THE ASSEMBLY OF MOTOR VEHICLE INDUSTRY IN MALAYSIA

by

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PREFACE

The programme of the setting up of the assembly of motor vehicle industry has been made popular in the newspapers and magazines, and the general feeling among the public is that this industry is desirable in the sense that it provides employment opportunities, save foreign exchange, develops ancillary industries, and so on. It is the aim of this academic exercise, to see the industry in its true perspective, and to analyse from the point of view of the industrial development programme, the desirabilities and the undesirabilities that this industry may have.

The author has gathered several important facts about this industry from several sources, among which are the Federal Industrial Development Authority and the Tariff Advisory Board. Various other literature regarding this industry are also available in periodicals and magazines. Besides articles written on the assembly of motor vehicle industry in Malaysia, there are also articles written about automobiles industry of other leading countries producing motor vehicles. These articles serve a very great purpose for this academic exercise. The author has also written to the Malaysian Motor Vehicle Assemblers Association for facts and figures, but unfortunately has not been granted much figures.

The main difficulty in doing this exercise is therefore the lack of up-to-date figures to substantiate certain parts of the argument. Nevertheless, the author has resorted to estimates made by the MMVAA at the time the Association was speculating for the setting up of the industry in this country.

Very broadly, this exercise is divided into two parts. The first part deals with a descriptive account of the industry, embodying Chapter I which describes the industrialisation programme and how this assembly industry fits into the programme, Chapter II, which describes the nature and structure of this industry, and lastly Chapter III, which describes, as well as analyses the various government incentives that are offered to this industry. The second part will be seen in Chapter IV where several analyses are made based on the generally accepted cliché such as "employment opportunities", "foreign-exchange savings", "development of ancillary industries" and also "the demand for motor vehicles".

Chapter V is a concluding chapter and the author has done this by summarising the place of this industry in the industrialisation programme, as well as a summary of the discussions on the evaluation of the industry.

The author wishes to extend his sincere gratitude to Mr. Lo Sum Yee who supervised the author in his work: he has read all the materials, given constructive criticisms and suggestions that make the present chapters what they are. The author also wishes to thank Mr. R.N. Worthington, the Honorary Secretary of the Malaysian Motor Vehicle Assemblers Association who has offered to supervise the author in doing this academic exercise. Credits also go to Mr. Khoo Kay Chock and Mr. Khoo Boo Kien both of FIDA, for letting the author have certain information regarding the industry. The author also wishes to thank Mrs. Lai Yoon Kong for letting him access to the FIDA Library. Lastly, but not least, the author wishes to thank Che Rashidah Bt. Abdullah who has been so kind to postpone her holidays to Bangkok in order to type this graduation exercise.

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CHAPTER I

MOTOR VEHICLE ASSEMBLY AND INDUSTRIALISATION

Industrialisation in Malaysia

It is a common feature among developing economies to place much reliance on industrial development as a means for accelerating economic growth. They believe that industrial development can help them to diversify and hence become more self-sufficient, add to their levels of national income and help them in solving unemployment problems for their expanding population.

Malaysia is one of these countries that place importance on industrial development. In the words of the First Malaysia Plan, "If national income and employment are to rise over the next twenty years as envisaged in the Perspective Plan ....., considerable structural changes in the economy will have to occur, with industry accounting for an increasing share of the total. The promotion of accelerated development in manufacturing activity is therefore important ....."[1]

Hence the case for industrialisation for Malaysia is clear. Her economy has been extremely over-dependent on rubber and tin for the major part of her gross national product and employment. Rubber price has been declining: the f.o.b. export unit value of rubber was 65.47 cents a pound in 1966, but it declined to 54.16 cents a pound in 1967 and declined further to 52.4 cents a pound in 1968.[2] In the case of tin, production is exhaustive in nature. Thus in view of these cases it is realised that this over-dependence upon rubber and tin could be detrimental to economic development. To reduce this dependence on a few commodities as well as to diversify the economy, it was found that development in the industrial sector would be necessary.

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[1] First Malaysia Plan, page 123, paragraph 353.

[2] Monthly Statistical Bulletin of West Malaysia, October 1968. The price of rubber had recovered since March 1968. By December 1968 it has improved to an average of 57.6 cents a pound. The price had since continued to improve from this high level and even touched to 71 cents a pound on February 24, 1969. The fact that rubber price had recovered so strongly since March 1968 does not nullify the argument that the price of rubber had been declining. In 1960, the price of rubber was 108.08 cents a pound and it dropped steadily to 83.54 in 1961, 78.20 in 1962, 72.43 in 1963, 68.11 in 1964, and 70.13 in 1965.
See also Bank Negara Annual Report, for the years 1960 to 1968.

Equally important is the provision of employment that development in the industrial sector has to offer. With a population increase of about 3 per cent annually,[3] it would be impossible for the agricultural sector alone to absorb all the resultant increase in the labour force.[4] With industrialisation, part of this increase in population will be absorbed into the industrial sector. This sector has been estimated to provide employment for about 10 per cent of the economically active population of Malaysia.[5]

Another argument cited as the case for industrialisation in Malaysia is that the Malaysian standard of living has been rising steadily and this has raised the demand for manufactured products.[6] If her industrial base was narrow as in the early 1960s, the situation would be that on the one hand she would have to import these manufactured products and on the other she would have declining commodity terms of trade to pay for her imports. This was what exactly happened in the early 1960s when manufacturing activity was still small and this partly explains the deficits in her balance of payments of those years.[7] Hence development in the industrial sector was found to be necessary so as to persue the objectives of import substitution and consequently export promotion.

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[3] First Malaysia Plan, page 5, paragraph 15.

[4] E.L. Wheelwright, Industrialisation in Malaysia, Melbourne University Press, 1965.

[5] First Malaysia Plan, page 83, paragraph 192.
A breakdown of population by age groups will show the percentage for which employment must be provided in the years to come. Over 44 per cent of the population are below the age of 14 and some 25 per cent are between the ages of 14 and 30. In other words, it is the aspirations of this 70 per cent or so which need to be satisfied on a priority basis.

[6] Yet another argument cited is the consequence of the British pullout. Although Britain offered £25,000,000 for the withdrawal of her commitments in Malaysia, it is estimated that this will fill about only a third of the gap left behind, while two thirds of the gap will have to be provided by her own resources. It is also estimated that to cushion the effect of the withdrawal, Malaysia needs to invest at least $600 million. However, this argument is a matter for urgency in industrial development.
See Asian Trade and Industry, Vol. 2, No. 2, page 27, and
A Quarterly Trade Journal Published by Federal (South-east Asia) Corporation.

[7] Observing the Bank Negara Annual Report for the years 1961 to 1964 will reveal the steady deterioration of the balance of payments. The year 1961 marked the turning point from current surpluses to deficits.

Government's Incentives

In view of these ideas, the Malaysian Government has made great effort at instigating, stimulating and promoting increasing industrialisation. Since 1959, a conscious policy of industrial development has been implemented in the various territories that are now Malaysia, with the introduction of the Pioneer Industries (Relief from Income Tax) Ordinances in Malaya 1958, in Sarawak 1957 and in Sabah 1963.

To accelerate its programme of industrial expansion, the government sought the assistance of the Colombo Plan and the United Nations for experts, to undertake feasibility surveys of the industrial possibilities. The Industrial Development Division was set up in the Ministry of Commerce and Industry to undertake the promotion of new industries. The government also established the Federal Industrial Development Authority (FIDA) with a view to promoting and co-ordinating industrial development in Malaysia, and to advising the Minister of Commerce and Industry on policies relating to industrial development. FIDA undertakes various other functions also, namely, industrial planning, establishment of industrial estates, identification of industrial possibilities through specific feasibility studies and pre-investment surveys, evaluation of project proposals for pioneer status and other incentives, and industrial promotion activities both local as well as abroad. In addition, FIDA plays the role of a clearing house between foreign industrialists with technical know-how and capital on the one hand and local entrepreneurs and investors on the other.

Financial facilities are offered by the various commercial banks in Malaysia. Besides these, institutions like the Malaysian Industrial Development Finance Berhad (MIDFB) (in which both the government and several private international banks and insurance companies have invested) was formed to extend medium and long term credit for industrial development.

The following summarizes the incentives and facilities which are provided by the Government in order to attract industries.[8]

(i) Provision of income tax relief from two to five years under the Pioneer Industries (Relief from Income Tax) Ordinance, 1958.

(ii) Allowances of free transfer of capital and earnings within the Sterling Area and with minimum of control to or from areas outside the Sterling Area.

(iii) Guarantee of protection to foreign investments against expropriation.

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[8] See also, Lim Chong-Yah, Foreign Investment Guide, Malaysia, a survey written for the First National City Bank, Kuala Lumpur.

(iv) Provision of tariff protection to deserving local industries; granting of import-duty exemption for machinery and, in some cases, for raw materials for industrial development.

(v) Provision of protection against dumping by foreign exporters.

(vi) Existence of the Malaysian Customs Union to permit the free flow of goods within Malaysia.

(vii) Development of industrial estates providing cheap and readily available serviced sites.

(viii) Development of other basic services to industry, such as roads, ports, power and communication facilities.

(ix) Provision of loan facilities for industry through the specially established Malaysian Industrial Development Finance Limited (MIDFL).

On February 29th 1968, the Investment Incentives Bill was legislated. The Bill provides a variety of incentives to induce a greater and more rapid flow of investments and to encourage the expansion of exports in manufactures. Embodied in this Bill are the procedure for granting Pioneer Status, the scope of which has now been extended to non-manufacturing industries; the granting of Investment Tax Credit to those firms that are not considered suitable for granting pioneer status, the granting of export incentives as well as other supplementary incentives. Hence the Government has made great efforts in promoting industrial development.

The Extent of Industrialisation

Since 1959, the manufacturing industries have grown to play an important part in the economic development of Malaysia. Industrialisation has further gathered momentum since the formation of Malaysia. Table 1.1 illustrates the steady growth of the manufacturing sector as a percentage of its contribution to the gross domestic product. The contribution of the manufacturing sector to the gross domestic product rose from 8.5 per cent in 1960 to 9.7 per cent in 1964, and to 11.4 per cent in 1967.

At the same time, the number of selected establishments and the net value of their output indicate significant increases throughout the period. The value of output in 1966 in fact more than double that of 1960. Employment figures also indicate significant increases.

TABLE 1.1

WEST MALAYSIA

MANUFACTURING SECTOR

MANUFACTURING SECTOR	1960	1961	1962	1963	1964	1965	1966	1967
1. CONTRIBUTION TO GAP								
$ MILLION	421	444	495	547	613	709	779	864
% GAP	8.5	8.2	8.7	9.1	9.7	10.4	10.8	11.4
2. PRINCIPAL STATISTICS OF MANUFACTURING INDUSTRIES, COVERED IN ANNUAL SURVEYS.								
NO. OF ESTABLISHMENTS	1,572	1,595	2,310	2,360	2,384	2,436	2,459	2,961
NET VALUE OF OUTPUT ($M)*	210.3	222.6	278.0	327.2	404.9	462.8	526.1	643.5
NO. OF FULL-TIME EMPLOYEES (THOUSAND)	43.5	45.3	53.8	58.8	64.6	68.2	70.0	87.1

*At constant price

SOURCE: ADAPTED FROM BANK NEGARA QUARTERLY ECONOMIC BULLETIN, VOL.1 NO.1 MARCH 1968, TABLE 30

TABLE 1.2

PRINCIPAL STATISTICS OF PIONEER AND EX-PIONEER ESTABLISHMENTS IN WEST MALAYSIA

YEAR	NUMBER OF ESTABLISHMENTS	NUMBER OF PAID EMPLOYEES
1960	32	2,240
1961	44	3,235
1962	68	4,769
1963	85	7,171
1964	91	9,960
1965	101	12,149
1966	112	15,070
1967	126	19,343
1968	142	22,017

SOURCE: MONTHLY STATISTICAL BULLETIN, WEST MALAYSIA, MARCH 1969.

Table 1.2 also summarises the increases of manufacturing activity since 1960. In 1960, the number of establishments that have been granted pioneer status was 32. In 1968, this has increased to 142.[9] That is to say, within a period of 9 years, the number of establishments that have been granted pioneer status have increased by about four fold. At the same time, the number of paid employees have increased by about ten times.

[9] As at November, 1968 the number of Pioneer companies that have completed pioneer period was 80. See FIDA, Malaysia Industrial Digest, Vol. 1, No. 4, page 14.

Most industries in Malaysia are light industries engaged primarily in the production of consumer and intermediate goods. However, there are several other industries that can be termed as "heavy" and these are the petroleum refineries, the fertiliser plant, aluminium rolling and other building materials industries, an integrated steel mill and the motor vehicles assembly plants.

Thus there is such a vast number of establishments producing a great variety of commodities. Government's encouragement have been playing a great role for such extensive development in the industrial sector. To the end of diversification of the economy and of the provision of employment, the government is committed to provide such encouragement to this sector.

As an answer to the Government's call for industrialisation, the assembly of motor vehicles industry was formally established in 1967. However, it must be borne in mind that decisions to set up assembly plants have been in the minds of foreign entrepreneurs since 1964.[10] Also, assembly operations in the form of semi-knocked-down vehicles[11] had started somewhere in 1965 when the firm Cycle and Carriage undertook assembly of commercial vehicles at Petaling Jaya.[12]

The term "assembly of motor vehicle industry" or sometimes referred to in this exercise as "assembly industry", includes those firms that are engaged in assembly operations of motor cars, commercial vehicles, trucks, motorcycles and scooters.[13] It should be noted that the scope of

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[10] See Far Eastern Economic Review, April 28th, 1966.

[11] Definition of semi-knocked-down, completely-knocked-down and completely-built-up vehicles are defined by the Tariff Advisory Board under "Notice for the Importation of Motor Vehicles." Briefly, completely-knocked-down vehicles are those whose component parts are unattached to other parts. These parts include for example, the engine, the front and rear axle, mudguards, windscreen, fuel tank, speedometers, exhaust pipes and muffles, metal penals, roof panels, doors, upholstry and so on.
Semi-knocked-down units are in the form of preassembled chasis and frame in the country of origin. Completely-built-up vehicles are those not classified under the above definitions.

[12] See Tariff Advisory Board: Written and Oral Evidence, Road Motor Vehicles, Part 1.

[13] Other vehicles that can be included under this activity are the off-road vehicles such as tractors and other heavy vehicles. The fact that the demand for these vehicles are very low, assembling of these vehicles will be made on order only. See Chapter II.

this industry does not include activities in building bodies for trucks and buses, although these activities have been undertaken for quite sometime ago.[14]

The Role of the Assembly of Motor Vehicle Industry

Although the assembly industry is in its early stages of development, starting production only in late 1967[15], it is possible to assess the role played by this industry in the context of economic, social and political structures of Malaysia. Experience in other countries, for example Australia, may also help to assess the proper role of this industry.[16]

The first and most important role played by this industry is that of meeting the nation's demand for motor vehicles. Table 1.3 shows the Registration of Motor Vehicles for the years 1963 to 1968. Between 1963 and 1968, which is a period of six years, the growth rate of the vehicle park in Malaysia has been some 49 per cent, resulting in a total population of 584,553 vehicles in 1968.

Between 1963 and 1968, the growth rate of motorcycle and scooter ownerships has been some 60 per cent, while that of motor car has been some 38.3 per cent. This, however, is the attribute of a relatively high per capita income. Buses have been expanding by some 31.3 per cent in the six years and this big increase indicates increasing demand for public transport. Commercial vehicles park has increased by about 27.4 per cent from 1963 to 1968 and this big increase is the result of developments in industry and commerce.

The annual increase of Malaysia's demand for motorcycles and scooters, basing on the 1967-1968 figures is about 6.3 per cent, while that of motor cars is about 7.2 per cent. Buses and commercial vehicles both increases by 7.2 and 3.8 per cent respectively. Most of the demand originate in West Malaysia which accounts for more than 90 per cent of the nation's demand.[17]

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[14] Annual Survey of Manufacturing Industries will show that as far back as 1959, there were already 16 establishments engaged in this activity. Refer Census of Manufacturing Industries in the Federation of Malaya 1959, page 11.

[15] The dates of incorporation for most of the firms under this industry was somewhere in 1966. See Tariff Advisory Board: Written and Oral Evidence, Road Motor Vehicles, Part 1.

[16] This will be observed from several articles among which are Motor Business series, published by the Economist Intelligence Unit and The Automotive Products Manufacturing Industry in Australia, produced by Moffat Advertising Pty. Ltd.

[17] For the simple reason that West Malaysia is more developed than East Malaysia.

TABLE 1.3

REGISTRATION OF MOTOR VEHICLES IN MALAYSIA

	Motor-Cycles including Scooters	Motor Cars including Taxis	Buses	Commercial Vehicles	Total
1963					
WEST MALAYSIA	112,086	129,687	3,332	35,637	280,742
SABAH	4,833	6,118	167	2,458	13,576
SARAWAK	4,590	4,408	224	1,182	10,404
TOTAL	121,509	140,213	3,723	39,277	304,722
1964					
WEST MALAYSIA	142,746	144,141	3,543	38,449	328,839
SABAH	5,027	7,609	343	2,609	15,588
SARAWAK	6,047	5,428	243	1,335	13,053
TOTAL	153,820	157,178	4,129	42,393	357,480
1965					
WEST MALAYSIA	175,842	159,517	3,763	41,854	380,976
SABAH	5,361	8,696	364	2,769	17,190
SARAWAK	7,378	6,552	268	1,419	15,617
TOTAL	188,581	174,765	3,395	46,042	413,783
1966					
WEST MALAYSIA	214,691	174,401	3,967	44,411	437,470
SABAH	5,536	10,640	406	3,225	19,807
SARAWAK	8,996	7,725	318	1,660	18,699
TOTAL	229,223	192,766	4,461	49,296	465,976
1967					
WEST MALAYSIA	251,529	188,005	4,234	46,502	490,270
SABAH	5,906	13,420	451	3,643	23,420
SARAWAK	11,040	9,273	349	1,985	22,647
TOTAL	268,475	210,698	5,034	52,130	536,337
1968					
WEST MALAYSIA	278,836	200,397	4,636	48,301	532,170
SABAH	5,819	15,886	425	3,618	25,748
SARAWAK	12,707	11,274	365	2,289	26,635
TOTAL	297,362	227,257	5,426	54,208	584,553

Compiled from: Annual Bulletin of Statistics, West Malaysia, 1968.
Annual Bulletin of Statistics, Sabah, 1968.
Annual Bulletin of Statistics, Sarawak, 1968.

Until 1967, the nation's demand for motor vehicles is largely satisfied by a substantial volume of new vehicle imports in the form of completely-built-up. At the end of 1967 when assembly operations had begun, some of the imports of motor vehicles are in the form of completely-knocked-down. Table 1.4 shows the consequent changes in the imports of motor vehicles from 1967 to 1968.

TABLE 1.4

WEST MALAYSIA: IMPORTS OF MOTOR VEHICLES

Description	1967 (units)	1968 (units)
Completely-built-up	13,763	6,041
Completely-knocked-down	464	2,033
Semi-knocked-down	9	110
Special purpose vehicles	15	4

Source: Statistics Department.*

*These figures are unpublished. To arrive at these figures, it must be observed that the code numbers 732-101-1, is for completely-knocked-down, 732-101-2 is for semi-knocked-down, 732-101-3 is for completely-built-up and so on.

In 1967, imports in the form of completely-knocked-down and semi-knocked-down together account for about 3.4 per cent of that of the completely-built-up. Whereas, in 1968, the imports in the form of completely-knocked-down and semi-knocked-down together have risen to about 36 per cent of that of completely-built-up. But it must be noted that this rapid rise in the import of units completely-knocked-down does not mean that the demand for motor vehicles are satisfied immediately by vehicles assembled locally.[18] However, it is expected that future demand for motor vehicles will be satisfied by the locally assembled units.

The role played by this industry can also be extended to the satisfaction of demand for motor vehicles in the foreign market. The regions adjacent to Malaysia, for example, Indonesia and Thailand, are

[18] See Chapter II.

great potential export markets for the products of this country.[19] As such this industry is able to promote exports and thus earn foreign exchange.

In terms of foreign exchange-savings, this industry can be cited as a case.[20] The employment of local labour and resources in assembly operations is clearly a saving of payments that would otherwise be made to foreigners. The feature of the industry is that manufactured parts of motor vehicles are imported in knocked-down conditions, and these semi-manufactured parts are then assembled locally, using local labour and resources. Hence, the form this industry takes is adding of values to imported semi-finished materials. In doing so, the industry provides employment opportunities for local labour as well as local resources. Indeed, it was intended that this industry shall be a project which can help the government in easing unemployment problems.[21]

Prior to the establishment of the motor vehicle assembly industry, there exist in this country some firms producing automotive component parts such as tyres, tubes, batteries, upholstry and paints.[22] The establishment of the motor vehicle assembly industry will form the link between these firms. To ensure this, the assembly industry is given an incentive for the use of a certain amount of locally produced automotive component parts.[23] In this way, those firms that have been producing automotive parts for quite sometime but were not linked by a common scheme, will be interrelated with the establishment of the assembly industry.

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[19] Singapore is not included since she has her own assembly industry, and secondly, there is no common market between Singapore and Malaysia for motor vehicles. As for Thailand, although she has her own assembly industry also, imports made by Swedish Motor Assemblies Sdn. Bhd. recently indicates the presence of export possibilities. See FIDA, Malaysia Industrial Digest, Vol. 1, No. 3, Third Quarter 1968

[20] This actually is not very true. Further discussions will be made in Chapter IV.

[21] FIDA, Malaysia Industrial Digest, Vol.1, No.3, Third Quarter 1968.

[22] Besides these, the 1963 Census of Manufacturing Industries reveal that there are 11 establishments manufacturing motor vehicles parts and accessories.

[23] This incentive is embodied in the Assembly Tax and will be discussed in Chapter IV.

This is the so-called "backward linkage." However, as the assembly industry grows, the industry that manufactures automotive component parts will also grow, with the expansion of existing firms as well as the entry of new firms. The result of this is that ancillary industries will be established.[24] Manufacturing now will not only be concentrated on automotive component parts but also on a range of allied component parts. As such this will benefit not only the assembly industry but also other industries that are, in some way or other, mechanised.

The growth of the ancillary industries, with new entrants coming into the industries, will provide greater items of local component parts. As such it provides a favourable atmosphere for the gradual local manufacture of motor vehicles. This will, however, take a very long period of time to go through but the establishment of the assembly industry is the basis for ultimate local manufacture of motor vehicles. A case that can be taken as an example is the developments in the manufacture of motor vehicles in Australia.

The establishment of the assembly industry will encourage the construction of more and better roads, and these in turn will stimulate the assembly industry through a flourishing road transport industry. From the point of view of defence as well, this industry is very vital, in view of the fact that the outgrowth of this industry may be able to provide a steady supply of automotive parts for military use in times of crisis. That the assembly industry would encourage other industries build a skilled labour force and stimulate technology is evident.

Lastly, the existence of this industry shows the local demand for cars and this is a pointer of the rising national standards of living. As such overseas and local investors will have greater confidence in the future of Malaysia.

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[24] It will be noted that this is the intended developments. So far, this stage has not been arrived at, although plans have been made to encourage the establishment of these industries. Further discussions on this is made in Chapter IV.

CHAPTER II

NATURE AND STRUCTURE OF THE ASSEMBLY OF MOTOR VEHICLE INDUSTRY

In this chapter attempt is made to present a clear picture of the nature and structure of the assembly of motor vehicle industry with particular reference to the assembly operations of motor cars. As defined earlier in Chapter I, the assembly industry covers all those firms that are engaged in assembly operations of all types of motorised vehicles. However, in this exercise, it is not possible to cover all these firms that are engaged in assembling of the various types of motor vehicles. Thus much of the reference in this chapter is made on the assembly operations of motor cars.

It is not wrong to speak of the assembly of motor cars as representative for the whole of the assembly industry. For one thing, the demand for motor cars in this country comprised more than 70 per cent of the total national demand for motor vehicles as a whole. Hence, the major part of the assembly industry consists of the assembly operations of motor cars. For another thing, more than 60 per cent of the total investment invested in this industry goes to the assembly of motor cars because passenger car assembly operations demand expensive type of equipment. In other words, this is where the real investment lies.[1] As compared with the assembly of motorcycles and scooters, the assembly operations of motor cars are more complex in their technical aspects. It will be noted that in the calculation made in Chapter I of the demand for motor cars as a percentage of the total demand for motor vehicles, the demand for motorcycles and scooters as a percentage of the total demand for motor vehicles have been excluded. This is in view of the greater concentration of investment in the assembly operations of motor cars than the assembly operations of motorcycles and scooters.

This is not to exclude assembly operations of other vehicles completely out of the picture. The disadvantages of making reference to the assembly of one type of vehicle only is realized when it is found that it may not be able to give a good picture when analysing for the whole assembly industry. But certain generalisations can be made with respect to this industry if particular reference is made on one aspect of it. Nevertheless, where necessary, efforts will be made to refer to assembly operations of other types of vehicles as well.

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[1] Tariff Advisory Board: Written and Oral Evidence, Road Motor Vehicles, Part II, page 30.

The Nature of the Industry

A distinguishing fact about the assembly industry is its involvement in the adding of values to imported as well as local motor vehicle components and accessories. Imports of motor vehicles come mostly in the form of completely-knocked-down packs and a small amount in semi-knocked-down packs. Included in these packs are the pieces of the knocked-down parts, and assembly operations are made on these pieces to produce a built-up vehicle.[2] The whole process of assembling do not end at fitting parts to one another only. Assembling operations include other works such as paint-spraying, trimming and also testing of the built-up vehicles.

In developed economies like the United States or Australia, assembly operations are capital intensive. But in developing countries, these operations should be viewed in the context of providing employment opportunities rather than capital efficiency. For in these economies labour resources exist in abundance while capital is scarce. In this event of utilizing the more abundant resources in developing economies, the industry, at the same time, helps to ease the burden of unemployment.

The end combined effect of employing local labour and resources is that the end product will be inflated with local values. Consider the case where motor vehicles are imported in the form of completely-built-up units, the economy would have lost all of these values to her exporters of motor vehicles, and hence her labour and resources would have been deprived of their utilisation as far as this industry is concerned. For example, the c.i.f. price for the completely-knocked-down pack of Anglia Deluxe Sedan is $2,481.00. The c.i.f. cost of the same model but completely-built-up is $3,377.00.[3] Thus the difference between these is the value that is added to the completely-knocked-down packs for a built-up vehicle. These values are broken down into labour costs, direct materials and supplies, depreciation of fixed assets and of overhead capital.[4]

In essence then, the nature of the industry is value-added. For a developing economy, the setting up of the assembly industry is therefore a gainful approach in that it is a foreign-exchange-saving enterprise. This can be seen when foreign exchange outlays per unit of motor vehicle will now be less than before, when imports were of completely-built-up condition.

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[2] An account in this process can be read in Tariff Advisory Board, Written and Oral Evidence, Road Motor Vehicles, Part I, under the questionnaires sent to Ford Motor Company of Malaysia, Ltd., page 6.

[3] Tariff Advisory Board, op cit., page 34.

[4] The actual value added will be greater than this difference. The reason for this is discussed under the heading Sales and Prices.

Historical development

In Malaysia the assembly industry consists of six plants assembling motor cars and light commercial vehicles, five plants assembling motorcycles and scooters and two plants assembling "heavy" machinery, such as tractors and trucks, giving a total of thirteen plants. As mentioned earlier, the assembling of trucks from semi-knocked-down condition have started since 1965 by Cycle and Carriage at Petaling Jaya. This was, however, carried on a small scale.

The initial move for the establishment of the motor vehicle assembly industry began in September 1963 (immediately after the formation of Malaysia), when the Government announced its intention to encourage the establishment of motor vehicle assembly plants in this country.[5] The first step was made when Arthur D. Little Incorporation undertook feasibility studies on motor vehicle assembly, incorporating on raw materials and labour availability, production costs, market possibilities, investment requirements and related matters that will be of use to interested entrepreneurs.[6]

Following the studies, no real action was taken until in January 1964, when a meeting of the Malaysian Motor Vehicle Assemblers Association and Government representatives was held to draft suitable definitions covering semi-knocked-down, completely-knocked-down and built-up cars, trucks and tractors.[7]

Successive meetings had taken place between the MMVAA and the Tariff Advisory Board on the question of protective tariffs and quota restrictions on completely-built-up and semi-knocked-down vehicles. The report by the Tariff Advisory Board on motor vehicle assembly led to the Government's policy announcement on May 28, 1964. The Government incentives embodied in this policy announcement will be discussed in Chapter III.

The Structure of Motor Car Assembly Operations

A list of the assemblers of motorcycles and scooters is supplied in Appendix 1.[8] The six assemblers of motor cars are:-

1. Associated Motor Industries (Malaysia) Sendirian Berhad.
   Factory site: Batu Tiga, Selangor.

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[5] Tariff Advisory Board, Written and Oral Evidence, Road Motor Vehicles, Part 1, under the section on 'Background on Motor Vehicle Assembly,' page 3.

[6] Parliamentary Debates, Vol.3, No. 1, page 213

[7] Tariff Advisory Board, op cit., under the section on 'Background on Motor Vehicle Assembly,' page 3.
See also Far Eastern Economic Review, April 28th, 1966.

[8] A list of assemblers of "heavy" machinery is not available.

2. Sharikat Fiat Distributors (Malaysia) Berhad.
Factory site: Tampoi, Johore Bahru.

3. Champion Motors (Malaysia) Sendirian Berhad.
Factory site: Batu Tiga, Selangor.

4. Swedish Motor Assembly Corporation Sendirian Berhad.
Factory site: Batu Tiga, Selangor.

5. Capital Motor Assembly Corporation Sendirian Berhad.
Factory site: Tampoi, Johore Bahru.

6. Asia Automobile Industries Sendirian Berhad.
Factory site: Petaling Jaya, Selangor.

Two points should be noted here. Firstly, these six assemblers are also involved in the assembly of commercial vehicles; one of them, that is, Sharikat Fiat Distributors (Malaysia) Berhad also undertake the assembly of scooters. Secondly, there are other entrepreneurs who undertake the assembly of passenger cars under contract arrangements with these six approved assemblers. For example, the Japanese Mitsubishi Heavy Industries Ltd. assemble their Colt 1200 and 1500 under contract arrangement with Sharikat Fiat Distributors.[9]

Table 2.1 shows the six assemblers with their authorised and paid-up capital, the current percentage of local and foreign holdings and their nature of connections with overseas companies.[10]

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[9]See The Straits Times, Saturday, April 19, 1969.

[10]Since current figures are not available this table is based on the reply of the questionnaires sent by Tariff Advisory Board in 1964 at the initial setting up of the assembly industry. Note that most of these figures are made on estimation. Caution therefore must be taken into account when making certain generalisations. The purpose of presenting this table is to give some idea of the general structure of the industry.

TABLE 2.1

TABLE SHOWING THE SIX ASSEMBLERS WITH THEIR AUTORISED AND PAID-UP CAPITAL, THE CURRENT PERCENTAGE OF LOCAL AND FOREIGN HOLDINGS AND THEIR NATURE OF CONNECTIONS WITH OVERSEAS COMPANIES

Assemblers	Authorised Capital ($)	Paid-Up Capital ($)	Current Percentage of Local and Foreign Holdings		Ownership	Nature of Connections with Overseas Companies
			Local	Foreign		
Associated Motor Industries	100,000,000	8,000,000	100	-	Jointly Owned by Motor Investments Ltd. and Wearne Brothers Ltd. on a consortium basis	Make Assembly Agreements with a) British Motor Corporation Ltd. b) General Motor Corporation c) Leyland Motor Corporation d) Regie Renault
Sharikat Fiat Distributors	5,000,000	N.A.	100	-	Limited Company	Fiat Franchise(3)
Champion Motors	50,000,000	8,500,000	N.A.	N.A.	Private Limited Company	Make Assembly Agreements with a) Volkswagenwerk A.G. Wolfsburg, West Germany. b) Rover Company Ltd. Solihull, U.K.
Swedish Motor Assemblies	10,000,000(1)	4,000,000(1)	50(1)	50(1)	Jointly owned by AB Volvo Gothenburg and Federal Auto Co. Ltd.	AB Volvo Gothenburg Franchise
Capital Motor Assembly Corporation	10,000,000	3,000,000	50(2)	50(2)	Limited Company	Opel Franchise
Asia Automobile Industries	20,000,000	2,500,000	100	-	Limited Company	Mercedes Franchise(4)

(1) Proposed.

(2) Approximation.

(3) Also assembles Mitsubishi Cars under Contract agreement.

(4) Also assembles Peugot, Mazda and BMW. See Appendix II.

N.A. = Not Available.

Compiled from Tariff Advisory Board, Written and Oral Evidence, Road Motor Vehicles, Part I.

Appendix II will show the assemblers and the basic models of motor vehicles that they are currently assembling and those models that they propose to assemble. Also shown in Appendix II are the models of light as well as heavy commercial vehicles that these assemblers undertake to assemble. It should be noted here that for some firms, assembly of heavy petrol-driven vehicles are made only on order. In the assembly of motor cars, there are 68 base models excluding variants for the six assemblers.

The Sources of Materials

The sources of materials or components used in the assembly are basically of two types. The first is the imported materials and the second is local materials.

Some of the imported components are: body metal penals, deck lids, hoods and doors, glass, door mechanism, steering column, instrument panels and decorative penals, brake instruments, springs, axles, engine component parts, wheels and seats.[11] Local components comprised tyres, tubes, batteries, paints or enamel, wiring, soft trims such as headlinings, crash pads, door panels, front and rear panel trays, upholstry and a few others.[12] However, not all the listed local component parts are used by some assemblers; for some, their models require imported component parts. This may be due to different specifications between foreign and local parts and also may be due to the requirements set out by the manufacturers themselves.

Imported component parts come from various countries, depending on the makes of the vehicles. These countries can be observed in Table 2.1 Briefly, from Table 2.1, there are six countries from which these parts come from. They are United Kingdom, Italy, West Germany, Sweden, Japan and Australia. Local component parts on the other hand come from a number of small establishments as indicated in the Survey of Manufacturing Industries 1967.[13]

Ownership and Control

It will be thought that since assembly is made on the basis that materials must be imported from overseas, the firms that undertake assembly operations must be foreign owned. This however, is not applicable to Malaysia since her Government encourage manufacturing activities to be undertaken either with wholly local capital or under a joint-venture basis. Thus from Table 2.1, it can be observed that some of the firms are set up on a joint-venture basis out of foreign as well as local capital. It will be observed also that there is no hundred per cent foreign-owned firm.

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[11] Tariff Advisory Board, Written and Oral Evidence, Road Motor Vehicles, Part 1.

[12] These will be observed in Chapter IV.

[13] See Chapter IV.

But the nature of connections with overseas companies as seen in Table 2.1, will reveal certain foreign control over the standards of the products. All manufacturers require a certain standard in their products so that these assemblers will have to see to the exact specification of the manufacturers. Thus manufacturers require that local component parts must meet certain acceptable standards before they can be put to use in their models.

Production

Among these firms, the date of commencement of production varies. This is largely due to the differing dates of incorporation, and thus the setting up of the plants. In some cases, the late delivery of highly specialised machinery hinders early undertaking of assembly activities. The reason as to why delivery of equipment is slow is that other countries are also in the market for similar equipment. Moreover, there is also considerable work done on construction, which, in a plant of the size envisaged will take considerable time.

Production capacities based on single shift for these plants are shown in Table 2.2.[14] As shown in the table, total production capacities amount to 26,540 units. Comparing with the 1968 registration of motor cars and commercial vehicles in Table 1.3, this total amount of production capacities meets only about 9.4 per cent of the annual demand for motor cars and commercial vehicles. This small figure is because the industry is still in its infancy. At this stage, it takes about 90 man-hours to assemble one vehicle. Subsequently, this time would be reduced to 50 man-hours when running at full capacity.[15]

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[14] Through actual assembly experience it has been found out that 3,000 units of vehicle annually is the minimum volume necessary for the economic operation of an average sized assembly plant. See Tariff Advisory Board, Written and Oral Evidence, Road Motor Vehicles, Part II, pages 9 and 28.

[15] Malay Mail, 22nd August, 1968.
It will be interesting to note here that in Australia, with automated machines, the minimum time to assemble a vehicle is about 27 man-hours.

TABLE 2.2

PRODUCTION CAPACITIES *

Assemblers	Units
Associated Motor Industries	7,000
Sharikat Fiat Distributors	3,600
Champion Motors	7,200
Swedish Motor Assemblies	2,500
Capital Motor Assembly	3,840
Asia Automobile Industries	2,400
Total	26,540

* Based on single shift.

Source: FIDA, Literature on Automotive Assembly Industry, 1968

Actual production figures for 1968 and 1969 are given by the Malaysian Motor Vehicle Assemblers Association.[16] In 1968, a total of 8,704 units are recorded by the members of MMVAA as having been assembled. Assembly volume in the last quarter of 1968 was greater than the first quarter of the same year. In the first four months of 1969, passenger car assembly is recorded as approximately 6,500 units.

The range of vehicles assembled includes almost all types of road transport and similar in range to those formerly marketed by the retail outlets. This is because the relationship between the distributors and the manufacturers is not broken up with the advent of the assemblers in the motor trade.

Referring to Appendix II again, and bearing in mind that some of the various models listed include those which the assemblers have scheduled for local assembly, it will be clear that whether these models will actually be assembled is a question which can only be resolved when assembly operations commence on the various models. Nevertheless, it is

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[16] It is understood that these figures will also be published in the Bank Negara Report.

a safe assumption that within a relatively short period of time, the number of models would have reduced and only those in substantial public demand and which can economically be assembled will continue to be carried on by the assemblers.

As regards to models with very low demand and highly specialised vehicles such as those specified in Customs Notice No. 1, are not assembled. These vehicles will be imported completely-built-up, as allowed for by the government.

Sales and Prices

The assembled vehicles are sold through distributors and these distributors operate through a chain of branches scattered all over Malaysia. In some cases sales are also made through authorised dealers. These authorised dealers are appointed by the respective assemblers and they order passenger cars and commercial vehicles for retailing directly from the assemblers. Some of these dealers have been assigned special areas of sales and service responsibilities. The authorised dealers are franchised by the assemblers to sell passenger cars and commercial vehicles either wholesale or retail.

Prices will depend to a large extent on the eventual volumes of production of the various models, because the high incidence of fixed costs will be spread over these volumes. Again, citing the example of Anglia Deluxe Sedan,[17] the c.i.f. price for the completely-knocked-down pack is $2,481.00. Total labour costs amount to $106.00, direct materials and supplies amount to $203.00, depreciation of fixed assets amount to $39.00 and overhead costs amount to $745.00. The total ex-factory cost of this assembled unit therefore amounts to $3,574.00. But the c.i.f. cost of an identical completely-built-up model to the distributors is $3,377.00. That is to say, the locally assembled unit is $197.00 more expensive than the identical unit brought in built-up condition.

In fact it is estimated that the basic price of locally assembled vehicles will be increased by about 10 to 15 per cent of the price of the imported completely-built-up units.[18] This may be due to low volume production, and also due to local content that will be used in the assembly.

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[17] Tariff Advisory Board, Written and Oral Evidence, Road Motor Vehicles, Part II, page 34.

[18] Tariff Advisory Board, Written and Oral Evidence, Road Motor Vehicles, Part I.

CHAPTER III

GOVERNMENT INCENTIVES

In this Chapter, discussion will be made on the incentives that are offered to the assembly of motor vehicles industry. The provision of infrastructural facilities, internal security, such as guarantee against expropriation and so on are, broadly speaking, incentives. These, however, have been mentioned in Chapter I, and therefore will not be discussed again here.

For the assembly industry, there are two main incentives, viz; tariff protection, and import licensing and quota restrictions. It should be noted that completely rigid definitions of completely-knocked-down, semi-knocked-down and completely-built-up, have been made by the government for the purpose of laying down these incentives. This is in view of having to recognise which packs will fall under each of these definitions and quality for the incentives. Where any vehicle do not conform to any of the definitions laid out, for example, special purpose motor vehicle, it will be the importers' or assemblers' responsibility to prove to the Minister of Finance, that this particular vehicle should be admitted under the relevant definition.

Tariff Protection

The import duty imposed on completely-built-up motor cars is 35 per cent ad valorem, while the import duty imposed on completely-built-up commercial vehicles is 20 per cent ad valorem. The import duty on completely-built-up motorcycles and scooters is 10 per cent ad valorem. All completely-knocked-down packs are allowed entry duty free, except for those parts that are manufactured locally, for example, starter cables, tyres, tubes, batteries and so on.

Table 3.1 traces the development of the imposition of import duty, surtax and ad valorem registration fee (AVRF), in four stages. It will be seen that in Stage 1 (prior to 19.8.66) there was no imposition of import duty and surtax on all completely-built-up vehicles. The only tax imposed was the AVRF, and here there was a preferential treatment on vehicles of Commonwealth origin. Thus the imposition of AVRF was mainly for government's revenue, and over the preference in favour of Commonwealth countries.

It will be seen also in Stage 1, for every duty listed, the completely-knocked-down packs for motor cars and motorcycles and scooters were not applicable. For completely-knocked-down commercial vehicles, however, there was a preferential treatment on commercial vehicles from commonwealth countries, which bear no AVRF. Whereas, for commercial vehicles of non-commonwealth origin, there was an imposition of 15 per

cent AVRF. This imposition of AVRF on commercial vehicles completely-knocked-down was in view of locally assembled trucks (Mercedes Benz) by Cycle and Carriage. Hence, account for the AVRF on the completely-knocked-down commercial vehicles.

TABLE 3.1

TABLE SHOWING IMPORT DUTY, SURTAX, AND AVRF ON MOTOR CARS, COMMERCIAL VEHICLES, AND MOTORCYCLES AND SCOOTERS

STAGE I. PRIOR TO 19.8.66

Items	Description	Import Duty	Surtax	AVRF
Motor Cars	C.B.U.	0%	0%	10% Commonwealth 25% Non-Commonwealth
	C.K.D.	N.A.	N.A.	N.A.
Commercial Vehicles	C.B.U.	0%	0%	0% Commonwealth 15% Non-Commonwealth
	C.K.D.	0%	0%	0% Commonwealth 15% Non-Commonwealth
Motorcycles and Scooters	C.B.U.	0%	0%	0% Commonwealth 15% Non-Commonwealth
	C.K.D.	N.A.	N.A.	N.A.

STAGE II. FROM 19.8.66. TO 19.1.67

Items	Description	Import Duty	Surtax	AVRF
Motor Cars	C.B.U.	0%	0%	25%
	C.K.D.	N.A.	N.A.	10%
Commercial Vehicles	C.B.U.	0%	0%	15%
	C.K.D.	0%	0%	0%
Motorcycles and Scooters	C.B.U.	0%	0%	15%
	C.K.D.	N.A.	N.A.	15%

N.A. = Not Applicable

C.B.U. = Completely-built-up

C.K.D. = Completely-knocked-down

STAGE III FROM 20.1.67 TO 18.1.68

Items	Description	Import Duty	Surtax	AVRF	Total
Motor Cars	C.B.U.	5%	2%	25%	32%
	C.K.D.	0%	2%	10%	12%
Commercial Vehicles	C.B.U.	5%	2%	15%	22%
	C.K.D.	0%	2%	0%	2%
Motorcycles and Scooters	C.B.U.	10%*	2%	20%	32%
	C.K.D.	0%	2%	20%	22%

* with effect from 14.12.67

STAGE IV ON AND AFTER 19.1.68

Items	Description	Import Duty	Surtax	AVRF	Total
Motor Cars	C.B.U.	35%	2%	10%	47%
	C.K.D.	0%	2%	10%	12%
Commercial Vehicles	C.B.U.	20%	2%	15%	37%
	C.K.D.	0%	2%	15%	17%
Motorcycles and Scooters	C.B.U.	10%	2%	20%	32%
	C.K.D.	0%	2%	20%	22%

C.B.U. = Completely-built-up

C.K.D. = Completely-knocked-down

Source: FIDA., "Summary showing AVRF and Customs Duties affecting Motor cars, Trucks and Motorcycles for ease of reference."

In Stage II, with the abolition of the Commonwealth preference on 19.8.66, the completely-knocked-down commercial vehicles were exempted from any duty, whereas, AVRF of 15 per cent was imposed on the completely-built-up commercial vehicles. In this second stage, it will be noticed that government's encouragement for local assembly began to take shape. For completely-knocked-down motor cars, the AVRF was 15 per cent less than that of completely-built-up motor cars, although for motorcycles and scooters the AVRF on completely-knocked-down and completely-built-up were the same. The reason for this was that there was no large scale undertaking of assembly operations of motor cycles and scooters.

Assembly operations had been undertaken initially during Stage III, thus for motor cars completely-built-up, the import duty was 5 per cent, with a surtax of 2 per cent and an AVRF of 25 per cent, giving a total of 32 per cent. Whereas, for completely-knocked-down motor cars, entry was duty free, but surtax was imposed at 2 per cent and AVRF was imposed at 10 per cent, giving a total of 12 per cent. There was therefore, a 20 per cent difference in tax in favour of completely-knocked-down motor cars.

For completely-built-up commercial vehicles, there was an imposition of 5 per cent import duty, 2 per cent surtax and 15 per cent AVRF, giving a total of 22 per cent of tax. Whereas, for completely-knocked-down commercial vehicles, only surtax was imposed at 2 per cent. As such, the completely-built-up commercial vehicles were faxed 20 per cent higher than that of the completely-knocked-down.

For motorcycles and scooters, however, the import duty of 10 per cent was imposed on completely-built-up units on 14.12.67. The reason why the import duty on completely-built-up motorcycles and scooters was imposed much later was that it was decided to encourage local assembly of motorcycles and scooters as well. With this imposition of 10 per cent import duty, there is a difference of 10 per cent in favour of completely-knocked-down units.

In the fourth stage, as local assembly gained momentum, it requires more protection. For completely-built-up motor cars, the import duty has now been increased to 35 per cent, and the AVRF reduced to 10 per cent. With surtax remains at 2 per cent, the total tax imposed on completely-built-up unit is 47 per cent. For completely-knocked-down units, there is no change in tax structure. Therefore, the completely-knocked-down is now 35 per cent less than the completely-built-up unit. This 35 per cent is actually the import duty imposed on completely-built-up motor cars, and therefore offers tariff protection to completely-knocked-down packs.

Similarly, completely-built-up commercial vehicles are imposed 20 per cent import duty, while the completely-knocked-down units enter free of duty. The imposition of this 20 per cent import duty on completely-built-up commercial vehicles will offer protection to the locally assembled commercial vehicles. Again, for completely-built-up motorcycles and scooters, the import duty is 10 per cent while the completely-knocked-down enter free.

It should be noted here that there is no change in tax structure for motorcycles from Stage III to Stage IV. It should be noted also that in Stage IV although there is an increase in import duty on completely-built-up commercial vehicles, there is at the same time an increase in AVRF on completely-knocked-down units, giving a total difference in tax of 20 per cent. Comparing with Stage III, it will be noticed that there is no actual increase in the difference of tax between the completely-built-up and the completely-knocked-down commercial vehicles. This will recall the statement made earlier in Chapter II that the assembly of motor cars is more important than that of motorcycles and commercial vehicles.

Import licensing and quantitative restrictions

In order to encourage the purchase of locally assembled vehicles, import licensing and quantitative restrictions are imposed on the imports of all built-up vehicles. Quotas have been allocated on the basis of the importer's proved imports into the country, during the years 1964 and 1965 and will be renewed periodically. The quota for completely-built-up motor cars is 110 per cent while that of completely-built-up commercial vehicles is 80 per cent. In 1964, import of motor cars amounted to 19,231 units while in 1965 it amounted to 18,837 units. The quota will be 110 per cent of the average of these two figures. Thus the quota for 1966 for completely-built-up motor cars was 20,937 units.

For the purpose of this quantitative restrictions, the year is divided into two six-months periods. At the end of each period, the restrictions are subject to review so that any changes that are deemed necessary will be put into effect. Thus it cannot be determined what the trends of quota restriction will be, since the policy is implemented on a "trial and error" basis. Nevertheless, it is a safe assumption that the quota will be gradually decreased.

To implement this quantitative restrictions, all motor vehicle importers are required to obtain import licenses which are issued free and which must be renewed annually.

The imposition of import licensing and quantitative restriction serves two main purposes. Firstly, to ensure that hoarding is not undertaken. Hoarding in this sense will be in the form of importing more built-up motor vehicles to gain advantage over the increased price of locally assembled motor vehicles. Local assembly of vehicles result in higher cost per unit due to high fixed costs and also expensive local content. In view of this dealers may still prefer to import completely-built-up vehicles, and this will be detrimental to the assembly industry more so during its infant stage.

Without quantitative restrictions dealers may import completely-built-up vehicles from their customary exporters in large numbers, and sell these vehicles at least at a price equivalent to those locally assembled. Hence, this works in two ways: that the dealers make tremendous profits and that locally assembled vehicles have to face the competition put up by the imported completely-built-up vehicles. There is always a certain degree of prejudice among consumers in preference of the imported

completely-built-up vehicles, the reason being that the consumers think that locally assembled vehicles do not attain a high standard as that of foreign assembled. As such the imported completely-built-up units would have greater advantage over the locally assembled. This is, however, undesirable because it would hinder the growth of the industry.

The second purpose is to induce manufacturers and dealers to undertake local assembly. The desirability of local assembly of motor vehicles have been discussed in Chapter I; it is in view of this desirability that the government encourages local assembly. It will be noted that quantitative restriction came into force on February 1966, at which time local assembly has just begun. The purpose therefore was to induce more assemblers to enter into this industry. At present the government has licensed 13 firms for assembly of motor cars, commercial vehicles, motorcycles and scooters. This, however, is the final limit, but dealers or manufacturers who wish to set up assembly operations in this country can do so on a contract basis with these assemblers.

The main purpose of inducing more assemblers to undertake assembly operation domestically is to limit and consequently reduce the imports of completely-built-up units and at the same time increase the number of locally assembled vehicles without falling short of demand for motor vehicles. Considering that the demand for all motor vehicles in this country increases by some 34 per cent[1] annually, there is therefore a necessity that the number of locally assembled vehicles will have to be increased by more than the proportionate decrease in imports of completely-built-up vehicles each year.

It must be noted that quantitative restrictions do not envisage a restriction of the number of makes imported. Rather, it is the total number of completely-built-up motor vehicles that are allowed to be imported. Thus it is left to the discretion of the firm to import the number of makes so long as its total imports do not exceed the limit.

Thus for firms that are in existence for a long time, quota restriction do not affect them as much as are the newly established firms. The latter are allowed certain quotas, based arbitrarily, since they exhibit no past record of their capacity.

With regards to the import of used vehicles, these are allowed subject to license. The number of used vehicles imported by or through distributors will be deducted from the respective quotas allocated to the distributors for their imports. As for the case of special purpose motor vehicles, for example, ambulances and fire-engines, or as specified in the Customs Notices, quantitative restrictions are not applied. The reason for this is that their market demand is very small compared to the demand for other vehicles.

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[1] See Chapter I

Other incentives

There are other government incentives that are provided to the assembly industry by incidence of government's programme to speed up industrial development. These incentives are embodied, for convenience and ease of reference, in a single legislation called the Investment Incentives Bill.

The Bill came into force on January 1, 1968. Broadly speaking, the Bill provides for two types of investment incentives: primary incentives in the shape of pioneer status and tax credit for the initial setting up of manufacturing facilities: and export incentives in the form of deductions for overseas promotion, accelerated depreciation allowances, export allowance, and payroll tax refund.

The assembly industry do not qualify for pioneer status nor the investment tax credit, the latter because, firms that make up this industry have been registered before this Bill was legislated.

The incidence of this Bill now comes from a range of export incentives. The first of these incentives relates to deductions for certain outgoings and expenses for the promotion of exports. Such expenses must be those made by these firms to persons not resident in Malaysia. However, expenses such as those incurred on advertising, test drives, conducting export market research and so on are made by the manufacturers rather than the assemblers. As such there is little left of this incentive.

Another incentive is given in the form of an export allowance, whereby deductions are allowed for income tax purposes of 20 cents for every dollar of expenses incurred in wages and purchases of locally manufactured component parts and resources for use in the assembly operations. The formula used will be:

$$\frac{(VE) - (AV3)}{GS} \times 20 \text{ cents}$$

where VE = Value of export sales in basis period.

AV3 = Average of export sales for 3 preceding years, and

GS = Gross sales for basis period.

A further export incentive is given in the form of an accelerated depreciation allowance of 40 per cent per annum in respect of capital expenditure incurred in acquiring efficient and up-to-date machines so as to be able to compete successfully in export markets. But to qualify for this incentive, the firms must export more than 20 per cent by value of the assembled vehicles. Since these firms have not expanded their output for export markets, they have not managed to export more than

20 per cent by value of their output.[1] Hence, they may be eligible for this incentive at a later stage.

To sum up, government encouragement ~~encouragement~~ has been in the main to make the assembly industry a viable industry. Since the industry is an infant, protection is needed to compete with the same product that is cheaper and having public prejudicial preference. Hence tariff and quantitative restrictions are imposed on completely-built-up vehicles for the purpose of discouraging and limiting imports of completely-built-up vehicles. This limitation will be reviewed periodically, and will be revised in such a way that the number of completely-built-up vehicles imported will be reduced annually. This progressive reduction in imports of motor vehicles completely-built-up will comprise less and less of the total supply of motor vehicles. At the same time, it is expected that the supply of locally assembled vehicles will increase as the industry becomes more efficient so that they will hold a greater proportion of the market than is envisaged at present.

Incentives, like deductions for promotion overseas, export allowance and accelerated depreciation allowance are offered to this industry so as to encourage exports to neighbouring countries.

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[1] To the writer's knowledge, only one firm has managed to export its output but by less than this percentage. The firm is Swedish Motor Assemblies Sdn. Bhd. which exports a small percentage of its output to Thailand, annually.

CHAPTER IV

EVALUATION

The preceding chapters have been discriptive for the major part with a few analyses made in order to bring to light the theoretical aspect of this industry. It will now be the object of this chapter to attempt at evaluating the establishment of this industry.

Evaluation in this exercise consists of an appraisal or a critical analysis of certain aspects of this industry. To do this, it is necessary that recognition be made of what are the advantages and disadvantages of the setting up of this industry, or in technical term, of the allocation of resources towards this end. By weighing the advantages as against the disadvantages, certain conclusions may be made.

However, it must be recognised that the conclusions drawn may not show the true picture. For the evaluation criterion is made on the basis of value judgements of the advantages and disadvantages of the industry, which are often contradictory. A good evaluation criterion is made by expressing the advantages and disadvantages in numerical coefficients, and from these coefficients accurate comparison may be made: the higher the coefficient, the more favourable is the project under review as against other projects. In this case, it will be necessary also to make a comparative appreciation between the possible uses of resources in this particular project and other projects. Hence a more accurate conclusion may be drawn from this method.[1]

Nevertheless, in a small exercise such as this, it is not possible to assess the economic value of this industry by assigning numerical coefficients as well as comparing the various possible uses of the same amount of resources. Therefore, the practical aspect of evaluating this industry lies outside the scope of this exercise. Evaluation will be made only on the basis of analysing the advantages and disadvantages of this industry.

It will be noted that in Chapter I, some attempts to emphasize the advantages were made; it was always implied that the setting up of the assembly industry is favourable. Hence for the major part of the

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[1] The technique of project evaluation is described in Manual on Economic Development Projects, United Nations Publications, Sales No. 58.11.G.5., 1958.

present chapter, a critical analysis of these advantages will be made, so that at the same time their disadvantages are brought out to light. The analysis therefore runs in terms of:

i) the demand for motor vehicles,
ii) foreign-exchange-savings,
iii) employment opportunities, and
iv) the development of ancillary industries.

i) The demand for motor vehicles

As discussed in Chapter I, between 1963 and 1968, the rate of growth of the demand for motor vehicles as a whole is about 49 per cent. The annual rate of growth of the demand for motor vehicles based on the 1967 - 1968 figures is about 10 per cent. Similar increase can be observed in other developing countries such as Thailand, which has an increase of about 7.5 per cent based on the year 1961 - 1962,[2] and Philippines, which has an increase of about 9.65 per cent to 9.05 per cent based on the 1960s figures.[3]

The demand for motor vehicles originates from two sources: an increase in the number of motor vehicle ownership, and the need to replace worn out motor vehicles. The increase in the number of motor vehicle owners can be seen by the fact that the standard of living increases enabling more people to own motor vehicles, more financial facilities to meet requirements of buying motor vehicles, and business booms such as the increase in the price of rubber, to which the demand for motor vehicles will be greatly enhanced. The need to replace worn-out motor vehicles can be seen by the fact that the 1950s motor vehicles are being in less use on Malaysian roads today. Assuming that the vehicles last for a minimum of five years, the replacement market will account for about 13 per cent of total demand annually.[4]

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[2] Economist Intelligence Unit, Motor Business, No. 42, April 1965.

[3] Economist Intelligence Unit, Motor Business, No. 50, April 1967.

[4] This calculation is based on Table 1.3. Assuming that the vehicles last for a minimum of 5 years, this will mean that vehicles bought in 1963 can no longer be used by 1968. This amount will be replaced in 1968 and so from the replacement market. Thus the percentage of the replacement market will be:

$$\frac{\text{The total of vehicles no longer in use (i.e. 1963's demand)}}{\text{The demand for motor vehicles in the current year (i.e. 1968's demand)}} \times 100$$

Thus it can be safely assumed that the upward trend of the number of motor vehicles in use will continue. The reason for this is also due to certain other factors such as the displacement of population from the rural towards the urban areas, resulting in increased demand for public transport, and the increase in the number of family units owning more than one car as a result of the rise in incomes.

At present local demand is largely satisfied by imports of new motor vehicles. As reported by the MMVAA[5] in 1968, a total of 8704 units are recorded by their members as having been assembled. Retailers report new model sales in the same period as approximately 13,000 units. Thus it is evident that the proportion of sales made were from units imported in built-up conditions.

However, imports of completely-built-up conditions are subjected to quantitative restrictions which are reviewed periodically, so that the supply of motor vehicles imported completely-built-up decreases annually. While at the same time, the assembly plants will increase production to keep pace with the increasing demand for motor vehicles. During the first four months of 1969, passenger car assembly alone is recorded as approximately 6,500 units, showing[6] a tremendous increase over that of the 1968 figures for the same period.

But locally assembled vehicles not only face competition against vehicles imported completely-built-up, which, even though subjected to import duty, still holds part of the market, but they also face serious competition against the used vehicles trade. Lower prices fetched by second-hand vehicles, especially passenger cars, will discourage car owners intending to change to new models from doing so. The depression in new motor trades over the years 1966 - 1967[7] indicates a rising cost of motoring.[8] Thus owners will either keep to their old models, or purchase second-hand vehicles rather than new ones. In fact, there is a large supply of used vehicles especially passenger cars in Malaysia. Indonesia used to be Malaysia's biggest market for second-hand passenger cars; however, she had then stopped importing second-hand passenger cars as a result of the imposition of import permits on cars by her government. Even Thailand was not importing as many second-hand passenger cars from Malaysia as she used to: she is now restricting imports to certain popular models.

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[5] Malaysian Motor Vehicle Assemblers Association. See footnote 16, Chapter II.

[6] Malaysian Motor Vehicle Assemblers Association. See footnote 16, Chapter II.

[7] Malay Mail, 7th November, 1968.

[8] This perhaps may assume in the form of increases in the prices of motor vehicles such as affected by the abolition of preferential treatment on commonwealth vehicles, or increases in the Road tax and so on.

The presence of used vehicle trades as well as the imports of new vehicles completely-built-up captures part of the market for motor vehicles. Thus it cannot be said that there is a wide market for motor vehicles at present. But since imports of completely-built-up units will decrease and allowing for depreciation on vehicles now in use, as well as increases in "consumer units"[10] there is therefore a wide market in the future.

ii) Foreign-exchange-savings

As discussed in Chapter I, the establishment of this industry will save foreign exchange. The extent to which foreign exchange is saved will depend on the amount of value-added in local assembly. However, a further analysis of this situation will show that this case is misleading. What actually happen is that under the guise of foreign-exchange-savings, it is a foreign-exchange-"loosing", as this industry "opens the door" for a foreign exchange drain. In a developing country like Malaysia where exchange control is being used to conserve scarce supplies of foreign exchange, the case of this industry being a foreign-exchange-loosing can be seen clearly.[11]

Assuming that Malaysia customarily imports 10,000 units of motor vehicles annually, and that this costs her a total of foreign-exchange of $50 million. Now, assuming that the assembly industry that has been set up assembles the same 10,000 units domestically. The payment out of foreign exchange will only be, say, $40 million, for the component parts occuring in the completely-knocked-down form, indicating a save in the foreign exchange outlay of $10 million.

Next, it will be assumed that this industry expands so that it will now assemble 15,000 units of vehicles annually. At the existing cost per unit of completely-knocked-down vehicle, the total foreign exchange incurred will now be $60 million. It will now be seen that the assembly industry drains out foreign exchange to the amount of $10 million. It will now be realized that this industry is a foreign-exchange-loosing. This situation can be grave when it will be recalled that Malaysia adopts a foreign exchange control, because foreign exchange is scarce, and this extra cost incurred over foreign exchange could have been put to a better end.

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[10] By "consumer unit" is understood as the group of related persons who pool their income for larger expenditure items. In the case of a married son and his wife living under one roof with his parents, this is only one family but two "consumer units". The consumer unit is therefore somewhat smaller than a family and its total will be higher than the total number of families in a given country.

[11] Walter Krause, Economic Development, Wadsworth Publishing Company, Inc., Bellmont, California, Second printing, June 1962.

But as seen, this extra foreign exchange incurred is all to the end of meeting consumers demand for motor vehicles. Then it would be that any foreign exchange used to satisfy consumer demands means that much less foreign exchange is available for securing developments either of capital goods for new industry or of essential raw materials of the already existing industry. Thus the main purpose of establishing this industry to save foreign exchange has now reversed to become a device for catering to growing consumer demand. In this way it breaks the exchange control regulations which are at first intended to curb consumer demand so as to place more foreign exchange at the disposal of developing other sectors.

But it must also be realised that the demand for motor vehicles increases by certain percentage, as indicated in Chapter I. Therefore, allowance must be made of the increase in imports by this percentage, to meet the increase in demand. As such whether the assembly industry is established or not, foreign exchange outlay has to be increased. Where the assembly industry expands production to the extent that output exceeds annual demand, then, this has become undesirable. The case of foreign-exchange-loosing is now evident at this stage.

It may now be argued that even though local assembly may exceed local demand for motor vehicles, the excess amount can be exported to neighbouring countries, for example, Indonesia and Thailand, and therefore now become foreign-exchange-earning. It will now be admitted that foreign-exchange-earning is evident in this case but a further analysis will reveal certain drawbacks.

The analysis is based on the relative grade of Malaysia's currency with that of her neighbours to whom Malaysia exports the assembled vehicles. Assuming that the neighbouring country has a lower grade of currency; (that is to say, inconvertible, vastly overvalued, and not sought after), and that there is no political stability in this neighbouring country.[12] Payments for assembled vehicle imported by this country is made with her own currency, which is then converted in Malaysia for Malaysia's currency, followed next by a remittance from Malaysia in payment for the knocked-down imports of foreign origin (along with remission of profits). The effect therefore is to impose a foreign exchange drain upon Malaysia, even though it is her neighbours' demand that are being serviced. As an offset, Malaysia ends by holding claim to her neighbours' currency. But, at the same time, she might want to put this amount of currency for other uses. Hence, this is the drawbacks when exports of the assembled vehicles are made to neighbouring countries.

There are therefore two types of problems. The first is that this industry is actually a foreign-exchange-loosing in the long run. Secondly, even if output is directed towards earning foreign exchange, by exporting the assembled vehicles, currency problem is bound to exist. The idea that the establishment of the assembly industry will save foreign exchange is therefore not realistic.

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[12] A good example of such country is Indonesia.

iii) Employment opportunities

The programme of setting up an assembly industry is viewed in the light of government's intention of providing employment. Unlike in developing countries, the assembly industry in Malaysia is labour-intensive and therefore offers a sizeable amount of jobs. It was estimated that the number of people by which this industry will employ is between 2,000 to 2,500 workers.[13]

Table 4.1 shows the 1964 estimates of employment for the six motor car assemblers. Since actual figures for employment is not available, it is possible to revert to estimation of the number of employees made by the assemblers at the time when they speculate upon setting up assembly plants in Malaysia. It must be realized that these figures will have changed over time, but the proportion of employees in the five classification of work (See Table 4.1) may have changed very little. The main idea is to see what percentage involves in production and what percentage in administration.

Before further discussions can be made, it is necessary to clarify what are jobs classified under direct, indirect, and miscellaneous. Direct jobs are those which contribute directly to production. These include the body-builders, spray painters, and trims and finals. Indirect jobs are those which contribute indirectly to production. These include the store-keepers, material handlers, production superintendents and so on. Miscellaneous jobs are those that do not come under the above two, for example, sweepers, gardeners, security-guards and so on.

From this and also as is evident in Table 4.1, discussions on employment opportunities can therefore be made on two basis: from the technical point of view and from the administrative point of view. The technical aspect of employment includes primarily that of direct and indirect employment, that is to say, those that are involved in the actual assembly works. The administrative divisions on the other hand includes the plant manager, executives, accountants, plant engineers and so on.

From Table 4.1 it can be seen that the technical division comprised about 67 per cent of the total work force in the industry. This is a comparatively great figure and it was anticipated that it is this particular division that will provide greatest employment opportunities in this industry.

A breakdown of the various job titles with the corresponding assembly processes will indicate the tremendous amount of employment in this division.

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[13] Tariff Advisory Board, Written and Oral Evidence, Road Motor Vehicles, Part II, page 61.

TABLE 4.1.

MALAYSIA: ESTIMATES OF EMPLOYMENT IN MOTOR VEHICLES ASSEMBLY INDUSTRY 1964

Assemblers	Production				Selling and Distribution		Administration		Miscellaneous		Total
	Direct		Indirect								
	M'sians	Others	M'sians	Others	M'sians	Others	M'sians	Others	M'sians	Others	
Associated Motor Industries	321	-	241	-	N.A.	N.A.	30	8	-	-	600
Sharikat Fiat Distributors	150	-	40	1	N.A.	N.A.	20	1	12	-	224
Champion Motors	155	-	34	7	N.A.	N.A.	28	2	15	-	241
Swedish Motor Assemblies	90	1	112	-	29	-	23	-	-	-	255
Capital Motors Assembly Corporation	50	-	25	-	10	-	30	-	15	-	130
Asia Automobile Industries	160	-	39	1	80	-	236	-	21	-	537
TOTAL											1,987

N.A. = Not Applicable

For certain firms, selling and distribution are undertaken by Marketing Companies.

Compiled from Tariff Advisory Board, Written and Oral Evidence, Road Motor Vehicles, Part I.

(a) Body-build and metal finish

Body metal penals are assembled in specialised tooling fixtures by fusing specific sections of the penals together. This is accomplished by the use of high ampere spot-welding and electrical arc-welding equipment. Gas-welding, lead-wiping and metal finish are carried out to ensure the body is to the standard required for painting. Deck lids, hoods and doors are hung and fitted.

Labour requirements are: panel beaters, spot welders, arc and gas-welders, metal finishers, oxy and gas-welders, and stock chaser.

(b) Paint shop

In the paint shop, the vehicle is pre-cleaned and physically inspected for any imperfections and blemishes. After having processed through the Phosphate System and Dry-off oven, the unit proceeds to the Sealer and Tack-off area where joints are sealed and the unit is thoroughly cleaned to enable the two coats of red and grey primer to be applied. Black sealer is then applied to all floor joints to ensure complete sealing from water entering. An underbody spray is applied to the underside of the floor pan. The unit is then processed to a Wet Sand Deck where a sanding operation is performed in preparation for the final exterior colour coat. The unit is then thoroughly cleaned and routed into the Enamel Spray Booths where a five-coat application is applied. The unit is then processed into the Enamel Bake oven, and a final paint inspection is made subsequently.

The various labour requirements in the paint shop are: the cleaners, wet rubbers, prime sprayers, spray painter (for colour), process technician, and panel beaters (for rectification).

(c) Trim and finals

The unit is then processed through the trim area where all hardwares (such as, glass, door mechanisms, steering column, wiring, instrument and decorative panels) and soft trims (such as headlinings, crash pads, door panels, front and rear panel trays) are placed into position. The final underbody operation to fit brake piping and clips, springs, sub-assembled parts and rear axles are carried out. Engine component parts are decked to the chasis. The exhaust system, balanced wheels, steering wheels, mats, and trimmed seats are fitted. The engine is checked and the whole unit thoroughly inspected before road test. All repairs, mechanical or paints, are carried out, and the unit is checked, rechecked and tested to the requirements of the manufacturers.

Labour requirements are: the stock chasers, trimmers, assemblers, mechanics, charge-hands, auto electricians, car wiremen, cushion-builders, assembler-trimmers, and seat assemblers.

Besides the above labour requirements there are also those indirectly involved in actual production such as the store clerk, shipping clerk, stores receiving clerk, material handler, unboxers, store foremen, forklifters and so on. Together, they comprise about 15 per cent of the total estimated work force.

Hence, there is a quite substantial amount of labour required in the technical division. For the recruitment of labour in this division, the usual qualifications required are either academic (that is, qualification among the lower secondary schools) or technical qualification. While the former do not possess technical skills, since they come directly from day schools, the latter do have, either semi-skills or skills. The semi-skilled would perhaps come from technical schools where more times are spent on technical training, such as the Monfort School for orphanage.

The skilled workers are those who have spent most of their times on mechanical repairs and these come from the repair shops not only of the big motor firms but also of the small workshops scattered all over urban areas.

Job allocation are therefore depending upon the technical skills of these workers. It can be safely envisaged that those skilled and semi-skilled workers are given the most sophisticated and intricated jobs, while the unskilled may be given the work of chargehands, store clerks and so on. Nevertheless, for the semi-skilled and unskilled workers direct training and supervision are provided by the assemblers and the supervisors are usually foreigners with technical know-how, in the early stages of assembly operations. Training is in the form of on-the-spot training and maximum skills will therefore be acquired through time.

The second group, that is the administrative group comprised about 18 per cent of the total estimated work force in this industry. The establishment of this industry would initially require foreign expatriates to manage the smooth running of the firms in the industry. This is because of the difficulty in finding local managers who are capable of administrating the assembly plants which are an entirely new undertaking. A first class general manager of an assembly plant has probably reached the age of forty-five having spent all his working life, after leaving university, in a manufacturing company's assembly plant.[14] Thus graduates with good honours degree in Engineering or Economics may have to start right from the bottom and work up the

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[14] See Tariff Advisory Board, Written and Oral Evidence, Road Motor Vehicles, Part II, page 69.

administrative level. The general manufacturing manager has to know every operations in the plant, and this can only be acquired through hard experience.

Hence there must be a change-over of foreign expatriates to local managers and this must be done early to achieve the objective of providing employment opportunities. It was estimated that the minimum period for change-over was about 5 to 10 years.[15] Nevertheless, the change-over would be done by stages, depending on the efficiency of local labour.

To sum up, the total employment opportunities is very great in this industry.

iv) The development of ancillary industries

As noted earlier in Chapter I, the establishment of the assembly industry will have repercussions in two general directions: "backward linkage" between certain industries and a forward outlook into the possibilities of establishing ancillary industries. These backward and forward repercussions will be discussed separately.

(a) Backward repercussions

Before the assembly industry was set up, industries catering for automotive demands are the tyre industry,[16] consisting of one firm, Dunlop, battery industry, consisting of three firms, Exide Batteries, Lucas Batteries and Century Batteries. Other than these, the 1963 Malayan Census of Manufacturing Industries revealed that there are 11 establishments[17] manufacturing motor vehilce parts and accessories. These parts include bolts, screws, spindles, shafts, bushes, cushions, radiator hoses and cores, oil seals, gaskets, rings

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[15] Ibid, page 67.

[16] Including the production of tubes.

[17] Census of Manufacturing Industries in the States of Malaya, 1963, Department of Statistics, page 13. It should be noted that motor vehicles body-building industry is not taken into account. The Census shows that there are 39 establishments for this industry.

and belts.[18]

Hence it will be clear that as the assembly industry is established, it will provide links between these industries, especially so, that of the tyres industry, the batteries industry and the paints industry. However, this will be observed only and only if the assembly industry incorporates into the locally assembled vehicles parts and components manufactured locally. To encourage the use of these items, the Government imposes the Assembly Tax Bill, by which, assemblers are required to use locally produced items where possible.

However, this Bill has not been enforced so far, but the Government has drafted the formula for the assembly tax. All assemblers (including those for motorcycles and scooters) are committed to a local content formula based on weight:-

$$\text{Local content} = \frac{\text{Weight of Deleted Items}}{\text{Weight of Locally Assembled Vehicles}} \times 100$$

The assembly tax legislation will lay down certain percentages of local content that must be attained within fixed periods of time. Failure to comply with the percentage/time schedule would be at the risk of paying a tax penalty for each vehicle assembled.

The effect of this legislation would be that assemblers will be committed to use whatever locally manufactured components that are available, so long as these conform to price and quality requirements. Therefore, at the same time, there was a potential for ancillary industries to develop further, firstly by expanding output, and secondly by the entry of new members. Output expansion can be seen for example in the development of local tyre manufacturing. The

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[18] It is probable also that a considerable proportion of the total production of these commodities occurs in other industries such as Motor Repair Shops and General Engineering and Repair Shops (not covered in Annual Surveys of Manufacturing Industries) and possibly also in the Machinery and Parts Industry. The 1963 Census shows that there are 162 establishments in Industrial Machinery and Parts industry, 156 establishments in the General Engineering and Machinery Repair shops, and 37 establishments in other Machinery and Repair industries, giving a total of 355 establishments.

development of local tyre manufacturing has now caused the value of net imports to fall as shown in Table 4.2. In 1963 the value of net imports of pneumatic tyres for motor cars was $3,181,931, while in 1967, it fell to $768,377. The quantity of pneumatic tyres imported also fell by 69,870 units, from 1963 to 1967.

(b) Forward repercussions

The 1967 Surveys of Manufacturing Industries revealed that there are only 13 establishments producing motor vehicle parts and accessories worth about $955,000 or almost reaching one million dollars as can be seen in Table 4.3. In contrast, net imports of such items by West Malaysia in the same year were $40,766,657 as can be seen in Table 4.4. From this, it can be seen that the market for parts and accessories of motor vehicles in Malaysia is largely untapped by local manufacturers.

In view of this, FIDA launched a world-wide campaign to attract international automobile component parts manufacturers to establish joint-venture project in Malaysia.[19] However, the Government is aware that certain specialised parts might not lend themselves to economies of scale for local manufacture in the light of Malaysian market requirements. It is with this awareness that the Government is encouraging not merely the establishment of single manufacturing units to produce specialised components but also the establishment of industrial complexes to manufacture a range of allied component parts. Such industrial complexes might involve a consortium of local and foreign investors and it will assist in reducing costs of production through the utilisation of common overhead facilities.

So far, these offers have elicited very little response. Among the assemblers themselves, the Motor Investment Berhad is the only one to contemplate facilities to make motor components.[20] It is drawing up plans to produce a range of items not only for its own models and makes, but for those of other assemblers as well.

The desire to utilise the advantages of the economies of large scale production of component parts will, however, impose certain problems. The first is the fact that there are some 68 base models excluding variants assembled in Malaysia will only impose complications and precludes any single assembler from making parts exclusively for itself. The assemblers will

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[19] Malaysian Industrial Digest, Volume 1, No.1.

[20] Asian Industry, February 1969, page 47.

TABLE 4.2

WEST MALAYSIA: IMPORTS OF NEW PNEUMATIC TYRES FOR MOTOR CARS

Countries	1963		1964		1965		1966		1967	
	Quantity (Units)	Value ($)	Quantity (Units)	Value ($)	Quantity (Units)	Value ($)	Quantity (Units)	Value ($)	Quantity (Units)	Value ($)
United Kingdom	60,521	2,043,826	24,001	883,405	14,981	518,384	28,164	932,609	10,513	325,811
West Germany	20,240	641,952	11,024	321,788	2,867	92,188	6,071	220,079	3,832	144,682
Japan	9,946	288,092	8,351	212,757	2,561	78,428	2,304	61,624	1,074	25,305
Other countries(1)	6,433	208,061	5,084	178,286	7,220	288,845	18,905	595,088	11,851	272,579
Total imports	97,140	3,181,931	48,460	1,596,236	27,629	977,845	55,444	1,809,400	27,270	768,377

(1) Include Italy, China, France, Canada, Netherlands and Austria.

Source: West Malaysia External Trade Statistics.

TABLE 4.3

WEST MALAYSIA: MOTOR VEHICLE PARTS AND ACCESSORIES MANUFACTURING

Year	Number of Establishments	Gross Value of Sales of Own Manufactured Products ($)
1963	11	497,000
1964	12	741,000
1965	13	880,000
1966	12	781,000
1967	13	955,000

Source: Survey of Manufacturing Industries in West Malaysia, 1967, Department of Statistics, page 257.

TABLE 4.4

WEST MALAYSIA: IMPORTS OF PARTS FOR MOTOR VEHICLES BY VALUE ($)

Countries	1963	1964	1965	1966	1967
United Kingdom	21,876,888	24,128,714	33,077,347	32,332,963	24,045,254
United States	8,998,112	7,191,000	7,876,935	9,978,351	5,846,965
West Germany	2,982,039	3,379,297	4,657,150	4,487,562	6,204,635
Japan	1,669,398	1,945,877	2,277,108	2,993,487	3,695,832
Other countries	3,053,772	3,150,190	3,797,519	4,402,757	5,671,156
Total imports	38,580,209	39,795,078	51,686,059	54,195,120	45,463,842
Exports and re-exports (2)	4,924,730	4,885,528	6,299,698	5,417,062	4,697,185
Net imports	33,655,479	34,909,530	45,386,361	48,778,058	40,766,657

(1) Includes Italy, France, Canada, Netherlands and Austria.

(2) Mainly to Singapore.

Compiled from: West Malaysia External Trade Statistics.

inevitably find that it is necessary to abandon some models and makes, which are not preferred by consumers and therefore are unprofitable.

What Malaysia can do to overcome this difficulty is perhaps by considering proposals for joint-ventures with just one or two consortia of foreign producers. Such ventures are specially ideal for the manufactures of sophisticated equipment such as pistons, crank rods, gears, clutch and brake and transmission components. Besides, a single brake and transmission facilities alone calls for an investment of $3 million.[21] It is therefore futile to think in terms of more than one such plant and forfeit the advantages of scale.

Secondly, the incorporation of local component parts in the locally assembled vehicles will lead to a slight increase in the retail price of the vehicles. This could be due to the deletion value of the component parts removed from the completely-knocked-down pack of the car being less than the actual value of the part made locally. The rise in cost of these parts was envisaged to be due to the smallness in the volume produced and the lack of automation or lower productivity. The effect of this rise in retail price of motor vehicles will be that demand will be depressed and a low demand almost certainly derails the economics of the entire assembly industry.

However, the experience of other countries shows that the use of local component parts would, at least in the initial stages, inflates prices of motor vehicles.[22] Moreover, if local production of component parts are undertaken, the demand for automotive component parts from other than the assembly industry will be met. Therefore, there are two other sources of demand for automotive parts and accessories. The first is the demand for replacement parts. The size of the replacement market depends upon the number of vehicles in use, their age structure, and the average life of components. Referring Table 1.3 in Chapter I, and assuming that the average life of motor vehicles is 5 years, there are more than two million of motor vehicles that are on Malaysian road today.[23] The average life of components such as batteries and tyres is much shorter than

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[21] Ibid.

[22] Ibid.

[23] This figure can be arrived at by adding the total number of vehicles registered during the last five years inclusive, that is, from 1964 to 1968.

the average life of the vehicle so that there is a large replacement market for such items. On the other hand, components such as radiators usually last the life of the vehicle and so replacement demand is extremely small. The second source of demand for automotive parts will be from those industries that are mechanised.[24]

Another advantage of the development of ancillary industries is that looking ahead towards the establishment of Malaysia's own motor vehicle manufacturing industry, the ancillary industries which develops out of the assembly industry will become the basis of Malaysia's future motor vehicle manufacturing industry. And here again, Malaysia would have increased employment and technical know-how will have been acquired by Malaysia's labour force.

It must be realized that there is no point to think in terms of exports of locally made component parts at this stage. Because, for several years to come, Malaysia cannot break into markets established for instance, by Australia's 200[25] odd automotive component producers. But for some firms that have been established in Malaysia, there is a big possibility for exports. For example, Dunlop now claims to be able to produce tyres to fit 98 per cent of all vehicles in Malaysia, and therefore captures overseas market as well.

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[24] Such as Machinery Manufacturing Industries.

[25] Asian Industry, February 1969, page 47

CHAPTER V

CONCLUSION

Summary of Findings

The need to industrialise arises out of three basic factors: diversification of the economy, provision of employment in the industrial sector and deficits in the balance of payments to pay for the imports of industrial goods. Since 1958, when the Government introduced the Pioneer Industries (Relief from Income Tax) Ordinance in West Malaysia, manufacturing industries have grown to play an important role in the economic development of Malaysia. Industrialisation was further enhanced by the fact that Government introduces several other incentives, among which the Investment Incentives Bill is one that is recently legislated.

As part of the industrialisation programme, the assembly industry was established. Assembly operations are among the easier form of industrial activity to introduce within a developing economy. The operations are generally not very complicated, representing merely one facet of the industrial process. The main feature of the operation is the value-added type. There are 13 firms currently undertaking local assembly of motor vehicles in Malaysia. Out of these, six assembles passenger cars and light commercial vehicles, five assembling motorcycles and scooters and two plants assembling "heavy" machinery.

Government's encouragement has been in the form of providing protective tariffs on vehicles assembled locally, as well as quantitative restrictions upon vehicles imported in completely-built-up conditions. The import duty imposed on completely-build-up motor cars as tariff protection is 35 per cent ad valorem, the import duty imposed on completely-built-up commercial vehicles is 20 per cent ad valorem, and the import duty on completely-built-up motorcycles and scooters is 10 per cent ad valorem. All completely-knocked-down units are allowed entry duty free, except for those parts manufactured locally such as tyres and batteries. Quantitative restrictions imposed on passenger cars completely-built-up is 110 per cent while that of completely-built-up commercial vehicles is 80 per cent. It is understood that quota restrictions will be revised half yearly, so that imports of vehicles in completely-built-up conditions will gradually be decreased. Other Government's incentives are such as those that can be found in the Investment Incentives Bill.

The establishment of the assembly industry can be regarded as one that can easily be introduced into the Malaysian economy since finished products have already entered the country in some amount, and therefore demand of some magnitude for new locally assembled vehicles

is known to exist. The demand for motor vehicles is, as has been seen, rising steadily at 10 per cent, and that the upward trend in the number of motor vehicles in use will continue. Although part of the demand is being satisfied at present by imports of vehicles completely-built-up as well as used vehicles, future market for locally assembled vehicles may be bright due to the fact that there will be an increase in consumer units as well as in the replacement of worn out vehicles, and at the same time, reduction in imports of completely-built-up units by approved quotas provided to dealers or distributors.

It has been thought that the assembly industry will help save foreign exchange so that the foreign exchange saved can be channelled into other investment purposes. But as has been seen, the assembly industry do not actually save foreign exchange as output expands. It may save foreign exchange to the extent that annual demand is satisfied and that no further assembly is carried out. This being so, assembly operations may be at very low capacity for some firms and therefore become idle and unprofitable. But if assembly operations are increased, taking advantage of excess capacity, the resultant output may be exported to neighbouring countries. The fact that this will ~~implove~~ impose certain currency problems, will not help any developing country at all. Thus it is not right to say that this industry can save foreign exchange.

But it can be said that the main aim of setting up the assembly industry is to provide employment opportunities. Indeed the objectives of industrialisation is to help the Government ease unemployment problem. As has been discussed, the industry will provide only between 2,000 to 2,500 jobs. About 67 per cent of these jobs will be technical, 18 per cent in administrative side and the remaining 15 per cent will be in the miscellaneous jobs such as store clerk, shipping clerk and so on. It is the technical side that is expected to provide maximum amount of jobs in this particular industry. Technical skills are not lacking in the Malaysian labour force, for, the main sources from which labour are supplied are the technical institutions and the workshops of the urban as well as rural areas. There is therefore little problem as to its establishment with regards to technical skills requirements.

Also, the establishment of the assembly industry produces a series of economic chain reactions "backward" as well as "forward". Backward repercussions are in the form of linkage between certain industries producing automotive parts and accessories. At least the demand for these products are assured of with the establishment of the assembly industry as well as with the Government's encouragement of incorporating locally manufactured automotive parts and accessories, through the Assembly Tax Bill.

Forward repercussions, on the other hand, will be in the form of the growth of industries producing automotive component parts and accessories. This will greatly be speeded up as a result of FIDA's campaign for automotive parts and accessories manufactures on a joint venture basis between local and foreign capital. It was aware that the main problem facing ancillary industries when there are many firms will be that of producing at levels too low to benefit from the economies of

large scale production. It is with this awareness that the Government is encouraging not merely the establishment of single manufacturing units to produce specialised components but also the establishment of industrial complexes to manufacture a range of allied component parts. It is expected that such industrial complexes will assist in the reduction of production costs through the utilisation of common overhead facilities.

At present local parts and accessories incorporated into the locally assembled units are tyres, batteries, paints, starter cables, some upholstry facilities and other items. But as has been seen, the incorporation of these parts as well as the utilisation of labour rather than automated machines, will inflate prices of vehicles locally assembled. This increase in retail prices of vehicles assembled locally will of course affect demand, due to the fact that the industry faces competition against vehicles imported in completely-built-up conditions and the used vehicles trade. The demand for motor vehicles, at present, is largely being satisfied by imports of new vehicles completely-built-up.

But, the increased in price of the locally assembled vehicles cannot be avoided. The former Minister of Commerce and Industry himself said, "we are sometimes faced with the difficult choice of asking consumers to pay a little more to help ease unemployment or reject projects and face the clamour for new jobs ..... while we accept that no entrepreneur will invest to create new jobs and save foreign exchange without getting an adequate return on his capital we must ensure that the consumer is not exploited."[1]

Future Prospects

Nevertheless, the assembly industry has a bright future in view of the steady increase in demand for new motor vehicles which will largely be satisfied by the locally assembled units. The effect of Government incentives of giving protective tariff and imposing quantitative restrictions upon vehicles imported completely-built-up will give a bright future for the assembly industry. The establishment of ancillary industries will be able to supply the necessary minimum local content initially required and their subsequent growth will keep pace with assemblers' demands for automotive parts and accessories.

Government's encouragement to establish industrial complexes producing component parts and accessories with the utilisation of common overhead facilities will help reduce the prices of locally manufactured component items, and these will in turn lower the retail prices of locally assembled units. So far Motor Investments Berhad has drawn up plans for

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[1] Malaysia Industrial Digest, published by Federal Industrial Development Authority, Vol. 1, No. 3, Third Quarter 1968, page 4.

the manufacture of automotive component parts, not only to supply their own makes and models but also for those of other assemblers as well.

The establishment of ancillary industries will then provide the basis for local manufacture of motor vehicles such as that developed in India and Australia. But, of course, this will take a very long time to come.

LIST OF ASSEMBLERS OF MOTORCYCLES AND SCOOTERS

Assemblers	Makes
1. Sharikat Guan Hoe Sendirian Berhad	Suzuki
2. Sharikat Wing Ming Berhad	Yamaha
3. Heat Asiatic Company Limited	Vespa
4. Boon Siew Company Limited	Honda
5. Fiat Distributors Company Limited	Lambretta

APPENDIX I

LIST OF ASSEMBLERS OF MOTORCYCLES AND SCOOTERS

Assemblers	Makes
1. Sharikat Guan Hoe Sendirian Berhad	Suzuki
2. Sharikat Wing Ming Berhad	Yamaha
3. East Asiatic Company Limited	Vespa
4. Boon Siew Company Limited	Honda
5. Fiat Distributors Company Limited	Lambretta

APPENDIX II

MOTOR CARS AND COMMERCIAL VEHICLES
PRESENTLY ASSEMBLED AND TO BE ASSEMBLED

1) Assembler: Associated Motor Industries (Malaysia) Sendirian Berhad

Manufacturer	Basic Model	Variants
British Motor Holdings (British Motor Corporation)	Austin Mini, Morris Mini, Riley Mini, Wolseley Mini — ADO 15	Saloon, Traveller/ Countryman, Van and Pick-up.
	Austin, Morris — Mini Moke	Single model
	Morris Minor - ADO 1076	Saloon, Traveller, Van and Pick-up.
	Austin Gipsy	Single model
	Austin, Morris, Riley, Wolseley, M.G. — 1100 Series ADO 16	Saloon, Traveller and Countryman.
	Morris Oxford, Austin A60 — ADO 38 and 40	Saloon, Traveller/ Countryman, Pick-up and Van.

Manufacturer	Basic Model	Variants
	Austin) Morris) 1800 Series Wolseley)	Yet to be decided - awaiting new model information from BMH
	Jaguar	Yet to be decided - awaiting new model information from BMH
Ford Motor Company of Britain	Anglia (1968 model)	Saloon, Estate Car, Van and Pick-up.
	Cortina	Saloon, Estate Car and Van.
Ford Motor Company of Australia Pty. Limited	Falcon	Saloon, Station Wagon, Van and Pick-up.
	Fairmont	Saloon, Station Wagon.
	Fairlane	Saloon, Station Wagon.
General Motors - Holden's Pty. Limited	Holden Special HR 225	Saloon, Station Wagon, Van and Pick-up.
	Holden Premier HR 235	Saloon, Station Wagon, Van and Pick-up.
	Holden Torana Sedan	Saloon only.
Regie Nationale de Usines Renault	Renault R1100	Saloon only.
	Renault R1600	Saloon only.

Manufacturer	Basic Model	Variants
Rootes Motors Overseas Limited	Hillman Hunter 1500	Saloon only.
	Hillman Hunter 1725	Saloon only.
British Motor Corporation	Austin and Morris	
	Heavy Commercial Vehicles	
	FGK 80	Scuttle, Front-end, Cab.
	FGK 100	Scuttle, Front-end, Cab.
	FFK 100	Scuttle, Front-end, Cab.
	FFK 140	Scuttle, Front-end, Cab.
	WFK 100	Front-end, Cab.
	WFK 120	Front-end, Cab.
	FJK 140	Front-end, Cab.
	FJK 160	Front-end, Cab.
	FJK 360	Front-end, Cab.
Albion	Albion:	
	Viking VK41L (Bus Chasis)	Chasis
	Chieftain CH3BNT	Cab
	Cheftain Super Six CH13CTR	Cab
	Clydsdale CD21A1	Cowl, Cab.
	Super Riever RE29L	Cowl, Cab.
	Super Riever RE29T	Cab.
	Super Riever RE31L	Cowl, Cab.
Leyland	Leyland:	
	Ninety	Cowl
	Comet 13CJS3R	Cab.
	Hippo 20LHT.1AR	Cab.
	Tiger Cub PSUC1.13	Chasis.

Manufacturer	Basic Model	Variants
Dennis Brothers	Public Vehicle Chasis and Specialist Truck Chasis and bodies such as refuse disposal units, fire engines, etc.	
Chrysler/Rootes	Commer 1500 cc	Cab.
	Commer 1500 VT & D	Van
	Commer 2500 VT & D	Van
	Commer VBFS.411	Cab. Front-end
	Commer VBAS.741	Front-end
	Commer VBAW.715	Cab, Front-end
	Commer VBAW.762	Cab, Front-end
	Commer VBAW.862	Cab, Front-end
	Commer VBAW.1294	Cab, Front-end
	Commer CCGW.815	Cab.
	Karrier Game cock Karrier Bantam	Municipal application Special bodies.
	Dodge	Various models as required for the Malaysian market.

2) Assembler: Sharikat Fiat Distributors (Malaysia) Berhad

Manufacturer	Basic Model	Variants
Fiat	600 T	Saloon and PCD
	600 D	Saloon only
	850	Saloon only

Manufacturer	Basic Model	Variants
	1100 R	Saloon only
	124	Saloon only
	650E (5 tons)	

3) Assembler: Champion Motors (Malaysia) Sendirian Berhad

Manufacturer	Basic Model	Variants
Volkswagen	Type I	Saloon only
Audi	80	Saloon and PCD
	90S	Saloon and PCD
Rover	Land Rover 88" P/D Series	PCD
	Land Rover 109" P/D Series	PCD
	Rover 2000	Saloon only
Triumph	Herald	Saloon only
	Spitfire	Saloon only
	2000	Saloon only
Mercedes	200	Saloon only
	200 D	Saloon only
	230 S	Saloon only
	250 S	Saloon only
	250 SE	Saloon only

Manufacturer	Basic Model	Variants
Vauxhall	Viva	Saloon and PCD
	Victor	Saloon only
	Ventura	Saloon only
Chevrolet	Impala Series	Saloon only
Toyota	800	Saloon, PCD/Station Wagon
	Corona	Saloon, PCD/Station Wagon.
	Corolla	Saloon.PCD/Station Wagon.
	Crown	Saloon, PCD/Station Wagon
Volkswagen	VW Delivery Van 214	Van
	VW Delivery Van 216	Van
	VW Delivery Van 236	Van
Rover	Land Rover Forward Control	Front-end, Cab.
Bedford	Bedford HA	Van
	Bedford CAL	Van, Front-end.
	Bedford CAS	Van, Front-end.
	Bedford TJ	Cab.
	Bedford TK	Cab.
	Bedford SB	Front-end
	Bedford VAS	Front-end
	Bedford VAL	Front-end
	Bedford VAM	Front-end

Manufacturer	Basic Model	Variants
Guy	Big J tractor	Cab.
AEC	Monarch	Cab.
Toyota	High ACE	
	Mini ACE	
	DYNA (R series)	
	Trucks	
	Coach	

4) Assembler: Swedish Motor Assembly Corporation Sendirian Berhad

Manufacturer	Basic Model	Variants
Volvo	144 S	Saloon only
	164	Saloon only

5) Assembler: Capital Motor Assembly Corporation Sendirian Berhad

Manufacturer	Basic Model	Variants
Opel	Kadet	Saloon, coupe, caravan, and sports.
	Rekord	Saloon, coupe, caravan, and sports.
	Commodore	Saloon only
	Kapitan	Saloon only
	Admiral	Saloon only

Manufacturer	Basic Model	Variants
	Diplomat	Saloon only
Pontiac	Parisienne	Saloon only
Nissan	Cedric	Saloon only
Datsun	Bluebird	Saloon and sports
	Sunny	Saloon only
	Nissan Petrol 4 x 4	
General Motors Corporation	Opel	Pick-up, Trucks, Vans.
Nissan Motor Company Limited	Datsun Pick-up 520	Pick-up
	Nissan	Pick-up

6) Assembler: Asia Automobile Industries Sendirian Berhad

Manufacturer	Basic Model	Variants
Peugot	204	Saloon and PCD
	404	Saloon and PCD
Madza	800	Saloon only
	1000	Saloon and PCD
	1500	Saloon only
B.M.W.	1800	Saloon only
	2000	Saloon only
Mazda	Mazda 1500 B	Pick-up, Front-end, Cab.

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