainly, royalties and fees from forest produce, imports and exports duties, reimbursement/grants from federal and foreign government. Analytically, an increase in the transaction of the international sector and the expansion of production of forestry and agricultural products, which are the strategic and dominant exports of Sabah's economy, will provide more revenue to the government, as everything is constant.

International sector is the backbone on which the State's finance is firmly built. The economic activities in the sector provide most of the capital needs in the activities of both public and private sectors. The advancement of this sector enables the State Government to increase revenue

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17. Sabah Revolution for Progress : a Review of Progress and Achievements during the First Malaysia Plan 1966-70 (Sabah : The Malaysian Information Service, 1971), p.9.

from royalties and fees, and export and import duties, and hence the accumulation of large revenue surpluses which are channelled into the Development Fund and further used for financing capital investment. The marked improvement in the financial position -- due to the higher prices of major exports and the general increase in the volume of foreign trade, the government revenue rised -- obviated the necessity for outright grants by the United Kingdom, which were accordingly suspended in 1955. Beginning in 1956, Sabah's finance was freed from the control of the United Kingdom Treasury.[18]

Table 3-2 shows the financial position of the main components of current revenue; this Table reveals some outstanding features. Mainly, the depression in exports of traditional products and the tariff policy thus followed had resulted a fall, both in absolute and relative terms, in export duties. The diminished shares of rubber export duties in the total export duties is the typical example. For only those exports of timber that extracted from freehold lands, which constituted a small portion of the total timber output, were subject to an export duty, therefore, export duties from timber were very much less than other government's revenue from timber, but its absolute value was gradually increasing and so was its share in total export duties over time. Although absolute value of import duties was increasing remarkably over time, the fall in export duties had produced a

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18. See "Malaya and British Borneo" (Economic Survey of Asia and the Far East, VII, 4, 1956.

Table 3-2

Sabah : Major Components of the Public Revenue

1955-70

(percentage)

	Share in Current Revenue			Share in Export Duty	
	Royalty and Fees	Import and Export Duties	Export Duties	Timber Duty	Rubber Duty
1955	6.61	55.72	21.18	--	--
56	6.14	54.58	19.52	--	--
57	7.05	53.23	17.31	--	--
58	7.78	50.43	16.64	--	--
59	8.27	49.52	18.67	10.90	49.30
1960	10.09	46.59	16.33	12.58	49.15
61	13.74	38.33	9.72	21.42	47.01
62	14.03	33.71	6.79	25.32	46.61
63	14.12	32.95	4.95	21.79	40.97
64	22.91	52.68	6.87	25.39	38.72
1965	22.08	55.19	5.78	25.25	46.15
66	25.16	49.83	5.34	32.38	35.26
67	37.15	36.41	3.11	44.20	30.68
68	38.79	31.47	2.71	43.10	30.51
69	35.33	28.50	3.05	39.50	43.62
1970	42.47	31.72	2.12	35.63	51.26

Source : Computed from Appendix Table 9.

declining share of total export and import duties in the entire current revenue. Its percentage share was about 55.7 percent in 1955 but fell gradually thereafter to 32.9 percent in 1963 and 28.5 percent in 1969, except the suddenly high level in the period 1964-66 which was characterised with great increase of imports into Sabah. Most of the production of timber, other than those extracted from freehold lands, were subject to not the export duty but the charge of royalty and fees. The brisk tempo of expansion of timber production was thus accorded by the rise of revenue from royalty and fees. The amount was about M$ 2.0 million in 1955 but increased rapidly thereafter to about M$ 6.0 million in 1960, M$ 16.5 million in 1965 and M$ 74.6 million in 1970, or about 6.6 percent, 10.1 percent, 22.1 percent and 42.5 percent, respectively, of the total public current revenue collected during the same period.

Despite various development schemes and plans of the re-construction period, i.e. from post-war period up to 1955, since the year 1955 -- beginning year of the real development period -- Sabah has experienced three five-year plans.[19] In order to meet the recurrent costs of these ambitious development plans as well as to create budget surpluses for financing capital expenditure, the State government faced the necessity of raising revenues rapidly enough

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19. Sabah Development Plans : 1956-60, 1959-64 and 1965-70 or 1966-70. See also Footnote 6, Chapter I.

via royalty and fees contribution and various taxation devices.[20] Royalty and fees charged on forest produce, export duties and the timber premia and extraction charges contributed a sum of about M$ 22.5 million or about 33.4 percent of current revenue in 1964 and further M$ 82.0 million or about 46.7 percent in 1970. As the level of public current expenditure was running well below that of current revenues, the State government was thus able to accumulate the huge budget surpluses for financing development projects. Total financial capacity, i.e. current account balance plus development revenue, was, though showed a mild fluctuation, increasing over time, from about M$ 16.7 million in 1955 and about M$ 28.0 million in 1960 to about M$ 43.9 million in 1965 and about M$ 97.9 million in 1969. Therefore, except the negative balances in 1955-58 inclusive, the accumulated financial balance, i.e. total financial capacity minus development expenditure, was about M$ 143.2 million or about 12.3 percent of GNP in 1969, as shown in Table 3-3. In the case of promoting industrialisation in the State, the existing industrial areas accompanied with infrastructure would not otherwise be taken place if financing of development expenditure was impossible or difficult.

20. The rate of royalty contribution had thus been raised approximately to double the previous rate since 1967. Timber extraction charge was initiated in 1964. But, on the contrary, according to the Malaysia Agreement the State shares 30 percent of its net Customs revenue from 1964 onwards. Under the Malaysia Common Market arrangements, the admission of Malaysian-made goods (excepting a few) into Sabah is free from 1965 onwards. In addition, the share of imports originated from within Malaysia has shown increasing since 1963. All these will no doubt adversely affect Sabah's Customs revenue.

Table 3-3

Sabah : Total Financial Capacity and Accumulated Financial Balance as a Percentage of GNP

	Total Financial Capacity	Accumulated Financial Balance
1955	8.41	- 0.43
56	7.00	- 0.71
57	7.81	- 2.22
58	10.11	- 1.83
59	6.20	0.22
1960	8.73	3.83
61	8.38	6.36
62	8.44	7.41
63	9.35	7.09
64	3.78	4.83
1965	8.83	8.38
66	9.74	11.40
67	10.20	15.02
68	13.40	18.95
69	12.34	18.05
1970	10.70	15.04

Source : Computed from Appendix Table 10.

C. GNP and External Trade

** GNP, Total Exports and Imports --- Numerically, Sabah's aggregate GNP have been increasing throughout the period 1955-70, this has also been accompanied by the brisk tempo of external trade expansion and a great change in the composition of trade as well. Table 3-4 summarises the relevant growth rates and fluctuation indices of aggregate GNP, export proceeds and import expenditure. During the period 1955-70, aggregate GNP at current market prices was growing at an exponential rate of 10.7% per annum and the growth rates of various sub-periods range from 8.5% to 12.5%. Noticeably, growth rates for period 1955-60 and the confrontation period 1960-65 and so the period 1955-65 are relatively lower than those of the periods of 1960-70 and 1965-70. This implies that aggregate GNP enjoys an accelerating rate of growth. Independent of the population growth of estimated constant annually rates of 3.5% compound for 1951-60 and 3.7% compound for 1960-70, per capita GNP increases at 4.86% and 8.71% annually during 1955-60 and 1960-70 respectively. It is rather interesting that growth rates of neither the export proceeds nor the import expenditure are matched by those of aggregate GNP. While growth rates of aggregate GNP are accelerating, respective growth rates of exports and imports decelerate. Therefore, as shown in Table 3-5, respective ratios of exports and imports against aggregate GNP show a growing trend in the first place but a descending trend later. Obviously, both decelerating trends of export ratios and import ratios

Table 3-4

Sabah : Comparison of Aggregate GNP, Total Exports and Total Imports, 1955-70

(percentage)

	1955-70	1960-70	1955-65	1955-60	1960-65	1965-70
Annual Growth Rates						
Aggregate GNP	10.70	12.41	8.85	8.36	10.39	12.52
Total Exports	11.02	9.80	11.14	14.25	6.36	11.38
Total Imports	10.58	7.91	13.45	14.06	11.25	7.51
Fluctuation Index @						
Aggregate GNP	6.19	4.11	2.52	2.16	1.78	4.00
Total Exports	5.97	4.67	7.43	7.79	4.43	3.25
Total Imports	9.73	6.92	5.37	5.52	3.48	5.55

Note : @ See also Table 2-1.

Source : Computed from Table 3-5 and Appendix Table 1.

Table 3-5

Sabah : Trade Ratios and Gross National Products

(M$ million at current market prices)

	GNP	Export Ratios %	Import Ratios %
1955	199	51.99	43.94
56	217	55.00	54.06
57	256	46.71	47.48
58	260	49.49	49.39
59	281	62.58	55.31
1960	305	72.64	64.20
61	330	66.33	65.08
62	352	66.68	67.87
63	401	68.52	75.99
64	448	58.01	76.41
1965	512	59.56	65.33
66	593	60.42	57.75
67	751	54.54	43.78
68	798	54.28	42.97
69	891	58.50	46.89
1970	952	56.10	52.31

Source : Data for GNP are compiled from various sources. Figures for 1956-58 are derived from F.S. Chen, The Nation al Income of North Borneo, 1956-58 (Doctoral dissertation, London University, 1962), Table 7a and 7b, pp. 230-31. Value of 1955 is thus estimated based on the average growth rate of 9.33% of 1956-58 and value for 1959-60 is estimated on the basis of average growth rate of 8.29% of 1958-61. Figures for 1961-62 are from the Department of Statistics, Malaysia, "Data for the EPU Mid-plan Review and the IMF Consultation, 1968". And figures for 1963-70 are taken from Sabah's 10th Anniversary within Malaysia : A Review of Progress and Achievements during 1963-73 (Sabah, 1973). All these figures are based on industrial origin of Gross Domestic Products.

commence at the year 1964. The high export ratios are mainly attributable to the large increase of exports since 1959 as a result of increased exports of timber. Although this brisk tempo of export expansion continued during the second half of the 1960s production for domestic consumption, particularly rice production, and diversification of export production had advanced remarkably so as to result in an even greater gross domestic products and gross national products, export ratios thus indicate a downward trend. For the same reason, import ratios are diminishing during the later half of the sixties. However, without the boom of import trade caused by the confrontation, the falling tendency might have otherwise started some years earlier.

For further analysis of the respective relationship between aggregate GNP, export proceeds and import expenditure, correlation and least-square regression equations are used in the following quantitative study.

Simple linear regression and correlation equations for total export proceeds and aggregate GNP for periods 1955-70 and 1960-70 are calculated and summarised in Table 3-6. The computed correlation coefficients of the equations, linear and logarithm linear or exponential, indicate that there is a highly close association between aggregate GNP and total export proceeds, and the value of the square of the coefficient (R^2) suggests that the behavior of the dependent variable is highly explicable by the corresponding independent variable. The negative intercept term in simple linear regression

Table 3-6

Sabah : Inter-relationship of Aggregate GNP and Total Exports

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1955-70

Exports = 15.7590 + 0.5521 GNP (M$ m.)
(0.0241)

GNP = -14.2007 + 1.7594 Exports (M$ m.)
(0.0808)

Orthogonal Equation :

GNP = -21.3560 + 1.7854 Exports

$R = 0.9856$ $R^2 = 0.9714$ t-ratio = 6.8160

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log. Export = -0.2686 + 1.0135 log. GNP
(0.0628)

log. GNP = 0.3851 + 0.9364 log. Export
(0.0580)

Orthogonal Equation :

log. GNP = 0.3251 + 0.9616 log. Export

$R = 0.9742$ $R^2 = 0.9491$ t-ratio = 17.77

1960-70

log. Export = 0.3495 + 0.7934 log. GNP
(0.0393)

log. GNP = -0.3720 + 1.2331 log. Export
(0.0611)

Orthogonal Equation :

log. GNP = -0.4063 + 1.2468 log. Export

$R = 0.9891$ $R^2 = 0.9783$ t-ratio = 16.58

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equation of aggregate GNP on total export proceeds implies that in the absence of exportation of products aggregate GNP will be negative. However, for the sake of examining the possible causual relationship between these two variables, the corresponding slopes of the equations are relatively more important than the intercept term. The slope of the simple linear equation of aggregate GNP on total export earnings suggests that for every unit (M$ million) of export earnings made would therein create more than 1.7 units (M$ million) of aggregate GNP, while that of the simple linear equation of total exports on aggregate GNP suggests that the amount of export earnings therein being induced by one unit of aggregate GNP produced is only about 0.5 or 1.8 units of aggregate GNP which must be produced in order to obtain one unit of export proceed. The highly reliability of these slopes or B-terms in the respective simple regression equations are fully supported by the very small value of the corresponding standard errors.

The high reliability of the slopes of the simple linear regression equations of aggregate GNP (total imports) on total imports (aggregate GNP) is firmly warranted by the small value of respective standard errors as well. Every unit (M$ million) of import expenditure spent would further induce more than 1.9 units of aggregate GNP and every unit of aggregate GNP created would therein demand for only 0.4 units of imports or every 2.5 units of aggregate GNP would in turn require one unit of import expenditure. Relevant regression

equations are presented in Table 3-7. And, the computed coefficient suggests a remarkably close association between the aggregate GNP and total import expenditure.

However, in order to reduce un-reliability or to increase reliability to a larger extent, we consider more than one independent variables in the equation. In the multiple regression equation of aggregate GNP on both, at the same time, total export proceed and total import expenditure, the coefficient of multiple correlation, $R = 0.9876$, suggests that import expenditure does contribute something to the relationship between the three variables, although its contribution is very insignificant, i.e. an increase of 0.004, in terms of R^2. The multiple correlation equation is

$$GNP = 1.623 + 2.1507\ X - 0.4798\ M,$$

$$R^2 = 0.9754.$$

It is generally agreed that there exists some inter-relationship between the economic growth of a country and its foreign trade. Rise in the level, as well as change in the composition, of national income would influence the pattern and volume of foreign trade while changes in the structure and magnitude of foreign trade would in turn directly and indirectly affect the composition and level of national income. In a country of given per capita endowments of natural resources, the five universal factors, i.e. labour, physical capital, human capital (skill), special natural resources and total natural resources, would produce a regular change in the pattern and in turn the level of imports and exports as

Table 3-7

Sabah : Inter-relationship of Aggregate GNP and Total Imports

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1955-70

Imports = 49.7493 + 0.4119 GNP (M$ m.)
(0.0472)

GNP = -32.0459 + 1.9507 Imports (M$ m.)
(0.2085)

Orthogonal Equation :

GNP = -93.6016 + 2.1894 Imports

R = 0.9285 R^2 = 0.8621 t-ratio = 5.8200

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log. Import = -0.1065 + 0.9426 log. GNP
(0.0934)

log. GNP = 0.4158 + 0.9327 log. Import
(0.0924)

Orthogonal Equation :

log. GNP = 0.2644 + 0.9968 log. Import

R = 0.9376 R^2 = 0.8791 t-ratio = 12.97

1960-70

log. Import = 0.8295 + 0.6092 log. GNP
(0.0881)

log. GNP = -0.7141 + 1.3815 log. Import
(0.1998)

Orthogonal Equation :

log. GNP = -1.0379 + 1.5115 log. Import

R = 0.9174 R^2 = 0.8416 t-ratio = 9.22

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national income increased. Therefore, once income rises, there may be an expansion of capacity in exports [21] if the processes of production are economically market-oriented, because when a market grows to a certain size, as indicated by national income, with certain minimum per capita income, opportunity has been created for the local development of those processes of production.[22] A rise in income would further demand for more imports and these imports, as the input of the production system, would in turn proceed further expansion of production and thus national income. Therefore, in the whole, it is reasonable to expect an inter-action between national income and both export earnings and import expenditure rather than just a single causation. As a matter of fact, the above numerical findings do suggest that there exists not only a causal relationship between national income and both exports and imports in Sabah's economy, but also suggest that this relationship is one of interdependence rather than of an uniliteral causation. More important, they do suggest that it is more likely that a rise in exports and imports stimulates an increase in national income rather than vice versa.

Therefore, another linear regression equation is necessary for indicating their relationship. This equation is statistically referred to as an orthogonal regression equation which is based on the means of the two sets of data and

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21. See Harrod-Domar growth model.

22. See C.P. Kindleberger, Economic Development (McGraw Hill, 1965), p. 186.

calculated basically on the assumption that there is not a biased but an equal variability for each of the two relevant equations rather.[23] The orthogonal linear regression equations of aggregate GNP on total export proceeds and total import expenditure are as well summarised in Table 3-6 and Table 3-7 respectively.

So far least-square regression equations are fitted to common annual data, the least-square linear regression equations fitted to annual data in logarithm, as demonstrated in Table 3-6 and Table 3-7, suggest a statistically more significant relationship between the two variables than that indicated by the former equations since the latter yields an equation with a higher value of t-ratio.[24] In addition, the logarithm linear regression obtains a higher growth elasticity for exports or imports with respect to aggregate GNP

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23. For detials of calculation and demonstration, see Appendix II.

24. The t-ratio is a variance-ratio test employed in the variance-analysis to test the homogeneity of a set of means. Since the two sets of data in question are correlated, the coefficient of correlation between these two is thus being taken into account in the computation of the standard error of the difference between two means. The formula is

$$E_d = \sqrt{E_{m1}^2 + E_{m2}^2 - 2R\, E_{m1}\, E_{m2}}$$

and $$\text{t-ratio} = (M1 - M2) / E_d$$

where E_d = standard error of the difference between the means, M1 and M2;

E_{m1}, E_{m2} = standard error of M1 and M2 respectively.

than that for aggregate GNP with respect to exports or imports for the period 1955-70. The coefficient of relevant orthogonal regression (logarithm) equation suggests that for each unit percentage of growth of export proceeds or import expenditure, aggregate GNP increases 0.96% or 0.99% respectively for 1955-70. As the period 1960-70 is concerned, the logarithm regression equations suggest that growth elasticity for aggregate GNP is higher than that for exports or imports, and a higher correlation coefficient. But the relationship between aggregate GNP and export proceeds or import expenditure for the period 1955-70 is more statistically significant than that for the period 1960-70 since it produces an equation with a higher value of t-ratio.

** GNP, Major Exports and Functional Imports

-- Because of the different nature of different exports and imports, the impact of various sorts of exports and imports on the advancement of GNP will thus be diverse. When some exports and imports grow, they might provide a strong stimulus, via direct and/or 'carry-over' effects, for expansion in other industries or activities within the international sector and those outside but supporting the international sector, these will aggregately raise the employment and income in those sectors concerned; while for other exports and imports, their impact may be such as to provide a weak stimulus for development of various sectors in the economy.

a. Aggregate GNP and Prime Exports --

Table 3-8 and 3-9 summarises the characters of those major exports in the aggregate GNP.[25] The former indicates the growth rates and growth elasticities, which are the b-coefficients of the exponential equation of individual exports on aggregate GNP, and the latter presents the average percentage contribution of the prime exports to the aggregate GNP.

Numerical figures in these tables reveal that logs are the most stimulant export to the aggregate GNP, where its percentage contribution is accelerating from 11.0 percent all the way up to 38.0 percent and also its growth elasticities are comparatively higher amongst the major exports, at the range of 1.1 to 3.3. This again is supported by the relatively high coefficient of the orthogonal regression equation, in the logarithm, of aggregate GNP on logs exports, as being displayed in Table 3-10, which suggests that for each unit percent of increase in logs exports aggregate GNP increases by about 0.5 percent. This relationship is warranted by the low standard error of the coefficients of the linear (logarithm) regression equations of aggregate GNP (logs) on logs exports (GNP), as being demonstrated in Appendix Table 11(a), and also supported by the high coefficient of correlation of 0.9574.

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25. This is rather an overall picture of the impact of different exports upon aggregate GNP. Since very unfortunately that quantitative information for input coefficients or factor combination of various individual exports are not available and a detailed analysis is thus suspended.

Table 3-8

Sabah : Growth Elasticities of Major Exports, 1955-70

	1955-70	1960-70	1955-65	1955-60	1960-65	1965-70
Growth Rates of Agg. GNP	10.70	12.41	8.85	8.36	10.39	12.52
Total Exports	1.014	0.793	1.237	1.589	0.629	0.887
Logs	1.919	1.308	2.669	3.262	1.371	1.152
Rubber	-0.185	-0.216	-0.241	0.324	-0.677	0.133
Copra	-1.036	-1.462	-0.450	2.203	-1.822	-1.222
Tobacco @	0.396	-0.879	2.527	2.572	1.629	-1.661
Hemp	-0.520	-1.354	0.626	2.064	-0.824	-2.169
Fishery Products	1.796	1.727	1.746	0.529	1.211	1.492
Oil Palm Products	- -	- -	- -	- -	- -	4.129
Cocoa Beans	- -	3.451	- -	- -	2.360	3.393
Veneer Sheets	- -	1.378	- -	- -	3.915	3.172
Plywood	- -	- -	- -	- -	- -	9.926

Note : @ 1961 exclusive.

Growth elasticities are calculated as the b-coefficients of the exponential equation of individual exports on aggregate GNP. The equation is as follows,

$$X = a\,Y^{b}, \text{ or,}$$

$$\log. X = \log. a + b \log. Y \quad \text{where}$$

Y represents aggregate GNP and X the individual exports.

Source : See Appendix Table 4.

Table 3-9

Sabah : Percentage Contribution of Major Exports To GNP

(4-year average)

	1955-58	1959-62	1963-66	1967-70
Total Exports	50.54	67.12	61.31	55.96
Logs	11.07	28.86	37.95	37.95
Lumber	1.34	0.84	0.15	0.08
Rubber	16.33	13.76	6.69	3.47
Copra	10.05	9.54	2.98	0.70
Tobacco	2.98	6.09	6.32	1.28
Hemp	0.98	1.32	0.71	0.19
Fishery Products	0.33	0.45	0.70	0.70
Oil Palm Products	-	-	0.25@	1.10
Cocoa Beans	-	0.06	0.14	0.33
Veneer Sheets	-	0.12	0.31	0.16
Plywood	-	-	0.01@	0.14

Note : @ Average of 1964-66.

Source : Computed from Table 3-5 and Appendix Table 4.

Table 3-10

Sabah : Orthogonal Regression Equations of Aggregate GNP on Major Exports, 1955-70

Equations	R^2	T
log.GNP = 3.1026 + 0.4994 log.(logs)	0.9166	9.56
log.GNP = 21.2085 - 3.4402 log.Rubber	0.2723	16.52
log.GNP = 9.0782 - 0.8245 log.Copra	0.7074	11.88
log.GNP = -0.0530 + 1.3743 log.Tobacco*	0.0879	17.76
log.GNP = 9.5039 - 1.1387 log.Hemp	0.1833	21.07
log.GNP = 3.8240 + 0.5376 log.Fishery	0.9312	43.71
log.GNP = 5.0078 + 0.2311 log.Oil Palm@	0.9870	15.33
log.GNP = 4.9880 + 0.2618 log.Cocoa Bean#	0.8071	17.97
log.GNP = 4.1886 + 0.5161 log.Veneer Sh.#	0.4225	31.53
log.GNP = 5.5615 + 0.1187 log.Plywood@	0.8104	10.45

Note : R^2 : square of the coefficient of correlation;
T : t-ratio. See also Footnote 24, p. 113.
* : 1961 exclusive.
@ : 1964-70.
# : 1960-70.

Another promising traditional export is the fishery product which in general indicates fairly high growth elasticities in those particular periods and also a remarkable advance in the percentage contribution although its lavel is relatively low in the aggregate GNP. The computed correlation coefficient suggests that aggregate GNP is closely associated with fishery exports and the coefficient of the orthogonal regression equation of aggregate GNP on fishery products, with high reliability, reveals its essential impact upon aggregate GNP. The coefficient implies that every unit percent of fishery exports expanded will further induced an increase of more than 0.5 percent in aggregate GNP.

Other traditional exports, i.e. rubber, lumber, copra, hemp and tobacco, have been statistically a decelerator to the expansion of aggregate GNP. This is not only clearly indicated by the very low or high but negative coefficients of correlation between traditional exports and aggregate GNP, and by negative slopes in respective orthogonal regression equations, but are also responsed by a declining percentage contribution to the aggregate GNP. Although the coefficient of the orthogonal regression equation of aggregate GNP on tobacco exports does suggest a quantitatively high and positive contribution to aggregate GNP, this relation is rejected by its very unreliability which is indicated by its relatively high standard error.

In respect of the two new agricultural exports,

i.e. oil palm products and cocoa beans, and two new manufacturing exports -- veneer sheets and plywood, whose contribution constitute only a small but increasing proportion in aggregate GNP, witness tremendously high growth elasticities. Also, the computed coefficients of correlation suggest a positively close association with aggregate GNP, as shown in Table 10.

By and large, what is evident from the above study is that after these years of economic growth, i.e. the growth of gross national products, exports of two primary products have been quantitatively of increasing importance to the growth of national products in Sabah's economy while the contribution from other major traditional exports have been declining. Exports of new crops and manufacturing commodities appear to be the potentially promising contributor to the national income.

b. Aggregate GNP and Functional Imports -- In an economy such as Sabah which is highly import-oriented, import is the main or probably the only source of productive input for proceeding further production and at the same time to meet the needs, in level and pattern, of the consumers, as a result of the growth of national income. However, again, different imports will result in various pattern and level of influence, at least various imports will directly impose different levels of foreign exchange burden and directly and/or indirectly affect the level and pattern of employment and

finally the level and distribution of national income. In order to investigate the possible impact of various imports, which are classified according to their nature or function into five groups, upon national income, some indicators are being used in the following so as to reveal their relationship.

Analytically, to express the statistically interdependent relationship between each of the import groups and the national income, some orthogonal regression equations of aggregate GNP on respective functional import groups are summarised in Table 3-11, and the growth elasticities of respective functional import groups are listed in Table 3-12. The computed coefficients of correlation for all but exclusive of raw consumption goods warrant the close association between the two variables. The square of the coefficients of correlation indicates the degree of one variable's behavior explicable by other variable. The respective ratios of the growth elasticities over corresponding standard errors warrant the reliability of the relationship between the two variables, except, again, in that of the relationship between national income and the raw consumption goods.

D. Trade Expansion and Employment

External trade was indeed vital to the growth of national products, as has been discussed in the preceding sections, but it also played an essential role in achieving social justice.

Table 3-11

Sabah : Orthogonal Regression Equations of Aggregate GNP on Functional Imports, 1955-70

Equations	R^2	t-ratio@
log.GNP = 0.4891 + 1.2896 log.Cf	0.9328	53.88
log.GNP = 0.8327 + 0.9491 log.Co	0.7458	24.29
log.GNP = 18.3913 - 11.5200 log.Cr	0.0114	19.95
log.GNP = 1.5512 + 0.8604 log.Kr	0.8334	51.30
log.GNP = 1.4555 + 0.6573 log.K	0.9086	24.57

Note : @ The degree of freedom is N - 1.

Cf : Food;
Co : Other consumption goods;
Cr : Raw consumption goods;
Kr : Raw capital goods;
K : Capital goods.

Source : See Appendix Table 12.

Table 3-12

Sabah : Growth Elasticities of Functional Imports

	1955-70	1960-70	1955-65	1955-60	1960-65	1965-70
Growth Rates of Agg. GNP %	10.70	12.41	8.85	8.36	10.39	12.52
Total Imports	0.943	0.609	1.490	1.611	1.064	0.502
Food	0.749	0.618	1.006	0.694	1.051	0.414
Other Consumption goods	0.920	0.401	1.787	1.459	1.276	0.080
Raw Consumption goods	-0.044	-0.301	0.064	1.362	-0.709	-0.135
Raw Capital goods	1.065	0.613	1.771	2.398	1.146	0.152
Capital	1.452	1.017	2.106	2.256	1.440	0.937

Note : Growth elasticities are calculated as the b-coefficient of the exponential equation of individual functional imports on aggregate GNP. The equation is as follows,

$$M = a\,Y^{b}, \text{ or,}$$

$$\log.M = \log.a + b \log.Y \quad \text{where}$$

Y represents aggregate GNP and M the individual functional imports.

Source : See Appendix Table 7.

On the basis of observation of Caribbean and Latin American economies, D. Seers following J.G. Mead's study of Mauritius,[26] the findings indicated that the rate of increase in employment was determined by and equal to the difference between the rate of increase of exports and wage-rate -- so called the export-wage gap. Furthermore, in a recent study of G. Ranis,[27] by reference to the historical Japan and contemporary Korea and Taiwan, it is argued that once the open economy moves into a more market-oriented and export-substitution phase, it becomes more possible for major efficient changes in output mix and technology both towards a labour-using direction. And such restructure may permit the economy to enjoy more of both output and employment rather than having to make a choice between them. H. Singer believes that the major contribution to the solution of the unemployment problem in developing economies lies in trade, through which they would find an outlet for their abundant labour.[28] In addition, J. Tinbergen insists that LDCs are being blocked, by restrictive trade policies of DCs and as well as of LDCs among

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26. D. Seers, "The Mechanism of an Open Petroleum Economy" (Social and Economic Studies, June, 1964) and "A Step Towards a Political Economy of Development : Trinidad-Tobago" (Social and Economic Studies, Sept., 1969). J.E. Mead, "Mauritius : a Case Study in Malthusian Economics" (Economic Journal, Sept., 1961).

27. G. Ranis, "Industrial Sector Labour Absorption (Economic Dev. and Cultural Change, 21, 3, 1973).

28. H.W. Singer, "International Policy and Its Effect on Employment" in R. Robinson and P. Johnston, (eds.), Prospect for Employment Opportunities in the Nineteen Seventies (London : HMSO, 1971).

themselves, for lack of opportunities to market their products whose production would create considerable employment.[29] But, on the contrary, on the demonstration of 'basic model', it was shown that any expansion takes place in a relatively labour-intensive sector will hamper the economy's growth; an opposite result would be the case of an expansion in the export leading sector of relatively capital intensive.[30] Also, it is criticised that export expansion does not appear to be making much of a contribution to the solution of the unemployment problem in some countries where export income has been expanding steadily for some time [31] and claimed that the increases in national income so earned, which are mostly transferred to those already employed, may be directed substantially at activities which do not provide an expanding and viable market for domestic sector capability and may also give rise to a socially distorted and anti-economic pattern of production which offers very little employment.

Intuitively, structural changes in the exports of an open economy will always have important effects on the rate and composition of growth of employment of the export

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29. J. Tinbergen, "Trade Policy and Employment Growth" (International Labour Review, 101, 1970).
30. A.C. Kelley, J.G. Williamson and R.J. Cheetham, Dualistic Economic Development : Theory and History (London : The University of Chicago Press, 1972), p.225.
31. H. Brewster, "The Growth of Employment Under Export-biased Under-development : Trinidad" (Social and Economic Studies, 21, 2, 1972).

sector, as well as national employment. The impact of this growth on employment will depend primarily on the relative importance of different industries in the national economy, the nature of the industry itself, the pace of export growth and changes in the industry's employment-output relationship. As we have seen, in Chapter II, that Sabah's export trade has been expanding for the last two decades, and the structure of which has as well been changing towards a more diversified phase (in terms of commodity items), therefore these should have been accompanied by a change in total employment in, particularly, the export sector and the redistribution of the labour from sector(s) to sector(s) and/or from industry to industry.

In an open export-oriented economy, the normal path of economic development will usually involve an expansion of the export sector, where value of output per employment is likely to be higher than in the economy as a whole. The additional products generated by the export sector result in an increase in the effective demand for goods and services of the other sectors, and thus permit an increase in employment in those sectors and the export sector itself. This is the employment multiplier effect of increased output of the export sector -- the direct effect. If it is the case that an economy's total output (given productivity) and income would need to grow at a sufficiently high rate in order to consummate the target of certain degree of employment growth and such that to reduce the level of unemployment, then to achieve this high

growth rate of output and income would in turn be necessary to increase the supply of investment/capital goods met by imports. Consequently, to match this increase in imports, at least, exports would need to increase substantially. Therefore, perhaps, the most crucial aspect of the indirect contribution of trade expansion to employment in an export-oriented economy lies on the increase in foreign exchange earnings.

It is important to note that although the Labour Department and the Department of Statistics of Sabah have carried out annual reports and several labour force surveys,[32] the decennial population censuses remain the only reliable sources of comprehensive statistical data on labour force in Sabah. These reports and surveys have the advantage of presenting a series of yearly data, but unfortunately, these pieces of information are modified by the scope of survey which covered only a small protion of the whole economic activity. Comparison ofthe industrial distribution of employment in different reporting and/or surveys years with those for the sensus years of 1951, 1960 and 1970 shows that the reports of the industrial distribution is incomplete, erratic and unreliable. The accuracy of the data varies considerably over time and its degree of accuracy differs from an industry

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32. The first survey was carried out in 1967 by the Department of Statistics, Sabah.

to another. In general, it falls off as the data recede in time; those in the decennial population censuses, however, can usually be regarded as relatively, sufficiently accurate. And accuracy is generally better for those industries which have a nature of comprising firms of larger scale. Due to the differential structure of different economic activities, the degree of reliability of the data for different economic activities in the annual reports varies. For example, the timber and services industries. The former comprises a very small number of small firms but a bulk of large firms [33] instead, and the opposite is the case in the latter, these would no doubt affect the availability and reliability of information in those reports. Yet, due to the discontinuity of time span, information from the censuses cannot reveal the change of annual employment. A third alternative, perhaps, is to make an estimate for each annual employment based on the information available in both censuses and annual reports, such that a series of annual data for the total labour force and labour force in crucial exporting industries is realised.

* Agrarian Characteristic of Employment --

In accordance with the common feature in the Third World,

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33. The size is defined in terms of number of persons employed. A large firm refers to one which comprises more than 20 employees.

employment in Sabah has lagged behind. During the period 1955-70, the growth of total employment of economically active population of 1.5% p.a. has not kept pace with the rate of growth of GNP (9.6%) and that of the total population (3.59%). In addition, an export-oriented economy like Sabah, the export sector is the dynamic one which indeed enjoyed very high growth rates, and this is the sector whose effect upon employment we are much concerned with. However, this dynamic sector was not absorbing labour at a satisfactory rate. Not only did the export sector's rate of labour absorption [34] fall behind the general growth rate of the entire population but it also lagged behind the growth rate of the economically active population employed; both its absolute number and relative share in total employment were decreasing during the 1960s. To examine the extent of the employment lag in the export sector, we can compare the gorwth rate of volume of exports in the export sector with the rate of growth of employment. The growth rate of volume of exports was 11.02% while that of its employment was barely 0.31%.

The agrarian characteristic of Sabah's economy is as well reflective of its agricultural structure of employment. About 85 percent of the total employment enumerated in

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34. Here, the export sector's labour absorption is defined, in narrow term, as the entirely agricultural employment minus employment in rice production.

the 1951 population census were absorbed by the agricultural sector but this figure dropped to about 80 percent, though its absolute number of employed increased, in the 1960 population census and fell again to about 64 percent, its absolute number of employment was reduced as well, when the population census was taken in 1970. This is clearly shown in the distribution of industrial employment in Table 3-13. Among the number of employment in the agricultural sector, more than half of this agricultural employment were registered as being engaged in rice production. Absolute number of the employed engaged in non-agricultural sector, and as well as its relative share in the entire employment, increased significantly. The rudimentary stage of Sabah's industrialisation has also been evident in the employment in manufacturing sector. It did expand very greatly, in terms of both absolute number of employment and relative share in the total employment, during the 1950s, but its number of employment increased comparatively slower than those of other non-agricultural sectors during the 1960s and thus its proportional share in total employment indicated a fall in 1970.

* Primary Export Sector and Employment --

Beyond the employment in rice production, employment in rubber production and processing industries was another traditionally social and economic phenomenon in Sabah's society. Owing to the prosperity of international rubber market and thus the

Table 3-13

Sabah : Distribution of Employment by Industrial Group

	1951		1960		1970	
	Number of Person	%	Number of Person	%	Number of Person	%
All Agriculture	119 370	84.99	142 113	80.46	125 777	63.63
Logging	3 637	2.59	9 301	5.27	11 090	5.61
Fishing	5 457	3.88	6 175	3.50	6 059	3.06
Rubber Prod. & Processing	20 331	14.46	25 378	14.37	19 246	9.74
Coconut & Copra Production	3 373	2.40	7 525	4.26	5 596	2.83
Tobacco	816	0.58	2 376	1.35		
Hemp	942	0.67	1 419	0.80		
Other Agriculture	10 779	7.66	12 258	6.94	16 916	8.56
Rice Production	74 040	52.65	77 681	43.98	66 870	33.83
Manufacturing	1 387	0.99	6 737	3.81	7 079	3.58
Non-manufacturing	19 872	14.02	27 776	15.73	64 832	30.15
Mining and Quarrying	269	0.19	535	0.30	889	0.45
Construction	1 642	1.17	4 488	2.54	6 230	3.16
Electricity, etc. & Sanitary Services	135	0.10	285	0.16	1 395	0.71
Tertiary	17 826	12.56	22 468	12.73	51 019	25.83
Commerce	6 037	4.29	7 734	4.38	11 770	5.96
Transport, Storage and Communication	2 345	1.67	4 657	2.64	6 923	3.51
General Services	9 444	6.72	10 077	5.71	32 326	16.36
All Industries	140 629	100	176 626	100	197 688	100

Source : Report for Population Census, Sabah (North Borneo), 1951, 1960 and 1970.

expansion of rubber industry, the number of persons employed in rubber industry increased substantially during the 1950s. According to the population census, the number was around 20 thousand in 1951 but rose to around 25 thousand in 1960 and whose percentage share in total employment in 1960 just maintained almost the same proportion of 1951 of about 14.5 percent. Therefore its growth indicates an annual rate of about 2.5% compound for the period 1951-60. The depression of rubber industry during the sixties was also evident in the computed negatively growth rate of about 2.7% compound, for the period 1960-70 and both of its absolute number and relative proportion of employment fell to around 19 thousand persons and about 10 percent respectively in 1970. Data published by the Department of Labour (Sabah) revealed that number of persons engaged in rubber establishments, which comprise at least 20 employees, increased from the year 1955 to 1960 but dropped severely thereafter (see Appendix Table 13). This difference additionally indicates the nature or structure of the rubber industry; that is, greater proportion of the employees in rubber industry was employed in small scale or cattage industries which employed less than 20 persons.[35] For

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35. The continuously drastic reduction of employment, as shown in the Department's records, reveals the fact that depression of rubber industry results the vanishment of larger establishments while smaller scale establishments are remaining more or less stationary. It is estimated that more than 75,000 acres of smallholder rubber would have been planted and less than 10,000 acres in estate rubber in the years of 1959-64. See review of the Development Plan 1959-64, in Sabah Development Plan 1965-70 (Sabah), p. 9.

the entire period of 1955-70, employment in rubber sector has been declining at an annual rate of 1.34%, and the comparison with the growth of quantity of exports, as shwon in Table 3-14, the growth rate of 2.7% of the quantum of rubber exports is clearly higher than the former. This simply implies that output or exports of rubber had lagged the employment in rubber sector behind.[36] The simple correlation coefficient of the proportion of employment in rubber industry in the total employment with that of volume of rubber exports in total exports indicates a positively high (0.8857) association between them. But the correlation of the proportional employment in the rubber industry with the quantity of rubber exported per worker suggests a close but negative (- 0.9169) relationship between each of them. The relationship between proportional employment in rubber industry and export shares of rubber in total exports and the quantity of rubber exports per worker is indicated in the following multiple regression equation,[37]

$$Ei/E = 15.896 + 0.073(Xi/X) - 4.326(Xq/Ei),$$

$$R = 0.9731.$$

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36. In addition to the depression of international rubber prices, the improvement of quality and in turn the higher yield of rubber per acre or worker discouraged employment in rubber industry.

37. Ei/E represents the proportional employment of an industry concerned, Ei, in the total employment, E, in the economy. Xi/X refers to the shares of exports of an industry concerned, Xi, in the total exports, X. Xq/Ei represents the quantity of exports of an industry concerned, Xq, per unit employment in that industry, Ei.

Table 3-14

Sabah : Comparison of Industrial Employment and Quantum of Exports, 1955-70

(percentage)

	Growth Rate of Employment	Growth Rate of Quantum of Exports
All Agriculture	- 0.37	
Logging	4.11	16.60
Fishing	0.24	5.19
Rubber Production and Processing	- 1.34	2.74
Coconut and Copra Production	0.27	- 11.64
Manufacturing	5.14	
Non-manufacturing	7.18	
Mining and Quarrying	5.77	
Construction	5.43	
Electricity, etc. and Sanitary Services	13.83	
Tertiary	6.67	
Commerce	3.81	
Transport, Storage and Communication	4.96	
General Services	8.68	
All Industries	1.51	

Source : Computed from Table 3-13.

People are also engaged in the traditional coconut and copra production. The methods of production are highly labour-intensive. Another characteristic of this industry is, as mentioned in Chapter II, that it comprises numerous small scale or family-size establishments.[38] This is warranted by the comparison of the enumeration of employment from the Labour Force registration with those from the decennial population censuses shows that barely 3.0 percent of the employment in this industry was absorbed by the larger establishments and the remainder was employed by the small scale ones. Similarly, both decennial population censuses and labour force registration (Appendix Table 13) show a growing trend of employment in coconut and copra production during the 1950s but a declined one in the 1960s. Both absolute number of employment and its proportion in total employment recorded an increase in 1960, the former is more than doubled, increased at an annual rate of 9.33% compound, and the latter is about doubled, as compared with the records of 1951. These are in accordance with the fact that both volume and quantity of copra exports reached the peak in 1960,[39] and the fall thereafter was also followed by the decrease of employment -- the

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38. For example, in a family, the parents, with the assistance from their young or unemployed children, work all the way from picking fresh coconuts and drying the coconut meat under the sunshine to the sale of copra to the agent.

39. See Appendix Table 4.

records of 1970 show a fall of more than 20 percent or annually 2.92% compound, in absolute terms, and 1.4% annually in relative terms. To view it for the period 1955-70, the quantity of copra exported suffered from a negative growth of 11.6% per annum while employment was keeping a slow growth of about 0.3% per annum. This seems to suggest that, to some extent, copra industry did manage to maintain its labour absorption because, due to very nature of its small size, technology in this industry remains traditional and no improvement in method of production had taken place or it was very insignificant if it did occur.[40] However, both its export shares and quantity of exports per worker were dropping over time, the computed coefficient of 0.5891 suggests that there is a positive but low correlation between the proportional employment in copra industry with the quantity of copra exported per worker and, simultaneously, a positive and low correlation, 0.5617, with export shares of copra as well. But the multiple regression equation

$$Ei/E = 2.990 - 0.0053(Xi/X) + 0.0837(Xq/Ei),$$

$$R = 0.5897.$$

suggests that its proportional employment in rubber industry has an inverse relation with its export shares but a positive association with its quantity of exports per worker. At 95

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40. Obviously, there existed disguised unemployment in the small scale establishments.

degree of confidence, the computed standard error of correlation coefficient suggests that the dependent variable is highly associated with both the independent variables, and the square of the multiple correlation coefficient indicates that only 35 percent of the dependent variable are explicable by both the independent variables.

As mentioned in Chapter II, the remarkable performance of fishery exports during the period 1955-70 laid the foundation of a potential source of foreign exchange earnings in the future. Its volume of exports expanded at a rate of 19.3% annually and its quantity of exports 5.2% yearly, but its employment was lagged behind, growing at mere 0.24% per annum. For the period 1955-60, both volume and quantity of exports increased at an annual rate of 5.75% and 7.46% respectively, but its average annual growth rate of employment for the period 1951-60 increased at barely 1.4% compound. For the period 1960-70, the former grew at 21.3% and 6.0% respectively whilst the latter suffered from a reverse trend of 0.19% compound. It is very clear that the employment lag in this industry was even severe in the 1960s. The labour force registration, although including merely those establishments which consist of at least 20 employees, does indicate the similar sign or tendency -- labour absorption enlarged in the later half of the 1950s but gradually contracted during the sixties. This was mainly due to the development of the fishery industry itself and the technology in the industry. Prior to the

sixties, the industry was very disorganised. Fishermen, particularly in the rural area, are independent from each other, they fished for their own provision or sometimes for a very limited market, if it did occur. These fishermen constituted the largest part of the fishery employment. Marine fishing was merely confined to the inshore waters and estuaries, methods of fishing were also old and traditional.[41] However, until the end of 1959, with the increase in the use of power boats, it was then gradually extending to off-shore waters. The culture of fresh water fish in ponds,[42] mainly in inland districts where fish is scarce, was still in its rudimentary stage during the second half of the fifties -- there were roughly 500 fish ponds with a total of less than 45 acres in surface area. High prices, together with a steadily growing demand had given much incentive to the gradual expansion of the fishery industry, and its primitive and labour-intensive technique of production ensured the gradually large increase in employment, during the later half of the fifties. In addition, as the industry is becoming better organised in the end of 1959 and the beginning of the sixties, new methods of

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41. Static traps, hand line, beach seine and gill nets are the mainly primitive fishing tools used by, particularly, the independent fishermen.

42. The technique of mono-sex culture of Tilapia introduced in 1954 was being adopted in 1957. See Annual Report : North Borneo, 1958.

fishing were introduced and adopted,[43] fishing area was then extended to deep sea. Furthermore, again, high prices, accompanied by a steadily growing demand from abroad, had done very much to encourage the production of frozen prawns and the new establishment of fishery concerns, e.g. pearl culture.[44] The expansion of the entire fishing industry, due to the aforementioned factors, made the gradual increase in employment possible during the fifties and the early sixties. Obviously, expansion of the fishery industry did do much to the absorption of the economically active population, but as new methods were adopted and flourished rapidly, productivity and then production of fishery products correspondingly increased very rapidly, this in turn kept the growth of employment in this industry slowed down or even merely maintained at a certain level of employment. In 1960, the average amount of fishery products exported (tons) per unit employment was 0.165 but it raised to 0.293 in 1970.[45] The computed simple correlation coefficient of -0.666 for the proportional employment of

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43. For example, rod-and-line fishing with line bait for tuna, and the purse-seine. Annual Report : North Borneo, 1960, p. 79. Method of other trawling for prawn was in fact introduced into Sabah as early as 1952 but was not adopted in practice until 1959. See Sabah's 10th Anniversary Within Malaysia (1973), p. 160.

44. The prawn processing factories, of which number was only two in 1963 but increased to seven in 1970, provided a substantial employment opportunities to the economy.

45. Certainly, the entire output of the entire fishery industry was very much greater than those being exported, and the deflated physical amounts would be no doubt much greater if quantity of the entire output was used.

fishery industry and the output exported per worker, reveals a negative relationship between them. And the proportional employment has a highly negative association with the proportional exports as being indicated by the correlation coefficient of -0.8267 . The square of the multiple correlation coefficient of

$$Ei/E = 3.776 - 0.303(Xi/X) - 0.476(Xq/Ei),$$

$$R = 0.8327.$$

suggests that 96.34 percent of the change of proportional employment of fishery industry can be determined by the two independent variables.

Timber industry has been the backbone of Sabah's foreign exchange earnings, as mentioned in Chapter II, since the late 1950s. And the findings derived from the analysis in the earlier part of this chapter indicate that the growth of exports of timber was highly and positively correlated with the growth of GNP of Sabah during the period 1955-70. Intuitively, from the viewpoint of its quantitatively important role in the economy, it is expected to have done much, or at least to a certainly remarkable extent, to the absorption of economically active population. Both volume and quantity of timber exports, as well as its relative share in total exports, as clearly being mentioned in the previous chapters, have been increasing over time during the period 1955-70. However, this was also corresponded with its high level of employment, in both absolute and relative terms -- there were 9301 persons engaged in this industry in 1960 but finally expanded to 11,090

persons in 1970 and its relative shares were simultaneously enlarged from about 5.3 percent to 5.6 percent. Perhaps, in order to compare the change of output with that of employment, it is more feasible to compare the growth of each of them and the picture of the employment lag such that revealed would be more realistic. The annual growth rate of absolute employment in timber industry for 1955-70 was 4.1% but that for its volume of exports was 21.3% and 16.6% for its quantity of exports. The average growth rate of absolute employment for the period between the two population census years 1951 and 1960 is estimated at 11.0% compound, but both of its volume and quantum of exports for the period 1955-60 show extreme high annual growth rates of 29.4% and 28.2% respectively. Also, in the period 1960-70, volume of timber exports grew at 16.3% per annum, and its quantum of exports at 9.38%, whilst it was merely 1.77% for the absolute employment at the same period. This demonstration clearly reveals that employment in the timber industry was severely lagging behind by its brisk expansion of output. Perhaps, some of the virtual facts in the porcess of development of the timber industry would help us to understand this outcome of employment lag. In the earlier period, methods of timber production and extraction were very primitive and highly labour-intensive. Hand or kuda-kuda logging to rail or road concomitant with hand and axes were the main traditional devices to extract timber, though at that time tendency towards mechanised logging had been initiated by

the larger companies or concessionaries and even some small producers had adopted tractors for use in conjunction with hand logging -- mechanised logging was still very unpopular.[46] Though power operated chainsaws were introduced into Sabah by those foreign concessionaries as early as in 1951, they were not widely applied or adopted until the early sixties. Mechanisation of timber extraction was gradually flourishing during the sixties. Due to the fact that area suitable for hand logging had been completely exploited on the East Coast, hand logging had virtually disappeared and had been replaced by mechanised logging in the early sixties. As logging operation penetrated deeper into hilly country and away from riverine flats, particularly on the East Coast, timber exploitation had been becoming very highly mechanised with the wide application of the well-adopted, power-operated chain-saws and heavy tractors. Hence, tractor yarding became the usual method of timber extraction.[47] Timber, time and labour -- an important factor in the economy where labour is short -- were such that saved substantially. Quantum of logs exported per

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46. It is due in part to the fact that mechanised logging method is not feasible for logging operation at ramin and swamp forest and/or riverine flats.

47. On the West Coast, hand logging was still being practised in the ramin and swamp forests, and high lead and skyline yarding method was still being used in hilly and steeper terrain. Though mechanised logging was being widely adopted. this industry was and is still in its very rudimentary stage by western standard. Owing to the factors of shortage of technically trained staff, poorly or inadequately equipped sawmills and poor management, a lot of labour and time were being wasted. The recovery percentage varied from sawmill to another, but the rate was and is still very low -- as low as an average of 38.2 percent in 1968. See Annual Report of Forest Department, Sabah, 1968, p. 11.

unit employment had been increasing over time during the period 1955-70. For example, it was about 150 cu. ft. per worker in 1960 but rose to about 308 cu. ft. per worker in 1970. The increase in output-employment ratios in timber industry is indicative of the fact that the employment generating capacity of the timber industry had declined considerably as a result of the capital-using character of new investment and of significant advances in labour productivity. Statistically, employment shares of timber industry in total employment is found to be highly associated with its quantity of logs exported per worker -- the simple correlation coefficient is 0.8867. To take the export shares of logs in total exports into account, the multiple association is shown by the multiple regression equation of

$$Ei/E = 3.643 + 0.0199(Xi/X) + 0.0019(Xq/Ei),$$

$$R = 0.8156.$$

To examine the important role of labour absorption of various industries or sectors in the economy, in addition, we examine the magnitude of both coefficient of differential growth and coefficient of absorption [48] of various industries or sectors. To indicate the speed of change in the

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48. Coefficient of differential growth of an industry is the difference, positive or negative, of the annual growth rate of employment in the industry over the growth rate of total employment. The coefficient of absorption of an industry is calculated as the ratio of the annual growth rate of labour force in the industry to the growth rate of total employment.

proportional shares of various export industries in the total employment, independent of the growth in the latter, coefficient of differential growth of various industries are thus computed and displayed in Table 3-15, in which figures are self-explanatory. Beside the timber industry, whose employment shares are indicated growing at an annual rate of 2.6%, all of the fishery, rubber and copra industries incurred a falling trend in their proportionate shares of employment. Proportional shares of employment in both fishing and copra industries contracted at a very closely annual rate of 1.27% and 1.24% respectively, but a rather severe depression is that in rubber industry, i.e. 2.85% per annum.

The scope of sectoral absorption of new entrants in labour activity is indicated by the coefficient of absorption of various industries presented in Table 3-15. As the rubber industry showed a decline in its absolute number of employees, hence, its coefficient of absorption is -0.887, indicating that for every unit percentage of total employment increased, employment in this industry decreased at about 0.89%. But, all timber, fishery and copra industries manifested positively but differently in degree of their contribution to the economy's entire employment. Level of the coefficient of absorption suggests that, for the period 1955-70, for every additional unit percentage of total employment, employment grew at about 0.16% in fishery industry and about 0.18% in copra industry, but as high as 2.72% in timber industry.

Table 3-15

Sabah : Coefficients of Employment Dynamics

(percentage)

	Coefficient of Differential Growth		Coefficient of Absorption	
	1951-60	1960-70	1951-60	1960-70
All Agriculture	- 0.60	- 2.35	0.766	- 1.080
Logging	8.44	0.64	4.297	1.566
Fishing	- 1.18	- 1.32	0.539	- 0.168
Rubber Production and Processing	- 0.07	- 3.86	0.973	- 2.416
Copra and Coconut Production	6.77	- 4.05	3.644	- 2.592
Other Agriculture	- 1.12		0.563	
Agriculture other than Rice	1.43	- 0.24	1.559	0.788
Manufacturing	16.64	- 0.63	7.500	0.443
Non-manufacturing	1.23	7.72	1.481	7.832
Mining and Quarrying	5.38	4.07	3.102	4.602
Construction	9.26	2.20	4.617	2.469
Electricity, etc. and Sanitary Serv.	6.10	16.08	3.383	15.230
Tertiary	0.04	7.42	1.016	7.566
Commerce	0.23	3.16	1.090	3.797
Transport, etc.	5.36	2.91	3.094	3.575
General Services	- 1.84	11.23	0.281	10.938

Method : See text.

Source : Computed from Table 3-13.

So far, in the preceding paragraphs, we have mentioned the direct impact of various agricultural exporting industries upon the economy's level of employment. For most of the agricultural products, other than rice, are engaged with exporting affairs, pattern of change of employment in agriculture other than rice production clearly reveals the pattern of change of direct employment effect of the primary exporting sector. Both absolute number and relative shares of employment in the entire agricultural sector were first raised during the period 1951-60 and reduced during the period 1960-70. Consequently, the average annual growth rates of employment in the agricultrue other than rice sector are 3.99% and 0.89% compound, its coefficients of differential growth are 1.43% and negative 0.24%, respectively, and its coefficients of absorption indicate that its absolute employment grew 1.56% and 0.79% for unit percentage of the economy's entire employment increased, for the two respective sub-periods. However, due to the very nature of weak backward-linkage effects in primary production, or, in other words, inter-industry relation is very weak, the additional products generated by a primary industry result little or no increase in the effective demand for goods of other primary industries, and thus incur little or no increase in employment in those industries. Therefore, employment indirect or multiplier effect of increased primary output upon primary sector is weak or even non-existent. But, on the contrary, minimum super-structure

of commercial, governmental and other services is undoubtedly necessitated to support the expansion of this export sector, and thus certain fixed technological relationship between employment in primary production and supporting services elsewhere exists. To distinguish it from employment multiple effect, this relationship may be called indirect, structural of employment.[49]

** Non-agricultural Employment -- After these sixteen years of economic development in Sabah, level and structure of employment has been changing over time. Employment, both absolute number and relative share, in the entire agriculture sector has declined whilst, as a matter of course, employment in non-agriculture sector has been increasing. As proportionate shares are concerned, the non-agriculture sector absorbed about 15.0 percent of the entire employment of the economy in 1951 and slightly increased to 19.5 percent in 1960 but then leaped to a double level of 36.3 percent in 1970. This leap of employment in non-agriculture sector is in fact, as will be mentioned later, greatly attributable to the huge increase of employment in non-manufacturing, particularly, tertiary sector. There was an extreme increase in absolute number

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49. It is somewhat similar to the terms used by W. Galenson in "Economic Development and the Sectoral Expansion of Employment" (International Labour Review, 87, 1963)

of employment in the manufacturing sector during the fifties -- the number of employment enumerated in 1960 was more than five times as large as that of 1951 -- this gives an annual growth rate of 19.2% compound for the period 1951-60, and whose proportionate shares increased to almost four-fold. But, unfortunately, as the period of 1960-70 is concerned, its number of employment was growing at mere 0.5% p.a. compound and its shares were barely maintained, therefore, although both of its coefficients of differential growth and absorption gave a level of as high as 16.6% and 7.5% respectively for the period 1951-60, they fell to negative 0.63% and mere 0.44% respectively. In reverse, employment in non-manufacturing sector, number of employment had been increased to one and half times from 1951 to 1960 and, again, to about two and a half times from 1960 to 1970 while its relative shares were raised by barely 2.0 percent point from 1951 to 1960 but to more than double from the year 1960 to 1970. Hence, the annual growth rate of tis number of employment was only 3.8% compound for the period 1951-60 but it was 8.8% compound between the years 1960 and 1970. In addition, both its coefficients of differential growth and of absorption show the levels of 1.23% and 1.48% for 1951-60 but 7.7% and 7.8% for 1960-70, respectively. The comparison of tertiary sector with other agriculture and/or non-agriculture industries in Table 3-14 and Table 3-15, clearly reveals the very importance of tertiary sector in the labour absorption in the economy.[50]

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50. As a matter of fact, the very distinctive contribution /..

** Tertiary Employment -- From the previous experience of the nowadays industrialised or developed countries, the direction of structural change in employment thus derived seemed to follow a common pattern that first shift from agricultural or primary employment to manufacturing or secondary employment and then, as the process of economic development continued and level of income per capita highered, to the tertiary employment.[51] But, in Sabah's economy, the development in the structure of employment was distinctively impressed by the transformation of employment from the primary stage, without passing through the secondary stage, to the tertiary stage during, particularly, the sixties. Tertiary employment constituted 85 percent of the entire labour force engaged in non-agriculture sector. Its number of employment was growing at merely an annual rate of 2.6% compound from 17,826 persons of 1951 to 22,468 persons of 1960 but increased annually at such high rate of 8.5% compound thereafter to 51,019 persons in 1970. To compare with the growth of total number of employment, the coefficient of absorption of tertiary sector shows that, for every percentage increased in the total number of jobs in the entire economy,

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50. cont./.. of the tertiary sector to labour absorption in many other countries has begun to draw the economists' very much attention. For example, A.S. Bhalla, "The Role of Services in Employment Expansion" (International Labour Review, 101, 1970), and, W. Galenson, "Economic Development and the Sectoral Expansion of Employment" (International Labour Review, 87, 1963).

51. For example, A.G.B. Fisher, Economic Progress and Social Security (London : Macmillan & Co., 1945), pp. 6-7.

there was barely over 1.0% more jobs created in the tertiary sector during the period 1951-60 but there were about 7.6% more jobs in the sector during the period 1960-70. Simultaneously, its relative share in the economy's entire employment in 1960 maintained almost the same level of 1951 but it went up from 12.7% of 1960 to 25.8% in 1970. Therefore, its coefficient of differential growth for the period 1951-60 shows that employment in tertiary sector was increasing at as low as 0.04% a year and as high as 7.4% a year for the period 1960-70, independent of the increase of the national employment.

Analytically, from the above information, we can easily obtain the sketch of the structural relationship between employment in tertiary sector and employment in agriculture other than rice production. The trend of employment in each of these two sectors is in a direction opposite to each other, i.e. one grows from the south-west upwards to the north-east and the other from north-west to south-east. Independent of the growth of employment in the agriculture other than rice production, employment in tertiary sector was declining at 1.39% annually for the period 1951-60 but, on the contrary, growing at 7.66% a year during 1960-70. And for every percentage increase in the number of employment in this primary exporting sector, there was barely 0.65 more employment in 1960-70, in the tertiary sector.

Factors behind this matter are complex. The

higher income level in, particularly, modern sector as a consequence of, in principle, the growth in export sector, induced effective demand for tertiary products [52] and such that the flourish of tertiary industry which is by definition, and indeed in Sabah's economy, using the bulk of low-skill manpower. The factual evidence of large share of employment in tertiary sector in a low income economy as Sabah does not necessarily invalidate C. Clark's generalisation, but, instead, it is in part due to the existing acutely uneven distribution of income, population engaged in the modern sector enjoyed the fruit of export expansion and economic growth. The higher income in this modern sector results a demand-induced type of services. For example, employment in general services (ISIC, Division 8), e.g. personal services, entertainment, catering and domestic services, increased 12.4% compound a year, 11.2% p.a. compound independent of the increase in total employment or 11.5% independent of the increase of working population in primary exporting sector, and 10.9% for every percentage increase in the total working population in the economy or 13.9% for every percentage increase of employment in primary export sector. Thirdly, due to the depression of certain primary industries, e.g. rubber and copra industries, and/or the rise of productivity caused by quality improvement and mechanisation, employment in various primary industries had been falling or slowering down. Although, to certain extent,

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52. According to Colin Clark's general finding, an economy with high average level of real income per head is always associated with a high proportion of the working population engaged in tertiary industries. See his work of The Conditions of Economic Progress (London: 1957), pp.6-7.

newly established agriculture industries had indeed done much to the absorption of labour force, nevertheless, their capacity was too limited or not large enough to absorb the bulk of workers left by the traditional primary industries. Therefore, Structurally, working population in the entire agriculture sector was confirmed statistically to be slackened, the surplus labour force was thus being pushed out of the agriculture sector. They were further either being greatly absorbed by the tertiary sector or partly by other non-manufacturing industries, particularly the public enterprises.[53]

According to W. Galenson's finding of the relationship between employment in manufacturing industries and employment in tertiary activities, he claims that, under the conditions of modern technology, direect or multiplier effect of employment contributed by the manufacturing sector is not as much significant as that indirect structural effect which can make to the alleviation of mass un-employment or creation of new employment.[54] Similarly, in the case of Sabah's export sector, the flourish of mechanisation in the sector had

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53. In developing countries, employment in public sector can represent a response to the need for more government services and public goods in an increasingly complex economy, or, it may simply be a mechanism for absorbing the educated un-employment, which is becoming significant, and general un-employment.

54. W. Galenson, "Economic Development and the Sectoral Expansion of Employment" (International Labour Review, 87, 1963), pp. 506-7.

modified the sector as a major source of new employment but, rather, it tended to generate the effective demand for certain services needed to support the expansion of the sector and in turn led to increase of employment in the supporting sector or activities. For example, according to the statistical survey, total number of establishments in commerce (3,547), transport (152) and general services (855) was 4554 in 1968, but the respective figures had risen to 3,799, 252 and 951 to make a sum of 5002 in 1970.[55] Perhaps, a simple diagram could help us to understand or to adumbrate the relationship between the tertiary employment and employment in primary export sector.[56]

Suppose, a fixed amount of capital is being invested in the primary export sector, represented by the magnitude of OA along the horizontal axis OI_x. Level of employment in primary export sector is indicated by the vertical axis, OE_x. As method of production moves gradually from capital-saving device, OD_L, i.e. higher employment-capital ratio, to a labour-saving one, OD_k, i.e. lower employment-capital ratio, as shown in the first quadrant of the Figure 5, productivity rises in the primary production from OP_L to OP_k a comparatively higher output, OQ_x, of the primary export sector is thus

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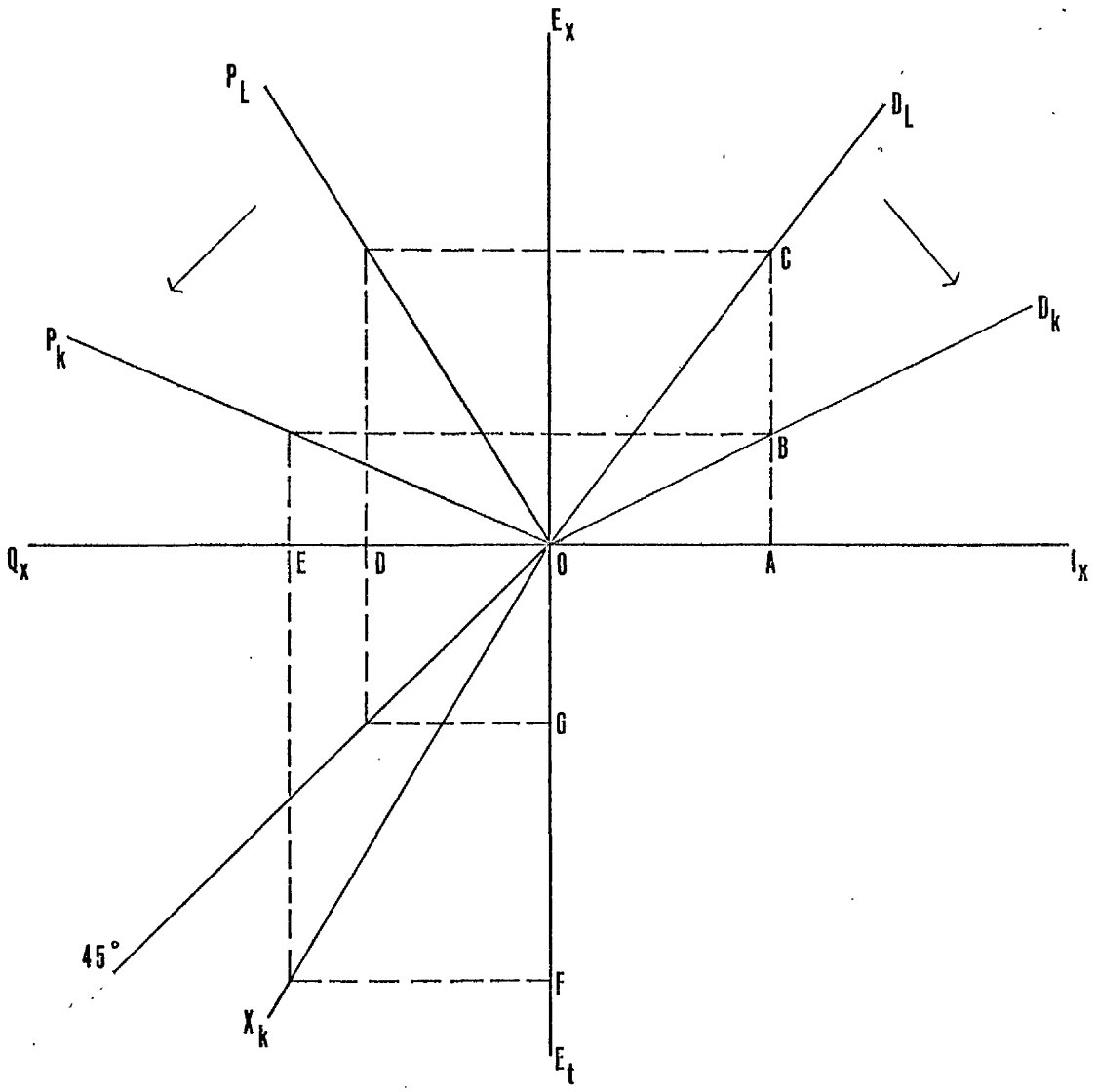
55. Department of Statistics, Sabah, Census of Licensed Trading Establishments; issues of 1968 to 1970. Unfortunately, information for earlier years are not available or incomplete.

56. Compare with Figure 2 in W. Baer and M.E. Herve, "Employment and Industrialisation in Developing Countries" (Quarterly Journal of Economics, 80, 1, 1966). This article is also reprinted in R. Jolly, E.D. Kadt, H. Singer and F. Wilson (eds.), Third World Employment : Problems and Strategy (Penguin, 1973).

Figure: 5 Primary Production and Tertiary Employment



I_x, E_x, Q_x : Investment, Employment & Output in Primary Export Sector

E_t : Employment in Tertiary Sector

gained, i.e. from OD to OE, as indicated in the second quadrant of the diagram. In the third quadrant of the diagram, the labour-saving or capital-using nature of the production in primary export sector is represented by OX_k which is lower than the neutral 45^o line, level of employment in tertiary sector, E_t , is consequently higher, i.e. OF compares with OG. If output per worker is retained at a high level, e.g. OP_k , the more rapid the increase of output in export sector (and of its employment), the more new employment will be created in the tertiary sector. Also, the static analysis suggests that the more capital-using the technigue of production in the primary export sector, the larger the employment in tertiary sector will be induced.[57]

Therefore, as the impact of primary export sector upon the employment of the entire economy is concerned, owing to its very nature of weak or non-existent inter-industry relation with individual industries, both direct contribution to and internally indirect or multiplier effect upon the creation of employment or alleviation of un-employment appeared to be very weak. Instead, its indirectly structural

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57. Certainly, it is limited to a static analysis, however, in a general analysis, perhaps, it is more realistic that the relationship between the degree of mechanisation in the primary export sector and employment in tertiary sector might not be in linear form but non-linear instead, as the more developed the economy.

effect via effective demand led the expansion of employment in other supporting industries or sector(s).[58] These are firmly corroborated by the factual evidence of employment indicators in commercial, transport and general services industries, presented in Table 3-14 and Table 3-15, respectively. However, to certain extent, there exists an economic obstacle which modified the extent of contribution of export sector to the creation of new employment and/or solution of current and/or future un-employment. That is, though export income has been indeed expanding steadily for the period under consideration, much of the increase in national income so earned were beneficial to those already employed in, particularly, export secotr -- thus causes an acutely uneven distribution of income in the economy. The effect of this on the development of the domestic sector is limited or at least not at its full extent because increases in the income of these employed may be directed substantially to activities, e.g. imports of luxury goods, which do not provide an expanding and viable market for domestic sector capability. These would have risen to a socially distorted and anti-economic pattern of production which offers very little employment as well.

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58. It accords to the Keynesian type proportion that the rate of increase of consumption must be accelerated in order to get the domestic sector moving and that to raise consumption is what is needed in an autonomous uplift-ment in the level of wage employment.

Otherwise, indirectly structural effect of the expansion of the entire export sector upon the employment in other sectors would have been exercised to a greater extent.

There is another unnegligible, though not very apparent, indirect contribution of export sector to the creation of new employment in Sabah's economy. Aforementioned that exports contributed internationally the economy with foreign exchange reserve and domestically with public revenue, and thus further financed the imports of essential capital goods and intermediate goods and various development projects. Eventually, a growing labour force would be complemented and more jobs would be created through the realisation of various development projects.

E. Spread Effect of Foreign Trade

We would certainly grossly understate the extensively propulsive impact upon economic development if we were to estimate the contribution solely by the static gains from trade in any given year or period of years on the assumption of given substitution or transformation curve. Because trade does generate very important indirect, or dynamic, benefits, which are over and above the direct static gains long embodied in the traditional theory of comparative costs upon the participating economies.

Given the existence of indirect or dynamic

effects of trade, among countries, the level of contribution of trade to economic development of various economies would vary if their export-base was different. Within a country, the level of contribution of trade of different sectors to domestic economic development would also vary. And, even within a particular sector, the impact of some particular exports of this sector upon domestic economic development would be very much different from others. For various export goods, according to the characteristic of their production functions, would induce differential 'carry-over' effects between and within countries and as well as sectors within an economy. As the mechanism within a particular economy is concerned, the export sector would further lead to escape the 'vicious circle of poverty' and 'take-off into self-sustained growth', only if the direct gains and the carry-over from the export sector could be further transmitted to the rest of the economy.[59]

Different factor combination for the production of various sorts of exports will certainly affect the distribution of income via the impact of the leading or dominant industry or industries, e.g. timber and rubber industries, in the export sector upon the relative share of profits, wages

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59. This is one of the arguments that why the process of export-induced development, in the developing countries of 18th and 19th centuries, had followed upon an expansion of the export sector but has not been in most of the contemperarily export-oriented developing countries.

and interest, in the economy concerned. In addition, the pronouncedly geographical location of these industries would thus once again influence the regional distribution of income and employment, etc. According to the geographical location of the major exporting industries, it is convincing to estimate that the regional per capita income in Sandakan Residency of the eastern Sabah is the highest and followed by the West Coast Residency. And thus produce one of the economic features of Sabah's economy -- the distribution of income has been in favour of the modern economic sector which, in terms of per capita income, is among the highest in Malaysia.

An industry which produces an arbitrary commodity would have backward and/or forward links with other industries in the whole production structure of an economy. A backward linkage effect senifies a 'demand-pull effect', which the industry in question demands for final products from other branches of production as input in its production. In reverse, forward linkage effect produces a 'supply-push effect' which the industry in question supplies its final products to other branches of production as intermediate goods. The larger the backward and/or forward linkage effects of an industry, the more the spread of its development-inducing effects in the domestic economy. The extent of this spread effect depends on the commodity produced. Therefore, the spread effect of any given export activity will depend upon the nature of the ex-goods in question.

The composition of Sabah's exporting commodity is characterised and dominated by primary products, which generally have low backward linkages but high forward linkages. Nevertheless, various nature of various primary products will result diverse level and nature of backward and forward linkage effects as well. Almost all of the major exports do give rise to some forward linkages in some form of processing that is done before exports. For example, smoked rubber sheet, copra from fresh coconut and palm oil from palm nuts. However, except those timber-base exports and fishery exports, forward linkage effects created by the rest of the major exports, i.e. rubber, copra, tobacco hemp, cocoa beans and oil palm, are not pronounced in the domestic economy. Timber industry has really resulted an important repercussion on the domestic economy. The logging operation has directly facilitated the widespread dispersion of sawmills. Then timber further facilitated veneer production and again further led to the production of plywood. Furthermore, sawn timber led directly to the establishment of small furniture and joining works for the domestic market. Certain further processing production has been practised in fishery exporting industry, for example, the most pronounced processed fishery products is the frozen prawn, whose exports add a few million Malaysian dollars to the economy's foreign exchange earnings every year. These forward linkage effects no doubt do, at least, raise the national products and increase employment as well, regardless of any possibly further repercussion effects. Beyond the foregoing phenomena, we can

hardly see any repercussion from one industry upon another in this primary production complex.

Profitable and dynamic export industries tend to stimulate additional domestic and as well as foreign investment. Where exports of a or some primary products show promisingly profitable and expanding, there will be a stimulus to domestic investment in the existing industries and in various further processing industries associated with the product(s) in various stages of production. In addition, dynamic exports also encourage investment in ancillary industries set up to supply services supporting the operation of the main export industries, e.g. commerce, banking industry, transportation and storage industry.

In addition to the direct 'factor contribution' from one exporting industry to another and/or from the export sector to other sectors via the provision of skilled labour and dispersion of organisational and adminsitrative skills, there are also some possible external economies resulted from further processing activities by using or adopting new methods to other activities [60] through the dispersion of technical knowledge, training of labour and the acquisition of organisational and supervisory skills. However, on the contrary, the

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60. Any methods which have not been introduced to and/or adopted by the economy are considered as new ones.

export industry or sector will have a negligible spread effect if its input coefficients are the same as those used in other industries or sectors, and also if its expansion occurs by only a simple widening of production along the production possibility curve or even at an outward shift (north-east direction) of the transformation curve without any change in the production function. Also, the stimulus will be less if the new method that is used does not differ markedly from the traditional techniques being used in the exisitng industries or sectors.[61]

Mechanisation was first initiated in the timber industry during the mid-1950s.[62] Tractors yarding, which is the usual method of timber extraction, has almost entirely substituted hand-logging, except in those swamp forests, and power-operated chainsaws have mostly replaced hand saws and axes for felling. The successful use of mechanical tools in timber industry has created a growing interest among farmers and smallholders, and mechanisation of farming has been subsequently realised to certain extent. These, as a matter of course led to a general increase in the productivity of national production.

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61. See G.M. Meier, ed., Leading Issue of Economic Development (London : Oxford University Press, 1970), p. 513.

62. More detials about mechanisation in Sabah has been mentioned in the preceding section.

CHAPTER IV

ASSESSMENT AND SUGGESTIONS

A. The Role of Changing Structure of Foreign Trade

It is general agreed that foreign trade was an effective 'engine of growth' during the early industrial era of most of today's advanced countries. Regarding to the international trade's role in the economic development of currently developing economies, both trade optimists, like W. Coden, J. Hicks, H. Johnson, G. Meier and B. Soderman,[1] and trade pessimists, like G. Myrdal, R. Nurkse, R. Prebisch and H. Singer,[2] concede that international trade is a sine qua non for economic development, despite the conflict in their diagnoses and policy measures. For the explanation of

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1. J.R. Hicks, "Inaugural Lecture" (Oxford Econ. Papers, June, 1953) and Essays in World Economics (Oxford: Oxford Uni. Press, 1965). W.M. Corden, "Economic Expansion and International Trade" (Oxford Econ. Papers, 1956) and Recent Developments in the Theory of International Trade (Princeton : Princeton Uni. Press, 1965). H.G. Johnson, International Trade and Economic Growth (London : Allen and Unwin, 1958); particularly Ch. III. G.M. Meier, International Trade and Development (New York : Harper & Row, 1963). B. Soderman, A Study of Economic Growth and International Trade (Stockholm : Almqvist and Wiksell, 1964).

2. H.W. Singer, "The Distribution of Gains Between Investing and Borrowing Countries" (American Econ. Review, Supplement, LX, May, 1950). G.Myrdal, An International Economy (New York : Harper and Brothers, 1956), especially Ch.13. R. Prebisch, "Commercial Policy in Underdeveloped Countries" (American Econ. Review, Supplement, XLIX, May, 1959) and Towards a New Trade Policy for Development (UNCTAD, E/CONF. 46/3, 1964). R. Nurkse, Pattern of Trade and Development ('Wicksell Lectures', April, 1959) (New York : Oxford Uni. Press, 1961).

foreign trade's failure to promote significant growth in most currently developing countries, the former group, though recognises there exists serious external obstacles, strongly emphasizes the internal rigidities and the latter strongly emphasizes the external obstacles which are beyond the LDC's control, although they admit there are serious internal rigidities. In addition, it is also recognised and warranted by empirical studies that the relationship between the growth of GNP and structural change is an inter-connected feature of the process of economic development -- rising income is associated with systematic variation in the structure of the economy, e.g. the types of commodity produced and consumed, the pattern of trade and the use of cpaital and labour.[3]

Research and analysis in the previous chapters demonstrated that after these years, 1955 to 1970, of economic development in Sabah, both aggregate GNP and foreign trade have been growing significantly. Diversification, in various dimensions, of domestic production and exportation has been proceeding remarkably but its degree of export concentration, both commercial and geographic, has been increasing too. Pattern of import trade has been changing in favour of Capital goods while its degree of concentration has shown a very slight decrease with respect to commodity but a very slight

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3. H.B, Chenery "Growth and Structure" (Finance and Development, 3, 1971). S. Kuznets, Modern Economic Growth : Rate, Structure and Spread (New Haven, Connecticut : Yale Uni. Press, 1966).

increase in regard to geographical provenance. Mode of production, to a certain extent, has been inclined towards mechanisation, and, in general, employment has been lagging behind. However, to evaluate the role of foreign trade and of which structural change in the process of Sabah's economic development, we examine the mechanism, based on the preceding research and analysis, in the following dimensions.

** Exports as a Leading Sector -- Because export industries, in certain countries, were a leading sector in promoting pervasive internal growth it is , therefore, sometimes suggested that foreign trade serves as an engine of growth. Accordingly, the growth process is accelerated when a dynamic export comes into existence to supply world market. However, under the orthodox colonial strategy for development, Sabah's economy has been adherently associated with traditional primary exports or staple exports during the period concened. Rubber was first the dominant staple export, and timber, or logs precisely, became the leading export at the late fifties and onwards. For the proportional shares of rubber in Sabah's total exports have been continuously falling since the beginning of the period in question, attention will be mostly focused on the dynamic effects of timber which increasingly dominates the lion's share of Sabah's total export trade. Because of its richness, mechanisation improved productivity and increased supply, reduced transport costs and, in addition, a large demand in world markets -- as a matter of fact, the large demand was from Japan -- export sales of timber have increased sufficiently to create profit opportunities and this

increase was large enough to cover losses in foreign exchange earnings caused by depressed sales of other traditional primary products. Therefore, the quantitative study in the preceding chapters suggests that logs are dominant determinant of the growth of export trade, and logs and so total exports are quantitatively crucial to the growth of aggregate GNP in Sabah's economy.

However, it should not be neglected to consider the indirectly quantitative effects of export industries, that whether the profit opportunities thus created would be transferred to other sector or whether activity in the export sector would serve to stimulate the initiation or expansion of activities in related sectors, through so-called 'spread' or 'carry-over' effects. 'Spread effect' is the amount of forward, backward and as well as 'lateral' linkage that is likely to give rise to further local activities. Although primary products potentially have great forward linkage effect, this advantage has been mostly transferred abroad through the exports in raw form.[4] Some forward linkages are seen in the processed industries like veneer sheets, plywood, frozen fishery products and palm oil, but their contribution to Sabah's economic is very insignificant because of their rudimentary stage of industrialisation, despite its promising

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4. See also Shu-Chin Yang, "Foreign Trade Problems in Economic Development" (Scottish Journal of Political Economy, June, 1964), p. 121.

potentiality in economic growth. And its backward linkages are nil in inter-export-industry and less stimulus to the initiation or expansion of other related industries. For instance, in transport industry, shipments of timber are usually monopolised by the vehicles chartered by the monosony -- Japan.

Nevertheless, the brisk expansion of services industries must be much attributable to the foreign trade sector through the 'lateral' linkage effect. In general, wage rates and so income are relatively higher in foreign sector than any other and relatively higher in certain profitable industries than any other within the sector.[5] The rise of profit opportunities in foreign sector or particular export industry has directly benefited and so is the uneven distribution of income in favour of the existing owners and workers, who are engaged in the relevant activities and of which propensity to consume is generally relatively higher. This in turn increases the pruchase of services and consumption goods and expansion or initiation of this type of activity is thus stimulated.

As the reasons mentioned in the preceding

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5. It should be noted that someone who engages in foreign trade activity whose income will not necessarily be higher than that of those who are outside the sector. Income of a raw copra producer will not necessarily be higher than that of a hawker, for example.

chapters, we not only consider the 'spread effect' in pecuniary terms but also from the veiwpoint of employment. Employment in foreign trade sector, as roughly the sum of employment in agriculture other than rice production and that in manufacturing sector, has been made greatly to lag behind by the brisk tempo of expansion in export production and trade. Traditional primary exports which encountered depressed sales have resulted a reduction in employment. Both production and exports of fishery products and timber have indeed increased largely, but due to the process of mechanisation in these industries, employment has been somewhat reduced in fishery industry and a slight increase in timber industry. Because of lack of further expansion, on the one hand, and improved productivity, on the other, in the existing manufacturing sector, employment of 1970 in this sector does not show much difference from that of 1960, although the latter is very much greater than the level of the 1950's . This implies that, again, forward linkage effect of export industries is limited, it is particularly true during the sixties. The most remarkable contribution of foreign sector to the economy's employment is its lateral linkage effect, through which tertiary employment has been increasing very rapidly as tertiary activities are being stimulated. There are other non-economic effects of foreign sector and/or of certain export industry upon other sector or other traditional or new industries within and outside the foreign sector. Mechanisation has been spread from originally the timber industry to local

rice production and other crops production, for example. This would have marked an increase in the strength of export sector's spread effect. Mechanised mode of production and adoption and adaptation of new skills in rice industry have resultantly improved productivity and then volume of output, although employment in this industry has been in turn reduced substantially. The substantial expansion of rice output is partly responsible for the conspicuous increase and accelerated growth in gross domestic products.

* Financing Imports and Development --

Another role of exports is to finance the importation of productive goods and services, and development programs. Because of the very nature of Sabah's natural resources base and economic structure, from the viewpoint of economic development, imports are necessary, and the ability to earn enough foreign exchange to pay for the importation of productive goods and services is the precondition for fostering economic development. The change of export structure serves to maintain and even improve Sabah's balance of payments position which would otherwise have suffered a deterioration caused by the recession of traditional primary exports. Exports of logs alone provide the bulk of Sabah's foreign exchange earnings. Without export expansion, severe deflationary measures would have been instituted in Sabah because of a deterioration in the balance of payments situation. Export expansion also indirectly serves to stimulate the initiation and expansion of

import industries and other supporting industries and in turn increase employment in these industries.

Foreign sector is the main source of Sabah's public revenue and savings via customs and excise taxes on imports and exports and royalty charges on exploitation of natural resources, and thus provides a means to finance public investments and development projects. These projects tend to improve investment climate, e.g. increase and improvement of infrastructure, and to foster industrialisation and diversification, e.g. processing or manufacturing industries and plantation of new crops, in Sabah's economy.

** Implication of the Findings -- Foreign trade has made the transformation of Sabah's economy possible, for the structure of domestic production to be 'unbalanced' in the sense that composition of domestic output differs substantially from that of local demand. The existence as well as changing composition of demand and output have greatly facilitated the process of growth in Sabah's economy. Sabah has reacted olosely to changes which are being originated largely from foreign demand and terms of trade, by adapting the structure of foreign trade to the changing situation.[6] Foreign

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6. It should be noted that transformation is not a shift of the whole economy from one task to another but rather at the margin. For instance, profitable industries like timber grow, such that attracting new enterpreneurs, new supply of labour and capital, etc., but opposite is more likely the case in rubber industry.

trade has made possible the utilisation of Sabah's rich natural resources which has comparative advantage and which would otherwise have been left idle. This conventionally recognised as the doctrine of 'vent for surplus' theory.[7]

Therefore, transformation via foreign trade has made foreign trade a necessary condition or corner-stone of Sabah's economic growth, and it is the expansion of foreign trade caused by change in structure that has generated the growth of Sabah's aggregate GNP and economic development rather than vice versa. But because of large advantages of forward linkage that have been instead transmitted abroad via exports in raw form, the actual impetus of foreign trade on growth and economic development has been less than what would potentially be, during the period 1955-70. Although external forces have substantially adversely affected the growth of certain industries or sector and so of Sabah's economy, the main constriant to Sabah's economic development is embodied in the internal rigidities which modified the development of spread effect of the foreign trade sector or particular export industries.

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7. The recently outstanding supporter of this theory is H. Myint. See his "The 'Classical Theory' of International Trade and the Underdeveloped Countries" (The Economic Journal, LXVIII, June, 1958), and reprinted in H. Myint, Economic Theory and the Underdeveloped Countries (London: Oxford Uni. Press, 1971).

B. Some Suggestions

We have seen that Sabah's traditional primary exports have severely sufferred from either declining commodity prices and/or acute competitiveness. This has induced re-allocation of resources towards a more diversified economy. Efforts have been initiated since the early years of the period in question and have been intensified in the later years towards a diversification of export production and increase of production for domestic use. Measures have been exercised to discourage exports in raw form -- levy of an export tax on raw exports like round logs, for example -- and to stimulate development in domestic consumer industries like rice and building materials industries. This had of course built up resistance to change in commodity trade and result a decelerating growth in dominant exports and total trade and a diminishing trend of income dependence on exports. Also, there is a fall in import ratios and a great change in the composition of imports as well. As an export-oriented economy, Sabah is encountering a problem of feasible re-allocation of resources. That is, how to transfer resources from the export sector to meet the needs of general development without damaging exports. Owing to the severely inflationary pressure,[8] internal terms of trade -- the prices of export products

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8. This is the result of the complex repercussion of high wage rates, high profitability in timber industry and high external tax rates.

compared with the prices of the rest of output -- have been moving strongly against the export sector. This has even exaggerated the problem of resources re-allocation.

Given the conditions of economic development, foreign trade will no doubts remain a crucially determinant factor in the process of Sabah's economic development. Export trade should be encouraged and should be considered to be compatible but not competitive with the growth of the economy. If the growth of Sabah's economy is to be generated through industrialisation, then the process of industrialisation should be in such way through a strategy of certain combination of both export expansion and import substitution, so as to result an outcome of a more balanced pattern of production. It is a theory of diversified production for the diversified demands of the domestic and foreign markets. There are production for the merely domestic market -- like the production of foodstuffs, production largely for domestic market -- and production mainly for external market, e.g. standardised intermediate goods. To achieve export expansion, export diversification or substitution is preferable to intensive expansion of the existing traditional primary exports. Diversification can be achieved via horizontal production in other primary commodity, can be vertically based on processing of commodity and can be punctual/lateral [9] -- development

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9. See also S. Bottcher, "Diversification as a Commodity Policy" (Intereconomics, 11, 1971), p. 352.

of other branches. In Sabah's case, vertical diversification should be the most preferable one and horizontal diversification the least. Vertical diversification should also take the advantage of low-cost input produced domestically. Import substitution should focus on the production of those goods which Sabah is able to produce and whose costs are low enough to compete with imports. Causally, small industries should play an important role in, at least, the process of import substitution. This version is based on the following justification.

Profitable industries like timber have been expanded to the maximum, further expansion in this industry will no doubt increase pressure on resources exhaustion and demand for more other production factors -- increased demand for labour force will further bid up wage rates and then exaggerate existing inflation, for example. This will consequently halt economic growth. Instead of enlarging the going size of the industry, increase of output via improved productivity in, say, timber industry should be more feasible. For example, recovery ratios of timber production is very low, about 50 percent in average,[10] improvement in productivity via improvement in technology, organisation and management, etc., will certainly increase output of timber without further enlargement in this industry. Such that to lower the tension of

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10. North Borneo, Annual Report, and, Sabah (North Borneo), Annual Report of Forest Department, various issues.

inflation, to secure continued supply and reduce instability of prices and reciepts, and enjoy the benefit of higher productivity.

Largely owing to external forces, traditional exports, except logs, are reducing their shares in Sabah's export trade and because of external forces the recovery of these depressed industries seems unlikely. But due to the improvement of productivity and quality, e.g. rubber, Sabah enjoys low costs of production of these items. Therefore, instead of further promoting the exportation of these traditional commodities in raw form, it should be more economical for Sabah to move a step further to promote processed or semi-manufacturing industries based on the output of traditional industries, such that to foster the spread of forward linkage, which involves high growth potential, within the economy rather than as it is presently being exported entirely. Production of processed or intermediate goods for exports will not be limited by the small size of domestic market as Sabah, because standardised intermediate goods do not necessarily require the availability of a home market.[11] It should be noted that not only the direct value is added between raw materials, e.g. saw-log, and processed output -- veneer sheets, but an important indirect value is also added where residues have been further utilized.

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11. See also B. Balassa, "Country Size and Trade Pattern": Comment" (American Econ. Review, 59, 1969), p. 203.

The other reason is the changing pattern and trend of world trade. Significant progress in industrialisation, of which a great deal was concerned with 'adding value' at the first stage of processing or manufacturing products, particularly those from domestic sources, has been achieved in many developing countries. Following the advance of highly sophisticated technology in industrial countries, there would be more likely a tendency towards a new change of structure in world trade such that exports from LDCs would focus on processed form while those from DCs would be of highly technological content. Therefore, to react to this change in world demands Sabah should accordingly change its structure of production exports which would otherwise be lagging behind. In order to determine the feasibility and profitability of producing certain new products, for local consumption and/or exports, it is necessary and essential to undertake studies of comparison between costs of imports and local costs of production and studies of market of particular products. According to the surveys of Sabah's potential industries, there exists an extensive list of products that Sabah can produce and a substantial number of them are expected to be promising in the international market in the future. But the trouble is rather that if the economy is prepared to shift to new lines. As a matter of fact, it is the question of a lack of flexibility and capacity to transform, more than the existence of trade barriers which are a mere artificial product and can be abolished via some kind of bilateral or multilateral agreements, that modifies the initiation or expansion

of activities in new products and exports in the future. As the findings indicate that more than half of Sabah's total exports have been shipped to industrial or developed countries, which absorbed the lion's share of Sabah's logs, cocoa beans, veneer sheets, plywood and hemp, and shared Sabah's rubber, lumber, fishery products and oil palm products with other developing countries. In order to attain continuing growth through trade expansion, Sabah, and other economies in a similar situation, would be well advised to place greater emphasis on the production and exports of those existing goods, particularly those in processed form, and on new processed goods based on domestically economical input, that are in demand in the DCs.

Consequently, the economy will gain more by processing primary products as it achieves a more diversified economy which allows for external economies. Because this will not only increase the competitiveness of the new exports by using low costs input but also support and promote more efficiency in existing primary production such that to maintain the level of employment in these traditional industries and will offer new employment opportunuties in new industries. Other related industries or sector will also benefit from this development, both on the supply and the demand side. Through such repercussion or multiplier effect of inter-industry relation, gross domestic products will consequently be increade and a more even distribution of income and wealth will also be possible.

Sabah's economy will not develop to its full extent unless internal rigidities are being conquered. Infrastructure, particularly transport problem is the prime rigidity first to be solved. The development of road system connecting the East and West Coast and linking towns in the East would consequently benefit the whole economy. Domestic market, at least, will be enlarged by breaking the barrier -- transportation -- between each of the fragmented markets, this will stimulate the initiation or expansion of agriculture and manufacturing production for local consumption. Agricultural products originated from the Interior will be stimulated by the expansion of market to the East Coast and the increased supply of staple in the East Coast will in turn release part of the acute inflationary pressure partly caused by domestic high prices of staple which in turn is the result of short of supply in the East. Therefore, improved infrastructure will certainly secure the development of economic activities for both domestic needs and exports.

C. Conclusion

The experience of Sabah's economic development in 1955-70 suggests that foreign trade is essential because it has, at least, the dual functions of being a leading sector and financing imports and developments. However, these functions would not have realised if the pattern of trade had not

changed to match the new demands, although these changes took place largely within the agricultural sector. Financially, foreign sector generates more direct than indirect effects to Sabah's economy, but it generates greater indirect than direct employment effect. The indirect employment effect is in favor of the tertiary sector. But owing to the nature of the economy -- rich natural resources of some kinds, lack of effective transport, particularly road, system which induced labour immobility and market fragmentation, etc. -- foreign trade had been specialised in exchanging a few primary exports for great variety of imports. Forward linkages, which primary products are believed to contribute more, were mostly being transmitted abroad through the exports of raw form. Also, owing to the internal rigidities, transformation of external economies from the foreign sector to the rest of the economy is modified. Due to the brisk tempo pf expansion of domestic sector, gross national products have been accordingly increasing and both the export and import ratios are gradually declining over time. Therefore, foreign was a sine qua non but not a sufficient factor for economic development in Sabah during the period 1955-70.

The policy implication of the above conclusion is that, in order to foster further economic development, Sabah should adopt the type of policies that will stimulate not only the growth of export activities but also the gorwth of domestic sector -- such that to retain as high the forward linkage, and backward linkage as well, at home as possible.

A small economy as Sabah that eagers to pormote economic growth while ignoring its source of foreign exchange earnings would encounter balance of payments problems which will consequently retard economic development in the long-run if foreign reserves are exhausted and the failure of an inflow of capital exists. Therefore, Sabah's economic development will remain relying on the growth of export trade in the future. The present structure -- both commercial and geographic concentration -- of trade makes Sabah's future trade position vunerable. It is, therefore, that diversification, both commercial and geographic, in export trade is necessary, and import substitution, to some extent, is required such that to reduce part of the latent balance of payments pressure and to generate economic development.

However, Sabah's economy will not develop to its full extent unless internal rigidities are being conquered.

APPENDIX I

Coefficient of Concentration*

It is commonly recognised that in measuring the level of concentration of exports and imports, or no matter in whatever quantitative study, statistically different results will be expected if differential definitions are applied. Thereupon, fixing a definition is the prior and unavoidable step. Whatever method of classification is adopted in this study, it is essential that it should be consistently applied to both exports and imports.

The measurement of concentration undertaken here is primarily based on the material, according to the revised Standard International Trade Classification, contained in the United Nations' Yearbook of International Trade Statistics.

However, selecting the method of classification does not in itself solve the problem of definition. It remains the problem of detail and fineness. From a theoretical point of view it is best to use five-digit code of the SITC, but in pracrice, the readily accessible data do not permit it, because in Sabah's trade statistics, trade records of those afore to 1963 were classified according to origin SITC, and especially

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* See also M.Michaely, Concentration in International Trade (Amsterdam : 1962), Chapter 2.

those of the earlier years are not detailed enough to be converted into five-digit code of the revised SITC. Therefore, in this study, it was decided to use three-digit code, of course for both exports and imports for the year 1960 and onwards while for the period 1955-59 can only two-digit code be undertaken. To some extent, comparisons based upon two-digit code would not be very meaningful, but it is believed or reasonable to expect an export-oriented developing economy as Sabah, characterised by a narrow range of products both domestically produced and internationally traded at its earlier stage of development. It is therefore reasonable to believe that the results based on two-digit code would not be very much different from those based on three-digit code, for the period of 1955-59. In addition, since General Trade system [1] is adapted to the trade records, definitions of exports and imports are sometimes quite homogeneous, but for the purpose of present study, both of them are presummed as hetorogenous.

Various devices have been applied for measuring the degree of concentration -- Gini Method, planimeter method

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1. General Trade system (as opposed to the Special Trade system) has the following identification : (a) Goods are regarded as imported when they are brought into the registration area whether direct or into bonded warehouse, and whether for consumption or re-export. (b) Goods are regarded as exported when they are taken out of the registration area whether or from bonded warehouses. (c) Goods in direct transit ares excluded from the statistics.

and Lorenz Curve.[2] All of these measures have the same disadvantage of being time consuming. But Gini Method has a main advantage that it permits the use of statistical tests of significance [3] and of which formula can easily be converted into a simple computer program such that to reduce time consumed. For the results produced by any one of these methods are identical to those of the other two, in the present study, the Gini-Herschman index [4] is adapted for measuring the degree of concentration.

The coefficient of commercial concantration of

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2. For planimeter method, see F.H. Thomas, The Denver and Rio Grande Western Railroad : A Geographic Analysis (Evanston, Ill. : Northwestern Uni. Press, 1960). Lorenz Curve has also been used as a device for measuring diversification or, concersely, specialization, in R.S. Thoman and E.C. Conkling, Geography of International Trade (Englewood Cliffs. : Prentice-Hall, 1967). M. Michaely accompanished the same thing by means of the Gini coefficients.

3. For comment, see G.J. Glasser, "Variance Formulas for the Means Difference and Coefficient of Concentration" (Journal of the American Statistical Association, 57, 299, 1962), pp.648-54.

4. This index was first developed, in a slighly different form, by C. Gini and was later developed independently, in the form as defined in the text, by Albert O. Herschman, in National Power and the Structure of Foreign Trade (Berkeley and Los Angeles : University of California Press, 1945), Ch. VI. Herschman measured the geographic concentration of trade not the commercial concentration, and his index is defined as the square root of the sums of the squares of the percentual share of N countries in the exports or imports of a given country.

exports of an economy, to be denoted by C_x , is defined as

$$C_x = 100 \sqrt{\sum_i^n \left(\frac{X_i}{X} \right)^2}$$

where Xi stands for the value of the economy's exports of commodity i to the rest of the world in particular year or period, while X represents the total value of the economy's exports to the rest of the world in the same period. For the sake of convenience, the coefficient is expressed in percentage form.

Similarly, the coefficient of commercial concentration of imports, C_m , is defined in the following manner,

$$C_m = 100 \sqrt{\sum_i^n \left(\frac{M_i}{M} \right)^2}$$

where Mi represents the value of the economy's imports of commodity i, while M is the total volume of the economy's imports, at the same period of time.

Obviously, the larger the number (N) of goods exported (imported) by the economy the lower will the coefficinet be, and the more evenly are exports (imports) distributed among these goods. Moreover, the highest possible coefficient is 100, where all exports (imports) consist of a single good. If N is the largest number of commodities which may potentially be exported (imported), the lowest possible coefficient is $100 / \sqrt{N}$, this represents the case in which the economy's exports (imports) are evenly distributed among all commodities. In the present case study, N = 177 for 1960-70 and N = 56 for 1955-59, the respective lowest possible coefficient would thus be about 7.52 and 13.36, for both

exports and imports.

The measurement of geographic concentration being tackled here is primary based on the materials contained in the United Nations' Yearbook of International Trade Statistics. For the sake of identity, only those countries, which are at the same time both the markets and suppliers for Sabah and whose respective volume of transaction constituted more than 90 percent of the volume of total exports and of total imports, are taken into account of the present study.

The coefficient of geographic concentration here, again, follows the Gini-Herschman index of concentration.

The coefficient of geographic concentration in exports, denoted by C_d , is displayed as follows,

$$C_d = 100 \sqrt{\sum_i^n \left(\frac{Xj}{X} \right)^2}$$

where Xj represents the volume of exports from the reference economy to economy j while X is the total volume of exports of the reference economy in the same period.

For the coefficient of geographic concentration in imports, denoted by C_p , we have the following definition,

$$C_p = 100 \sqrt{\sum_i^n \left(\frac{Mj}{M} \right)^2}$$

where Mj stands for the provenance of imports from the economy

j to the reference economy whose volume of total imports is represented by M, for the same period.

APPENDIX II

Orthogonal Regression Equation

Any simple regression will produce two lines on a plane, this the result of different dependent and independent variables being fitted. Any one of these two simple regression equations will assume that all of the variability occurs in the independent variable and that there is no variability in the dependent one. However, this arbitrary assumption is no more realistic in the case that there exists, not a single causality, but rather an inter-dependent relationship between the two relevant variables. A third regression based on the assumption of equal variability for each of the two series is thus necessary. This third line lies between the two extreme regression lines, and its equation, as statistically referred to as an orthogonal regression equation, is derived from the existing two equations.

In brief, the orthogonal regression equation is calculated by using the means of the data of the two variables concerned.

Here, the computation of the orthogonal regression equation of aggregate GNP on export proceeds is demonstrated below.

The span of time for the two series covered the period 1955-70 inclusive. The mean of the export proceeds is

276.126 (million) and that of the GNP is 471.625 (million).

The calculated simple regression equation are as follows,

$$GNP = -14.2007 + 1.7594\ X \qquad \ldots\ldots(i)$$

$$X = 15.7590 + 0.5521\ GNP \qquad \ldots\ldots(ii)$$

The B-term in the orthogonal regression equation is obtained by averaging the reciprocal of the B-term in the Equation (ii) of exports on GNP and the B-term in the Equation (i) of GNP on exports. Therefore, we have,

$$\left(\frac{1}{0.5521} + 1.7594 \right) \div 2 \quad 1.7854$$

A new constant is next calculated by substituting the calculated means of the series in the original simple regression equation (ii) of exports on GNP,

$$X = A + 0.5521\ GNP \qquad \ldots\ldots(iii)$$

$$276.126 = A + 0.5521\ (471.625)$$

$$\therefore \quad A = 15.7418$$

So the new regression equation of exports on GNP, based on the value of means, becomes

$$X = 15.7418 + 0.5521\ GNP \qquad \ldots\ldots(iv)$$

Since, as above mentioned, the orthogonal regression line lies between the two extreme regression lines, its constant should thus be at the middle of between the constant term for equation (i) of GNP on exports and the intercept of the adjusted equation (iv) of exports on GNP on the GNPaxis, i.e. when X 0.

Therefore, when X = 0, Equation (iv) becomes

$$0 = 15.7418 + 0.5521\ GNP$$

$$\therefore\ GNP = -28.5126$$

Now, the constant term of the orthogonal regression equation of exports on GNP, i.e. the intersection on GNP-axis, is at the mid-point between (-14.2007) and (-28.5126), or at (-21.3567).

Finally, the orthogonal regression equation is thus presented in the following pattern,

$$GNP_o = -21.3567 + 1.7858\ X_o \quad .$$

Appendix Table 1

Sabah : Historical Series of General Trade, 1947-70

(M$ million at current market prices)

	Exports (f.o.b.)	Annual Change %	Imports (c.i.f.)	Annual Change %
1947	16.93		20.47	
48	29.74	75.7	25.42	24.2
49	38.49	29.4	33.97	33.6
1950	93.04	141.7	46.06	35.6
51	122.86	32.1	70.23	52.5
52	66.88	- 45.6	70.32	0.1
53	60.26	- 9.9	70.04	- 0.4
54	78.51	30.3	74.34	6.1
1955	104.88	34.0	87.54	17.6
56	120.88	15.4	117.35	34.1
57	120.87	- 0.2	121.54	3.6
58	130.44	7.6	128.41	5.7
59	177.21	36.7	155.42	21.0
1960	222.62	26.0	195.80	26.0
61	220.32	- 1.0	214.75	9.7
62	234.73	6.5	238.25	10.9
63	274.79	16.5	304.58	27.8
64	259.89	- 4.2	301.98	- 0.9
1965	304.96	17.3	334.49	10.8
66	358.29	17.5	342.49	2.4
67	409.59	14.3	328.79	- 4.0
68	433.15	5.8	342.94	4.3
69	521.23	20.3	417.82	21.8
1970	534.04	2.4	497.97	19.2

Note : The annual change is the change in value in that year compared with the value of preceding year.

Source : United Nations, Yearbook of International Trade Statistics, various issues.

Appendix Table 2

Sabah : Volume of Exports by Commodity Class

(M$ million at current market prices)

	Food, Beverages and Tobacco (0 + 1)	Crude Material Oil and Fats (2 + 3 + 4)	Manufactured Goods (6 + 8)	Capital Goods (7)
1955	8.71	87.10	3.70	0.49
56	13.89	94.92	6.62	0.65
57	11.54	99.35	4.65	1.06
58	12.21	109.38	2.16	1.39
59	13.81	154.52	2.07	1.54
1960	19.27	192.46	3.77	2.17
61	27.38	182.47	3.24	1.75
62	38.70	186.47	3.00	1.66
63	48.88	207.93	4.80	4.29
64	36.00	205.12	4.32	4.44
1965	47.00	240.03	4.39	4.32
66	25.18	311.10	4.93	6.12
67	27.03	359.97	3.72	5.65
68	18.51	382.51	5.26	10.37
69	25.58	442.54	6.32	29.66
1970	28.25	455.73	8.98	14.04

Note : Numbers in the parentheses are SITC one-digit codes.

Source : Compiled from United Nations, Yearbook of International Trade Statistics, various issues.

Appendix Table 3

Sabah : Volume of Imports by Commodity Class

(M$ million at current market price)

	Food Beverages and Tobacco (0+1)	Crude Materials (2+4)	Mineral Fuels (3)	Chemicals (5)	Manufac-Goods (6+8)	Capital Goods (7)
1955	29.69	10.76	5.24	3.79	25.43	9.73
56	37.87	18.16	6.07	4.92	32.41	14.21
57	30.22	19.20	5.75	5.32	30.93	16.09
58	43.46	23.74	4.80	5.27	29.15	17.61
59	42.80	24.70	17.12	6.94	32.88	26.14
1960	52.08	30.97	16.14	7.77	42.49	39.71
61	58.41	22.91	14.54	9.38	51.25	41.19
62	85.17	15.97	18.62	9.10	52.29	53.41
63	108.46	15.15	20.99	11.39	67.42	74.13
64	98.73	14.61	26.72	13.39	70.85	70.60
1965	108.01	13.04	29.07	13.82	72.65	86.69
66	90.03	12.12	37.04	16.59	76.70	99.95
67	97.50	8.38	24.10	17.19	75.11	94.65
68	90.75	8.74	27.79	19.72	82.69	105.70
69	111.77	10.39	26.92	23.08	96.99	143.87
1970	119.23	13.63	29.12	25.02	108.58	194.18

Note : Figures contained in the parentheses refer to SITC one-digit code.

Source : Compiled from the United Nations, Yearbook of International Trade Statistics, various issues.

Appendix Table 4

Sabah : Volume of Main Exports, 1955-70

(M$ '000 at current market price)

	Timber					
	Logs	Lumber	Rubber	Copra	Tobacco	Hemp
SITC	(242.3)	(243.3)	(231.1)	(221.2)	(121 122.2)	(365.5)
1955	19579	1981	41760	14168	3900	2199
56	23330	2847	40359	23311	6468	1786
57	27484	4041	37134	24009	8556	2817
58	32771	3606	32901	32152	8883	2381
59	57393	3671	47043	35144	10571	3613
1960	86174	4575	49533	40240	13088	5173
61	101800	955	41200	27100		4800
62	120600	1505	36733	18485	33494	3208
63	149700	940	32091	17586	42452	3772
64	147816	744	32409	15900	26572	4510
1965	184601	837	34199	13527	39899	2738
66	259390	366	31939	11295	14656	2841
67	316808	529	26332	5625	15661	2391
68	334760	596	25994	6583	6070	2309
69	374926	944	41129	7066	12310	2072
1970	395807	1031	36454	6781	13878	340

Source : United Nations, Yearbook of International Trade Statistics, various issues.

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(continued) Appendix Table 4

Sabah : Volume of Main Exports, 1955-70

(M$ '000 at current market price)

	Fishery Products	Oil Palm Products	Cocoa Beans	Veneet Sheets	Plywood
SITC	(03)	(422.2)	(72.1)	(631.1)	(632.2)
1955	620				
56	1013				
57	635				
58	769				
59	861				
1960	984		16	479	
61	1900		200	100	
62	2004		338	635	
63	2111		514	1269	
64	1816	552	551	1467	31
1965	3585	1280	471	1538	4
66	6077	2028	1126	1769	35
67	7121	5293	1617	998	759
68	8065	7671	2605	1121	1509
69	6920	10178	3592	1395	1002
1970	7971	18097	4441	2540	1814

Source : United Nations, Yearbook of International Trade Statistics, various issues.

Appendix Table 5

Sabah : Quantum of Main Exports, 1955-70

	Timber					
	Logs	Lumber	Rubber	Copra	Tobacco	Hemp
	('000 m^3)		(metric ton)			
1955	352	19	18072	35793	302	2811
56	426	19	20239	60110	381	1826
57	589	31	20324	64743	564	2493
58	717	27	20611	68256	598	2260
59	1089	30	23294	60372	724	2630
1960	1391	61	22402	80955	1013	3799
62	1937	12	22741	45411	4531	3446
63	2354	6	21598	40297	5807	3696
64	1905		23319	33290	4080	4088
1965	2152	5115	24401	24906	5483	2589
66	2743	2359	24148	26868	2351	3260
67	3004	2489	24108	14053	2565	3281
68	3275	2881	24897	15277	1949	3518
69	3493	7194	29399	16496	1580	2671
1970	3412	8403	31307	14792		367

Source : United Nations, Yearbook of International Trade Statistics, various issues.

(continued)

Appendix Table 5

Sabah : Quantum of Main Exports, 1955-70

	Fishery Products	Oil Palm Products	Cocoa Beans	Veneer Sheets	Plywood
	(metric ton)			('000 m^2)	
1955	725				
56	941				
57	719				
58	754				
59	1256				
1960	1018		9	886	
62	1461		250	1190	
63	1247		343	2732	
64	507	875	363	3594	18
1965	827	1722	425	3879	2
66	1360	3336	768	3722	26
67	1636	8896	1019	2475	596
68	1641	18042	1421	3454	1102
69	1370	25934	1350	4370	973
1970	1776	28194	2490	4788	1591

Source : United Nations, Yearbook of International Trade Statistics, various issues.

Appendix Table 6

Sabah : Destination of Exports by Region

(M$ m. at current market prices)

	ECAFE						Entire
	Total	DCs	LDCs	Common-wealth	Non-Common wealth	Japan	Common-wealth Group
1955	50.22	13.14	37.08	36.03	14.19	8.68	59.22
56	59.67	16.54	43.13	34.95	24.72	12.26	62.93
57	75.78	26.40	49.38	41.40	34.38	19.98	64.46
58	87.86	50.24	37.62	34.21	53.64	42.65	57.71
59	128.27	79.95	48.31	47.76	80.51	70.53	68.65
1960	172.00	110.45	61.55	60.29	111.71	96.11	79.19
62	193.74	123.62	70.12	40.26	153.48	116.28	52.24
63	237.05	148.47	88.58	34.83	202.21	148.33	42.81
64	233.52	137.13	96.39	60.59	172.93	129.14	67.23
1965	284.97	161.71	123.26	65.25	219.72	153.86	71.58
66	337.54	216.45	121.10	64.96	272.58	211.34	72.04
67	391.06	261.47	129.59	59.19	331.87	253.15	67.72
68	408.51	259.89	148.62	66.50	342.01	249.62	77.48
69	472.78	286.63	186.15	85.97	386.81	277.88	97.25
1970	489.71	294.05	195.65	90.38	399.43	284.42	103.94

Source : Compiled from the United Nations, Yearbook of International Trade Statistics, and, Sabah, External Trade Statistics, various issues.

cont./..

(continued) Appendix Table 6

Sabah : Destination of Exports by Region

(M$ m. at current market prices)

	EEC		EFTA		N. America	
	Total	West Germany	Total	United Kingdom	Total	United States
1955	13.77	7.09	23.19	23.19	1.96	1.96
56	15.45	5.59	27.98	27.98	2.13	2.13
57	9.63	2.84	23.06	23.06	1.68	1.68
58	8.94	1.62	23.35	22.81	4.46	4.31
59	13.75	4.15	21.94	20.04	8.67	7.82
1960	15.92	5.02	20.73	18.30	5.57	4.97
62	11.51	4.26	13.30	10.75	4.85	3.62
63	8.27	2.23	10.30	7.74	3.22	2.97
64	7.02	2.77	8.32	6.34	3.74	3.44
1965	5.19	1.12	6.68	6.01	4.89	4.58
66	3.52	0.79	8.79	7.02	4.43	4.37
67	2.70	0.54	9.18	8.49	4.61	4.57
68	4.81	1.50	11.55	10.91	3.39	3.33
69	3.84	0.88	12.42	11.23	2.75	2.70
1970	5.71	0.93	14.42	13.50	1.73	1.67

Source : Compiled from the United Nations, Yearbook of International Trade Statistics, and, Sabah, External Trade Statistics, various issues.

Appendix Table 7

Sabah : Composition of Imports by Functional Class

(M$ million at current market prices)

	Consumption Goods			Capital Goods	
	Food	Non-food	Raw Material	Capital Goods	Raw Material
1955	22.7	29.59	13.5	15.61	5.8
56	30.5	36.17	21.3	20.43	6.9
57	28.0	33.81	23.7	22.29	8.2
58	30.4	39.04	27.7	22.86	7.8
59	29.2	48.56	29.7	32.94	14.1
1960	35.1	61.35	35.8	46.95	16.7
61	38.8	79.83	29.0	51.37	15.6
62	40.8	96.99	22.8	60.01	17.5
63	51.1	122.64	24.2	83.76	22.8
64	57.7	108.31	23.6	80.59	23.8
1965	57.4	129.26	22.7	97.04	28.0
66	63.7	112.48	23.1	111.32	31.8
67	68.2	108.18	20.7	103.72	27.6
68	67.4	107.33	21.2	114.57	32.4
69	72.8	126.24	22.1	148.04	30.8
1970	76.9	138.90	20.9	208.13	32.6

Note : The definition of classification is a little bit different from that applied in the Economic Survey of Asia and the Far East. Imports of passenger cars are not included in the Capital Goods Class but in the Nonfood Consumption Goods Class instead.

Source : Compiled from the United Nations, Economic Survey of Asia and the Far East (Bangkon) and Yearbook of International Trade Statistics, various issues.

Appendix Table 8

Sabah : Provenance of Imports by Region

(M$ m. at current market price)

	ECAFE						Entire Commonwealth Group
	Total	DCs	LDCs	Commonwealth	Non-Commonwealth	Japan	
1955	47.82	10.45	37.37	20.84	26.98	7.59	43.75
56	71.22	12.80	58.42	23.76	47.46	9.51	51.94
57	63.87	11.54	52.32	22.14	41.73	8.36	51.14
58	77.10	11.47	65.63	23.33	53.77	8.29	50.91
59	93.03	13.87	79.16	28.80	64.23	9.53	60.98
1960	114.88	19.91	94.98	37.35	77.53	14.45	77.60
62	136.75	25.23	111.53	66.45	70.30	18.42	111.63
63	180.40	34.98	145.41	92.81	87.59	26.46	150.32
64	181.87	34.54	147.33	105.51	76.73	25.40	198.16
1965	182.31	33.79	148.52	124.25	58.06	23.86	190.63
66	209.61	39.12	170.50	129.23	80.38	28.72	198.36
67	222.88	47.32	175.56	137.54	85.34	38.39	186.60
68	235.87	56.82	179.05	146.58	89.28	45.29	193.65
69	289.92	73.73	216.19	180.62	109.30	63.27	228.20
1970	327.31	89.12	240.41	203.00	124.31	77.07	260.09

Source : Compiled from the United Nations, Yearbook of International Trade Statistics, and, Sabah, External Trade Statistics, various issues.

cont./..

(continued) Appendix Table 8

Sabah : Provenance of Imports by Region

(M$ m. at current market price)

	EEC		EFTA		N. America	
	Total	West Germany	Total	United Kingdom	Total	United States
1955	2.50	1.26	22.91	22.91	4.58	4.58
56	3.67	1.94	28.18	28.18	6.10	6.10
57	4.02	2.27	29.00	29.00	11.42	11.42
58	5.19	1.90	28.67	27.30	11.99	11.71
59	8.14	2.81	32.98	31.77	15.09	14.68
1960	14.31	4.04	41.12	39.31	20.98	20.04
62	11.79	4.49	47.74	44.30	33.38	32.50
63	14.50	4.96	61.03	56.96	41.62	40.08
64	14.21	5.53	96.07	91.16	29.54	27.68
1965	14.30	4.63	70.11	65.03	41.77	40.41
66	16.91	5.77	71.87	67.20	39.27	37.34
67	13.51	5.91	51.34	47.26	37.41	35.62
68	14.07	6.99	50.31	45.67	38.68	37.29
69	16.85	7.58	51.58	46.96	53.20	52.73
1970	22.94	7.82	60.82	54.36	73.48	70.75

Source : Compiled from the United Nations, Yearbook of International Trade Statistics, and, Sabah, External Trade Statistics, various issues.

Appendix Table 9

Sabah : Major Components of Public Revenue

(M$ m. at current market price)

	Royalty and Fees	Import and Export Duties	Export Duty	Timber Duty	Rubber Duty
1955	1.95	16.45	6.26		
56	2.07	18.31	6.59		
57	2.50	18.88	6.14		
58	2.92	18.95	6.25		
59	3.87	23.18	8.74	0.95	4.31
1960	5.96	27.51	9.64	1.21	4.74
61	9.36	26.11	6.62	1.42	3.11
62	11.13	26.75	5.38	1.36	2.51
63	13.84	32.39	4.85	1.06	1.99
64	15.43	35.47	4.60	1.17	1.78
1965	16.53	41.32	4.33	1.09	2.00
66	22.96	45.49	4.87	1.58	1.72
67	51.14	50.12	4.28	1.89	1.31
68	61.76	50.11	4.31	1.86	1.32
69	63.86	51.50	5.51	2.18	2.40
1970	74.58	55.71	3.72	1.33	1.91

Sources : Annual Report of Trade and Customs Department, North Borneo, 1955-62.

Annual Report of The Royal Customs and Excise Department, Sabah, 1963- .

Annual Report of Forest Department, Sabah, various issues.

Appendix Table 10

Sabah : Current Revenue, Total Financial Capacity and Accumulated Financial Balance

(M$ m. at current market price)

	Current Revenue	Total Financial Capacity	Accumulated Financial Balance
1955	29.53	16.73	- 0.86
56	33.74	15.20	- 1.55
57	35.46	19.99	- 5.69
58	37.58	26.29	- 4.76
59	46.81	17.91	0.64
1960	59.05	28.05	12.30
61	68.11	29.91	22.72
62	79.36	31.30	27.50
63	97.99	38.04	28.84
64	67.33	16.60	21.16
1965	74.87	43.96	41.74
66	91.28	53.99	63.15
67	137.66	68.43	100.77
68	159.23	96.46	136.47
69	180.74	97.86	143.15
1970	173.62	89.97	139.09

Source : Compiled and computed from Financial Statements (formerly the Report on the Accounts and Finances), Sabah, Malaysia, various issues.

Appendix Table 11(a)

Sabah : Regression Equations for Aggregate GNP And Individual Exports for 1955-70

Equations					R
log.(Logs)	=	-5.7442	+	1.9192 log.GNP (0.1547)	0.9574
log.GNP	=	3.2120	+	0.4776 log.(Logs) (0.0385)	
log.Rubber	=	5.5964	-	0.1848 log.GNP (0.0809)	-0.5218
log.GNP	=	12.3140	-	1.4689 log.Rubber (0.6431)	
log.Copra	=	10.0143	-	1.0355 log.GNP (0.1780)	-0.8411
log.GNP	=	8.4855	-	0.6832 log.Copra (0.1174)	
log.Tobacco@	=	1.9056	+	0.3958 log.GNP (0.3536)	0.2964
log.GNP	=	4.7080	+	0.2220 log.Tobacco (0.1984)	
log.Hemp	=	6.3312	-	0.5196 log.GNP (0.2931)	-0.4281
log.GNP	=	6.8224	-	0.3528 log.Hemp (0.1990)	
log.Fishery	=	-6.7542	+	1.7963 log.GNP (0.1304)	0.9650
log.GNP	=	3.8879	+	0.5184 log.Fishery (0.0376)	

Note : @ 1961 exclusive.

Figures contained in the parentheses are standard errors.

R is the coefficient of correlation.

Appendix Table 11(b)

Sabah : Regression Equations for Aggregate GNP And Individual Exports, 1960-70

Equations					R
log.Oil Palm @	=	-21.5057	+	4.2990 log.GNP (0.2196)	0.9935
log.GNP	=	5.0132	+	0.2296 log.Oil Palm (0.0117)	
log.Cocoa	=	-16.9429	+	3.4514 log.GNP (0.5625)	0.8984
log.GNP	=	5.0668	+	0.2338 log.Cocoa (0.0381)	
log.Veneer	=	-4.9122	+	1.3782 log.GNP (0.5371)	0.6500
log.GNP	=	4.8129	+	0.3066 log.Veneer (0.1195)	
log.Plywood @	=	-41.8582	+	7.5653 log.GNP (1.6371)	0.9002
log.GNP	=	5.5901	+	0.1071 log.Plywood (0.0232)	

Note : @ Covered the period 1964-70 only.

R is the coefficient of correlation.

Figures contained in the parentheses are standard errors.

Appendix Table 12

Sabah : Regression Equations for Aggregate GNP And Functional Imports, 1955-70

Equations	R
log.Cf = -0.3111 + 0.7494 log.GNP (0.0537)	0.9658
log.GNP = 0.5631 + 1.2447 log.Cf (0.0892)	
log.Co = -0.5268 + 0.9197 log.GNP (0.1435)	0.8636
log.GNP = 1.0927 + 0.8109 log.Co (0.1265)	
log.Cr = 1.4840 - 0.0439 log.GNP (0.1089)	-0.1070
log.GNP = 2.9761 - 0.2610 log.Cr (0.6482)	
log.Kr = -1.5495 + 1.0655 log.GNP (0.1273)	0.9129
log.GNP = 1.6481 + 0.7822 log.Kr (0.0943)	
log.K = -2.0324 + 1.4519 log.GNP (0.1231)	0.9532
log.GNP = 1.5112 + 0.6258 log.K	

Note : R : coefficient of correlation;

Cf : food;
Co : other consumption goods;
Cr : raw consumption goods;
Kr : raw capital goods;
K : capital goods.

Figures contained in the parentheses are standard errors, at (N-1) degrees of freedom.

Appendix Table 13

Sabah : Distribution of Labour by Industrial Groups

	Estates	Rubber	Hemp	Tobacco	Copra	Cocoa	Oil Palm
1955	11261	8804	1436	907	114		
56	12006	8906	1510	1448	93	49	
57	12408	9330	1544	1310	133	91	
58	12763	9618	1428	1369	178	170	
59	13953	9967	1748	1558	181	501	
1960	14863	10710	1748	1455	230	720	
61	12881	9546	1897	286	223	907	
62	13522	9582	1160	25	301	789	
63	13173	8577	1269	24	222	815	2266
64	13787	8004	1116	18	132	744	3773
1965	13295	7337	911	20	90	562	4375
66	13491	6843	918	160	131	575	4864
67	12402	5624	886	8	171	621	5083
69	10723	4441	302		97	593	5185
1970	11577	4703			65	873	5921

Note : The above figures are based on the labour force engaged at registered places of employment, which comprised at least 20 employees, on 31st. December of each year.

Source : Labour Department, Sabah.

cont./..

(continued) Appendix Table 13

Sabah : Distribution of Labour by Industrial Groups

Industry	Timber	Services	Bldg.* & Cons.	Fishing	Misc.@	Government	Total
1955	8957	5912	923	1256	159	707	4164	24382
56	10879	7645	767	1367	223	877	4186	27071
57	11419	7907	766	1472	258	1016	3390	27217
58	11630	8423	720	1245	426	816	3687	28080
59	12132	8994	796	1002	320	1020	3763	29848
1960	14020	10293	833	894	720	1270	4913	33787
61	16022	11107	940	879	699	1930	5195	34098
62	16605	12389	926	884	518	1888	6989	37116
63	17654	12522	1152	1605	211	2164	7184	38011
64	18154	12427	1532	1860	189	2146	6976	38917
1965	18895	12925	1373	1833	171	2593	7998	40188
66	19463	13480	1477	1711	198	2597	7449	40403
67	18428	12573	1434	1412	305	2704	8832	39662
69	14240	8734	1545	889	201	2871	12495	37458
1970	15448	8361	1587	1420	170	3910	11966	38991

Note : * Building and construction.

@ Miscellaneous.

The above figures are based on the labour force enaged at registered places of employment, which compirsed at least 20 employees, on the 31st. December of each year.

Source : Labour Department, Sabah.

SELECTED BIBLIOGRAPHY

Official Publications

Board of Trade Journal (London).

Commonwealth Development (London).

Commonwealth Survey : a record of the United Kingdom and Commonwealth Affairs (London).

Digest of Colonial Statistics (London).

IMF, Annual Report on Exchange Restrictions.

Jones, L.W., Report on the Census of Population, North Borneo, 1951. Report on the Census of Population, North Borneo, 1960.

Malaysian Government Gazette.

Population Census of Malaysia, 1970.

Sabah (formerly North Borneo) —
- Annual Report, 1950-63.
- Annual Report of Customs and Excise Department.
- Annual Report of Forest Department.
- Census of Licensed Trading Establishments, 1967- .
- Census of Population and Households, 1970.
- Financial Statements (formerly Report on the Accounts and Finances).
- Report of Department of Labour and Welfare.
- Sabah Development Plan, 1965-70.
- Sabah Government Gazette.

United Nations —
- Conference on Trade and Development (2nd. Session), 1968.
  - vol. II : Commodity Problems and Policies.
  - III : Problems and Policies of Trade in Manufactures.
  - IV : Problems and Policies of Financing.
  - V : Special Problems in World Trade and Development.

United Nations --- contd.

Development Programme : Natural Resources Survey of the Labuk Valley, Malaysia (1968).

Economic Bulletin for Asia and the Far East (Bangkok).

Economic Survey of Asia and the Far East (Bangkok).

Statistical Yearbook for Asia and the Far East.

Yearbook of International Trade Statistics.

Books

Baldman, Robert E., Economic Development and Growth (London: John Wiley and Sons, inc., 1972).

Bardham, Pranab K., Economic Growth, Development and Foreign Trade : a Study in Pure Theory (London : Wiley-Interscience, 1970)

Bhagwati, Jagdish N., R.W. Jones, R.A. Mundell and J. Vanek (eds.), Trade, Balance of Payments and Growth (London : North-Holland Publishing Co., 1971)

Cairncross, A.K., Factors in Economic Development (London: George Allen & Unwin Ltd., 1965).

Caves, R.C., Trade and Economic Structure : Model and Methods (Cambridge : Harvard University Press, 1960).

Cukor, Gyoray, The Role of Import Substitution and Export Development in the Industrialisation of Developing Countries (Budapest : Center for Afro-Asian Research of the Hungarian Academy of Science, 1970)

David, Wilfred L. (ed.), Public Finance, Planning and Economic Development (London : Macmillan Press, Ltd., 1973).

Jolly, R., E. de Kadt, H. Singer and F. Wilson (eds.), Third World Employment : Problems and Strategy (Penguin, 1973).

Kindleberger, C.P., Foreign Trade and the National Economy (New Haven : Yale University Press, 1962).

Kuznets, Simon, Modern Economic Growth : Rate, Structure and Spread (New Haven, Connecticut : Yale University Press, 1966).

Maizels, A., Exports and Economic Growth of Developing Countries (London : Cmabridge University Press, 1968).

Meier, Gerald M., The International Economics of Development : Theory and Policy (London : Harper and Row, 1968).
(ed.) Leading Issues of Economic Development (London : Oxford University Press, 1970).

Michaely, M., Concentration in International Trade (Amsterdam: North Holland Publishing Co., 1962).

Myint, H., The Economics of the Developing Countries (London: Hutchinson & Co., 1967). Economic Theory and the Underdeveloped Countries (London : Oxford University Press, 1971).

Seers, D. and L. Joy (eds.), Development in a Divided World (Penguin, 1970).

Stewart, I.G. (ed.), Economic Development and Structural Change (Edinburgh University Press, 1969).

Streeten, P., The Frontiers of Development Studies (London: The Macmillan Press, Ltd., 1972).

Articles

Baer, W. and M. Herve, "Employment and Industrialisation in Developing Countries" (Quarterly Journal of Economics, 82, July, 1968).

Bhagwati, J., "International Trade and Economic Expansion" (American Economic Review, Dec., 1958). "The Theory of International Trade" (Indian Economic Journal, July, 1960).

Bhalla, A.S., "The Role of Services in Employment Expansion" (International Labour Review, 101, 5, 1970).

Bottcher, S., "Diversification as a Commodity Policy" (Intereconomics, 11, 1971).

Cairncross, A.K., "International Trade and Economic Development" (Economica, August, 1961).

Chenery, H.B., "Patterns of Industrial Growth" (American Econ. Review, 50, Sept., 1960). "Comparative Advantage and Development Policy" (American Econ. Review, 51, 1, 1961). "Growth and Structural Change" (Finance and Development, 3, 1971).

Chipman, J.S., "A Survey of the Theory of International Trade : Part 1. The Classical Theory" (Econometrica, July, 1965). " ---- : Part 2. The Neo-Classical Theory" (Econometrica, October, 1965). " ---- : Part 3. The Modern Theory" (Econometrica, January, 1966).

Dominguez, L.M., "Economic Growth and Import Requirement" (The Journal of Development Studies, 6, 6, 1970).

Emery, R.F., "The Relation of Exports and Economic Growth" (Kyklos, XIX, 1967).

Galenson, Walter, "Economic Development and the Sectoral Expansion of Employment" (International Lab. Rev., 6, 1963).

Hueth, D. and A. Schmitz, "Trade in Intermediate and Final Goods" (Quarterly Journal of Economics, LXXXVI, 3, 1972).

Kuznets, S., "Quantitative Aspects of the Economic Growth of Nations -- IX. Level and Structure of Foreign Trade : Comparison for Recent Years" (Economic Development and Cultural Change, XIII, 1, Part II, 1964). " ---- X. Level and Structure of Foreign Trade : Long Term Trends" (Economic Dev. and Cultural Change, XV, 2, Part II, 1967).

Leff, N.H., "The 'Exportable Surplus' Approach to Foreign Trade in Underdeveloped Countries" (Economic Development and Cultural Change, XVII, April, 1969).

Maizels, A., "The Effects of Industrialisation on Exports of Primary-Producing Countries" (Kyklos, 14, Fasc. 1, 1961).

Massell, B.F., "Export Concentration and Fluctuation in Export Earnings : a cross-section analysis" (American Econ. Review, March, 1964).

Kassell, B.F., "The Relation of Export and Economic Growth" (American Econ. Review, 60, 4, 1970)

Naya, Seiji, "The Commodity Pattern and Export Performance of Developing Asian Countries to the Developed Areas" (Economic Development and Cultural Change, 15, 4, 1967).

Ranis, Gustav, "Industrial Sector Labour Absorption" (Economic Development and Cultural Change, 21, 3, 1973).

Rapp, William V., "A Theory of Changing Trade Patterns Under Economic Growth : Tested for Japan" (Yale Economic Essay, 7, 2, 1967).

Schydlowsky, D.M., "From Import Substitution to Export Promotion for Semi-Grown-up Industries : a Policy Proposal" (Journal of Development Studies, 3, 4, July, 1967).

Severn, A.K., "Exports and Economic Growth" (Kyklos, XXI, 3, 1968).

Thoburn, J.T., "Exports and Economic Growth in West Malaysia" (Oxford Economic Papers, 25, 1, 1973).

Thomas, M. J., "Export Sector Development and Economic Growth" (International Development Review, XI, 2, 1969).

Tinbergen, J., "Trade Policy and Employment Growth" (International Labour Review, 101, 5, 1970).

Yang, S.C., "Foreign Trade Problems in Economic Development" (Scottish Journal of Political Economy, June, 1964).